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**AGRICULTURAL ENTREPRENEURSHIP DEVELOPMENT AS STRATEGY FOR
ECONOMIC EMPOWERMENT: THE CASE OF SMALL-SCALE FARMERS IN
EASTERN CAPE PROVINCE OF SOUTH AFRICA**

BY

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(201316067)

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ABSTRACT

This study emanated from the struggle for economic empowerment among small-scale farmers in South African. The study advocates for the establishment of a viable environment where agricultural entrepreneurship can thrive. While the South African Nation Development Plan (NDP) proposed to create one million jobs through agricultural sector by 2030, the majority of small-scale farmers in South Africa are struggling to grow beyond the level of subsistence farming, and the youths appear not to be interested in the farming. It is therefore become necessary to conduct this current study that is exploratory in nature; it explored several factors and barriers to agricultural entrepreneurship development, as well as factors that can contribute to the development of prosperous and sustainable agricultural entrepreneurship among small-scale farmers in South African. The study was conducted in two district municipalities of Eastern Cape Province of South Africa – OR Tambo and Chris Hani. Both quantitative and qualitative research methods were used to make findings. Findings from the study shows that economic empowerment can be achieved through agricultural entrepreneurship development by giving adequate attention to specific factors like individuals' attitude, production skills, access to market and marketing skills, management skills. Empirically, basic components like personal interests, adequate training and background, efficient extension service, famers' network and communication, specific goal-oriented, understanding market, farmers' collaboration, and access to sufficient funding are few of the factors that will make the small-scale farmers grow to the level of commercial farming. The study concluded that prerequisite to developing a sustainable agricultural entrepreneurship climate among small-scale farmers in South African is the combination of basic components aforementioned. Suggestions were made for strong collaboration between government and private

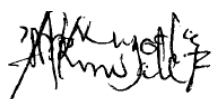
sectors to provide development assistance for small-scale farmers as they struggles to develop their small-scale farming to sustainable entrepreneurship level.

Keywords: Agriculture, Eastern Cape, Entrepreneurship, Small-Scale, South Africans.



DECLARATION

I, **OLUSOLA MOKAYODE AKINWALE**, make a declaration that this study was conducted by me and the work is mine with the exception of the indicated acknowledgments and references. This thesis is submitted to the University of Fort Hare for the fulfilment of the requirements for Doctor of Philosophy degree in Development Studies. I further declare that this report has not been at any time before now submitted for any examination or for the purpose of another degree.



24/11/2020

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Signature (Student)



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Date

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Signature (Supervisor)

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Date



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DEDICATION

TO THE GLORY OF JEHOVAH GOD



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ACRONYMS

BEE	Black Economic Empowerment
CAADP	Comprehensive Africa Agricultural Development Programme
CHDM	Chris Hani District Municipality
COMESA	Common Market for Eastern & Southern Africa
DAFF	Department of Agriculture, Forestry and Fisheries
DOA	Department of Agriculture
ECP	Eastern Cape Province
ECSECC	Eastern Cape Social Economic Consultative Council
EU	European Union
GEM	Global Entrepreneurship Monitor
GDP	Gross Domestic Products
IFPRI	International Food Policy Research Institute
LRAD	Land Redistribution for Agricultural Development
MAFISA	Micro Agricultural Financial Institutional Scheme of South Africa
NDP	National Development Plan
NGOs	Non-Governmental Organizations
NDP	National Development Plan

NEPAD	New Partnership for African Development
NPCA	Nepad Planning & Coordinating Agency
OECD	Organisation for Economic Co-operation and Development
PDP	Provincial Development Plan
PGDP	Provincial Growth and Development Plan
SADC	Southern African Development Community
REC	Regional Economic Communities
ReSAKSS	Regional Strategic Analysis and Knowledge Support System
RSA	Republic of South Africa
SASAE	South African Society for Agricultural Extension



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CHAPTER ONE

1.0 Introduction

The background of the study discusses the subject of agricultural entrepreneurship in South Africa and gives a general overview of what the study entails. The chapter proceeds by stating the identified problem of the study and further highlights the research questions which then constitute the objectives of the study. The chapter also gives an outline of the significance of the study which reveals the necessity of conducting the study as well as the potential beneficiaries. Lastly, the delimitation of the study defines the coverage area of the study.

1.1 Background to Study

Globally, agriculture is acknowledged as a significant channel for bringing about good transformation in job creation, food security, improving standards of living as well as, having general impacts on the economy. Moreover, it is identified as the catalyst for growth and food security (Bach & Pinstrupp-Adersen, 2008). The South Africa National Development Plan (NDP) 2015/2016 to 2030 estimates that agriculture has the potential to create one million jobs by 2030. Research indicates that over time the agricultural sector will be twice as effective in reducing poverty as any other sector (Kapsos & Bournmpoula, 2013; Nagler and Naudé, 2015; Singh, 2014). Hence, most nations globally have been promoting the development of entrepreneurs in the agricultural sector in view of its great potential to contribute to a nation's Gross Domestic Product (GDP). Every nation drives towards making policies and a supportive environment for the small-scale farmers and young people to embrace opportunities abound in agriculture, to boost its production value and open the agricultural sector for businesses (Alsos, Carter, Ljunggren & Welter, 2011). According

to International Labour Organization (ILO) (2014), agriculture is adjudged to be one of the potent ways to address the challenges of global economic recession, poverty and the increasing rate of unemployment most especially in developing countries.

The extant literature shows that many analysts refer to agriculture as the engine of growth because of its ability to generate essential resources to other sectors in the economy for the sustainability of the economic growth as a whole (Tiffin & Irz, 2006). In addition, theories and empirical studies have also indicated that agriculture plays a crucial role in poverty reduction, particularly, in low income countries (Christiansen, Demery, & Kuhl, 2006). Sharing the same opinion, an earlier report by the Organisation for Economic Co-operation and Development (OECD) (2006) contends that agricultural development tends to be pro-poor; it harnesses the key assets of poor people, which are labour and land; it also creates a sustainable economy in rural areas. Silva, Shaffirl, Uli and Abu (2009) argue that considering the huge potential within the agricultural sector and full support from active government, great opportunities are bound to be created for entrepreneurs. As such, Man (2017) advances that even though, people portray negative perceptions about agriculture, if operated diligently, and the sector is still capable to yield high income.

Also, there is always high demand for agricultural products. The change in the societal perception towards entrepreneurship is prompted by the transformation of the agricultural sector towards a money making entity. So in order to cultivate interest in youths and farmers in agricultural entrepreneurship, South African need to provide a variety of programs and activities to improve their skills (Pemandu, 2013). Reason being that, challenges and opportunities are created for producers and processors, wholesalers and retailers including other participants in the supply chain due to transformation programs from government (Silva et al. 2009).

On the other hand, the growing body of entrepreneurship literature has derived its inspiration from Joseph Schumpeter's work. Schumpeter (1999) refers to an entrepreneur as an agent of change who interrupts the static equilibrium. On the other hand, entrepreneurship is the pursuit of an opportunity irrespective of limited resources or conditions. For instance, innovation, productivity, wages, income and survival have been the most frequent measures of entrepreneurship performance. Furthermore, satisfaction and profitability for owners and employees are other performance measures. Meanwhile, the measures of entrepreneurship tend to focus on big non-agricultural firms, by and large, neglected the agricultural sector.

The United State Department of Agriculture (2011) associated entrepreneurship with innovative and dynamic developments within Small, Micro, and Medium Enterprise (SMME). Mishra, El-Osta, and Shaik (2010) described entrepreneurship as the application of energy into innovating and building an enterprise. According to Hisrich, Peters, and Sheperd (2013) entrepreneurship is a way of fashioning something new and valued by dedicating the necessary time and effort; assuming accompanying financial, social and psychic risks and; receiving a rewards of personal and monetary satisfaction as well as, independence. This definition depicts the reasons why entrepreneurship is capable of playing a significant role for the establishment of viable SMMEs in the farming sector, reduced unemployment and establish a strong economy and an equal distribution of wealth as proposed in the New Growth Path of the national policy of South Africa (Department of Agriculture, Forestry and Fisheries (DAFF), 2013; Preisendörfer, Bitz & Bezuidenhout, 2012).

The discipline of entrepreneurship is multifaceted and includes a conflation of several disciplines, while the agricultural sector has enormous potential for growth. Therefore, agricultural entrepreneurship a combination of agriculture and entrepreneurship and it

is also known as agricpreneurship (Bairwa, Kerobim, Kushwaha, Meena & Kumar 2014). Also, Carter, Ljunggren and Welter (2011) believe that nations and communities depend on agricultural produce as their source of livelihood, transforming the agricultural sector to embrace agricultural entrepreneurship and support aspiring agricultural entrepreneurship. Agricpreneurship helps to develop a country's agriculture and increase the likelihood of food security for its population. The present study thus conceptualised agricultural entrepreneurship as a combination of utilising and turning the resource potentials in agriculture into business venture, using entrepreneurial principles to recognize, develop, and succeed in a feasible agricultural enterprise for profit and improved livelihood (Bairwa et al., 2014; Mukembo & Edwards, 2016).



Agricultural entrepreneurship is also defined by Bairwa et al., (2014) as a combination of agriculture and business which helps agricultural entrepreneurs to cultivate the act of innovation, identify markets, and satisfy needs by developing different ways of doing things. Mukembo, and Edwards (2016) further emphasize that agricultural entrepreneurship is also the application of entrepreneurial principles during the process of identifying, developing, and managing sustainable agricultural enterprises/projects optimally for profits and improved livelihoods. Agricultural entrepreneurs are thus referred to, as innovative agents who find prospects in utilising land and other resources for professional, agriculture-based and value-added food businesses. They own and manage their businesses with the intent to make a profits. Bairwa et al., (2014) emphasised that since the fall of apartheid in 1994 the South African government has been making efforts and initiatives through policies for rapid political change, socio-economic development in the agricultural sector and rural development. The efforts mostly drive at improving the living conditions of the black

communities which during the apartheid period were deprived of adequate services and opportunities. From empirical findings on agricultural development and entrepreneurship in South Africa, two basic facts characterise reported in the findings: that there is increase in new business start-up, and secondly compared to other ethnic groups, the black South Africans have a low participation rate in entrepreneurial activities (GEM, 2011; Preisendörfer, Bitz & Bezuidenhout, 2012). This describes the state of entrepreneurship in South Africa which shed more light on what is suggested Foxcroft, Wood, Kew, Herrington and Segal (2002), who reported that entrepreneurial activities in South Africa are the lowest in terms of its contribution to Gross Domestic Product (GDP) as compared to other developing countries. Increasing entrepreneurial activity in agriculture sector could, therefore, play a vital role in creating economic empowerment among Black South Africans.



Given the importance of entrepreneurship in the development and empowerment of Black South Africans and among unemployed youths, it should be noted that embracing entrepreneurial skills in agriculture will be an imperative condition for meeting the proposed 2019/2020 strategic plan target of DAFF according to National Development Plan. Hence, this study explored the factors necessary for the developing entrepreneurial skills in agriculture and barriers to developing agricultural entrepreneurs or treating farming as a viable business. The study focused on small-scale farmers involved in crop and livestock farming such as maize farming, wheat, deciduous and subtropical fruit, vegetables, poultry, goats rearing and rearing of cattle. Furthermore, the study also looked at perceptions of youth towards embracing the opportunities abound in agricultural sector and entrepreneurship. Since, growth in the economy of any nation is contingent upon the significant role played by entrepreneurs, encouraging and growing entrepreneurial attitude in every black South African is

crucial to developing the economy of the country. According to Fal, Sefolo, Williams, Herrington, Goldberg & Klaasen (2010), South Africa has shown a nation-wide drive to encourage and promote entrepreneurship by developing the Black Economic Empowerment (BEE) policies as well as several similar initiatives. However, Foxcroft et al., (2002) stressed that government efforts are yet to satisfactorily promote entrepreneurial spirit among black South Africans

Additionally, in spite of the South African governments' drive towards entrepreneurship and provisions to stimulate entrepreneurial activity, 'policymakers have primarily been operating without the benefit of substantive research findings' (Dennis, 2000; GEM, 2011). For instance, Gwija, Eresia-Eke and Iwu (2014) argued that despite South African government interventions, the level of entrepreneurship remains unsatisfactory. More so, Pemandu (2013) suggested that for government to promote interest in youths and small-scale farmers on agricultural entrepreneurship, varieties of activities and programs to improve skills and awareness must be provided.



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A report by the Department of Agriculture in 2013 also reported that despite the tremendous amount of investments by government institutions, the performance of South Africa small-scale farmers remains unsatisfactory. Meanwhile, Bezuidenhout, (2012) denotes that applying the thought and practice of entrepreneurship in agricultural sector generates and increases agricultural productivity, job creation, establishment of new business ventures, development of rural locations and increased wealth. While the concept of entrepreneurship is very broad, the present study only focused on agricultural entrepreneurship by exploring the factors and barriers to agricultural entrepreneurship development among Black South Africans. The focus was directed to the small-scale farmers (men and women) who engage in both crop production and rearing of animals in two district municipalities from Eastern Cape

Province. According to (Stats, SA 2017) the Eastern Cape Province remains the poorest among other Provinces in South Africa. Meanwhile, the study targeted Chris Hani, OR Tambo, district municipalities which when compared to other municipalities have high numbers of unemployed citizens as well as high number people living in poverty. Also, agriculture is one of the major economies of these municipalities, therefore; an explorative study of this nature was worth conducting.

1.2 Statement of the problem

Small-scale farming in South Africa is a serious issue that has led to many scholarly debates, due to the failure of small-scale farmers to develop their farming activities beyond the level of home garden. This pressing issue has prompted government to design an economic policy that makes provisions for the encouragement of entrepreneurs and opportunities for success in entrepreneurship across all economic sectors. However, extant literature on entrepreneurship and agriculture in South Africa has over time been consistently pointing to an undeveloped entrepreneurial skill most especially among the South African Black farmers (Preisendorfer & Bezuidenhout, 2012; Xaba, 2014).

A typical Black South African is an individual who belong to the 'majority' indigenous (black) group that are culturally and linguistically homogeneous; they form the major ethnic groups in the country. Although, not all black South Africans are small-scale farmers, few are already flourishing as commercial farmers (Fenwick and Lyne 1998); while majority still finds their livelihood in small-scale farming across all rural locations of the country; in most cases those who have other jobs still practice small-scale farming. Meanwhile, majority of those that choose farming as career are not growing beyond the typical marginal level of subsistence farming despite the evident provisions from private, non-governmental and government establishments.

Another serious cause for concern in the agricultural sector is the low level of interest shown by the youth. In recent years, Government has prioritised youth in its database and there is a general belief that youth involvement will have positive effects on rural and agricultural development (Ommani 2006). For example, one of the goals of the New Growth Path (NGP) policy of 2011 was to create jobs for youths. Government effort to invest in youth was also supported by Food and Agriculture Organisation (FAO) (2011) which stated that the most disadvantaged group are youth; thus, youth involvement in agriculture will present the country with opportunity to develop the sector. Yet, youth participation in agriculture remains low.

This poor involvement has resulted in an exodus of youth rural-urban migration. This situation has further been propelled by youth attitude regarding agricultural activities as well as their inclination to pseudo jobs (Ghadiri 2005; Cheteni, 2016). Ommani (2006) indicated that good standard of living and job security attracts youth rural-urban migration. Similarly, lack of education prevented them from securing formal employment; hence, migrating to urban areas to take up informal businesses remains preferable to agriculture (Te Lintelo 2001).

Woolard (2013); Ardington and Hofmeyr (2014) noted that South African youth seeks jobs in urban areas partly because of the poor growth in agriculture and the low status attached to it as a career. The rural-urban migration has consequently resulted to inequalities of resources distribution, overcrowded cities, and heavy burden on those who remain in agriculture (Cheteni, 2016). In addition youth have also struggles with low self-esteem; this is associated with increase in their negative perception about agriculture (Outley 2008). Meanwhile, Samardick (2000) posits that social status, perceptions and lack of information are barriers to youth hunting careers in agriculture.

No doubt that those problems highlighted above have resulted to great set back in agricultural sector and its development. Venter, Urban, and Rwigema (2010) reported that agricultural sector contributes below 3% towards South African gross domestic product (GDP) compared to over 20% it enjoyed in the 1930s. Venter, Urban and Rwigema (2010) also linked the low contribution in the sector to dearth of knowledge and skills base especially among previously marginalized sectors and population (Black South African). This means, poor entrepreneurial skills and approaches among black farmers plays major role in limiting the development in agricultural sector.

Also, probing the services of the South African Society for Agricultural Extension (SASAE) since its establishment in 1925, Koch and Terblanche (2013) emphasised that its professionalism and effectiveness of service delivery is very poor. In 2025, just 5 years from now, agricultural extension service in South Africa will clock 100 years, yet more is required of SASAE. Similarly, extant literature shows that despite the number of policies, programmes and different initiatives implemented by the government, this sector continues to face a number of challenges. For instance, concerns have been raised that there exist barriers that contribute to non-development of entrepreneurial attitude mostly among black South Africans such as: lack of education and skills, finance, government policies and programs, physical infrastructure, business information and access to market; this has affected the implementation of frameworks which contribute towards building a climate in which entrepreneurial initiatives can thrive.

Furthermore, Hashemi, Nadi and Rezvanfar (2012) pointed that successful entrepreneurs were usually motivated by market related factors. But Chikazunga (2013) reported that in South Africa, the mainstream markets provide limited opportunities for small-scale farmers due to their low productivity as well as stringent

agricultural entrepreneurship activities. Other researchers are of similar opinion that, lack of transportation to the market from the farms, poor roads network, lack of apposite information, lack of marketing skills, high transaction cost and poor market infrastructure are among major constraints (Khapayi & Celliers, 2016; van Schalkwyk, Groenewald, Fraser, Obi & van Tilburg, 2012). Hence, this study also explored the level of agriculture entrepreneurial drives and key factors that contributes to the development of agricultural entrepreneurs. Furthermore, it is not clear how the government interventions and its various agricultural policies for black farmers have been implemented or if they have been monitored and evaluated to gauge if they can be turned into commercial farming that may produce wealth in the same way that the white communities have done. Therefore, it is against this background that this study sought to explore agricultural entrepreneurship development as a key for economic empowerment among the Black South Africans.

1.3 Objectives of the study

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The general objective was to explore agricultural entrepreneurship development as strategy for economic empowerment among Small-scale farmers of Eastern Cape Province of South Africa.

Specifically, the study focused on addressing the following objectives:

- i. To describe farmers source of farming knowledge and training on agriculture entrepreneurship.
- ii. To describe the factors contributing to agricultural entrepreneurship development in the study area.
- iii. To profile the barriers to agricultural entrepreneurship development.

- iv. To examine the relationship between farmers' demographic variables (age and gender), purpose in farming and interest in agriculture towards agricultural entrepreneurship development as well as their achievements.
- v. To establish the level of acceptance, attitude and knowledge of agricultural entrepreneurship among the youth.
- vi. To identify sustainable interventions for building a climate through which agricultural entrepreneurial initiatives can thrive.

1.4 Research Questions

- i. What are the source of farmers' farming knowledge and training on agriculture entrepreneurship?
- ii. What are the factors contributing to agricultural entrepreneurship development in the study area?
- iii. What are the barriers to agricultural entrepreneurship development?
- iv. What are the relationship between farmers' demographic variables (age and gender), purpose in farming and interest in agriculture towards agricultural entrepreneurship development as well as their achievements
- v. What is the level of acceptance, attitude and knowledge of agricultural entrepreneurship among the youths?
- vi. What are the sustainable interventions for building a climate through which agricultural entrepreneurial initiatives can thrive?

1.5 Significance of the Study

Literature has shown that embracing the practice of agricultural entrepreneurship promotes job creation, business opportunities, agricultural productivity as well as rural development. On the other hand, GEM, (2011) contends that the agricultural entrepreneurship activities in South Africa remain poor despite the government's drive

towards entrepreneurship and its provisions to stimulate entrepreneurial activities. Gwija et. al., (2014) also argues that despite South African government interventions, the level of entrepreneurship remain unsatisfactory. In addition, Department of Agriculture (2013) reported that, despite the tremendous amount of investments by government institutions, the performance of South African small-scale farmers remains unsatisfactory.

Although, the on-going debates is clear about the unsatisfactory level of agricultural enterprises in the country, the contributing factors to the low level of agricultural entrepreneurship are yet to be explored. Sharing similar sentiments is Pemandu (2013) suggested that for government to promote interest in youths and black farmers on agricultural entrepreneurship, varieties of activities and programs to improve skills and awareness must be provided. However, he did not explicitly dwell on barriers to agricultural entrepreneurship development or give recommendations on the specific activities to be provided. This study aims to fill the gap in literature by exploring the contributing factors that leads to the low level of agricultural entrepreneurship as well as the barriers to its development. This will be done to ascertain whether agricultural entrepreneurship development can be a panacea for empowerment among Black South Africans and thus, develop a policy framework for building a climate in which entrepreneurial initiatives can thrive in South Africa.

The findings of this study may also identify further factors characterising poor access to market by small-scale farmers. Furthermore, the study might point out the crucial role expected from the government in increasing market participation by subsistence and emerging farmers. This may enable smooth accessibility of farmers to output markets and establishment of local point of sales of farm produce in rural areas. The findings of the study might help policy makers and practitioners on how to go about

improving the agricultural sector by developing policy and design programs that will promote agricultural entrepreneurship development among the black community.

More so, the findings of the study may help South African Black society to value the opportunity abound in agriculture and importance of agricpreneurship in self-development, enterprising and nation building. Similarly, the findings might contribute by not only focusing on crop and livestock farming but also pointing out opportunities embedded in agricultural sector. As such this may help the Black South Africans especially the youths to understand and make use of the unlimited opportunities in agricultural businesses.

The findings of the study may help the government, extension service providers, small-scale farmers and the youths with information and initiatives on how to embrace entrepreneurship. In addition this may create the opportunity among South Africans to participate in agriculture-based businesses which have remained poor, in order to fill the research gap as suggested by Preisendörfer, Bitz and Bezuidenhouton (2012). Furthermore, the emerging results may provide answers on how to design strategies and necessary provisions on New Growth Path of the national policy of South Africa as supported (DAFF, 2013). Lastly, the findings will contribute to the growing studies on agricultural entrepreneurship development in South African.

1.6. Delimitation

The research focused on two district municipalities in Eastern Cape Province – Chris Hani and OR Tambo because agriculture is their main economic activity. Meanwhile, other district municipalities in the Province like Nelson Mandela Bay, Buffalo are metropolises and; are excluded in this study because Agriculture does not form part of their major economies. The proposed study focused on primary sub-sector of the

agricultural sector only – the animal and crop production. This is because agricultural sector is a very large sector that cannot entirely be covered by one study. Similarly, entrepreneurship is also a wide sector on its own and there is no single study that can oversee its activities.

Meanwhile, agricultural activities such animal and crop production are farming businesses that formed the entrepreneurship activities in this study. The scope of the study was therefore, delimited to small-scale black farmers (male and female, literate or illiterate) including young people at age 18 and above, who were either not practicing farming; Non-governmental organisations that are agricultural Practitioners available to small-scale farmers in rural locations and government officials in the agriculture sector.

1.7 Conclusion

This Chapter laid a firm basis for the expectation of the study by giving a detailed overview of the research aim and objectives. The objectives were clearly enumerated and thereby set a viable path for the study. It is no doubt that the problem statement shows the need for this study to be conducted in South Africa. The research questions has propelled the urgency of this study, and as such shows that this study will significantly contributes to the development and progress of agricultural entrepreneurship among black South Africans in particular. The next chapter is a scholarly debate from the literature.

1.8 Chapters Outline

Chapter 1 – The focus of the first chapter is on the introduction and background to the study, the statement of the problem, highlights of the research questions and objectives, significance of the study and the delimitation.

Chapter 2 – this is a literature review chapter. It examines the conceptual framework from the South African context on agriculture, Entrepreneurship and agricultural entrepreneurship. The chapter also discussed the government legislative frameworks as well as barriers to agricultural entrepreneurship development. it also discussed the theoretical frameworks that underpin the study .

Chapter 3 – This is a research methodology chapter. A full detail of the adopted methodologies were given and reasons for adopting such methods were explained. The chapter also gives report on the field experience in terms of attitude of the participants.

Chapter 4 – Analyses and presentation of data was done in chapter four

Chapter 5 – Discussion from the findings were given in this chapter.

Chapter 6 – The last chapter concluded the study and gave recommendations. The study proposed a model, which was also presented in this chapter.



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CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses the conceptual and empirical literature reviewed as well as a detailed explanation of the theoretical models relevant to the study. Previous literature was reviewed in order to demonstrate where the gaps lie in literature that necessitated the present study. The chapter looks into the conceptual meaning of agriculture, entrepreneurship, agricultural entrepreneurship, small scale farming and small-scale farmer. The chapter progresses by discussing South Africa agricultural sector in the context of entrepreneur, youth and agriculture entrepreneurship including government policies and legislative framework. The chapter further identified factors that contribute to agriculture entrepreneurship development and barriers to agricultural entrepreneurship development as reviewed in literature. The chapter ends with a conclusion and summary.



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2.2 Conceptual framework

2.2.1 Agriculture

Globally, agriculture has been recognised as a key instrument to sustainable development particularly in developing economies in 21st century (World Bank, 2008). It is considered by many scholars as an instrument for growth because of its potentials to generate required resources in other sectors across the country by supplying and sustaining the entire economic growth process. In addition, empirical findings and theories have proven that agriculture can play a vital role in poverty reduction, particularly, in developing nations (Christiansen, Demery, & Kuhl, 2006). Likewise, the OECD (2006) report argues that development in agriculture has a tendency to be pro-

poor as it connects poor people's key resources such as land and labour, and sustain rural economies, areas where mostly of poor people live.

Agriculture is described as the art of farming, encompassing the work of soil cultivation, crop production and livestock rearing.

Similarly, the Oxford English Dictionary (1971) defines agriculture as "the science and art of cultivating the soil, including the allied pursuits of gathering in the crops and rearing livestock; tillage, husbandry and farming." According to Silva et al. (2009) agricultural industry offers vast potential and thriving business opportunities to entrepreneurs when government actively and provides full support. In spite of that, people's negative opinions towards agriculture, there still exists trust that the sector is capable to increase income, provided it is efficiently operated (Man, 2007).

Besides, the high demand for agricultural produce has never stopped. However, making agricultural sector an efficient sector will change the public perceptions regarding agriculture. So in order to cultivate interest of youth and black farmers in agricultural entrepreneurship, it may be necessary that the South African government provide programs and activities that equip people with required skills (Pemandu, 2013). In recent times, the government driven transformations programs are creating both opportunities and challenges for producers, processors, wholesalers, retailers and other supply chain participants in agricultural sector (Silva et al. 2009).

Moreover, for decades in South Africa, the Department of Agriculture, now known as Department of Agriculture, Forestry and Fisheries (DAFF) has been on the drive to improve the agricultural production and reducing the costs of inputs of farmers (Ramaila, Mahlangu & Toit, 2011). According to Kirsten and Vink (2003), the South African government through the drive to increase the productivity of farmers in '80s and early '90s supported farmers with debt consolidation subsidies, crop production

loans, drought reliefs and also acted as a guarantor of consolidated debt incur by farmers.

However, these support mechanisms changed after the collapse of apartheid era where the government reduced funding towards commercial farmer. As such, focus was more on the subsistence farmers through microeconomic deregulation, land reform policy and provision of rural infrastructure to improve small scale farmers' productivity in rural locations, particularly among the formally disadvantage farmers (Aliber & Hall 2012). As agricultural sector is regarded as one of the sector with potentials to supply large number of job opportunities, hence, the government's effort to encourage an entrepreneurial culture particularly among the Black South Africans is capable of promoting future wellbeing across the country and the economy at large.

2.2.2 Entrepreneurship



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Entrepreneurship has been described as an important economic driver of every growing economy. It is characterized by the presence of opportunities, emergence and growth of new enterprises (Sebikari, 2019). The growing body of entrepreneurship literature has derived its inspiration from the work of Joseph Schumpeter. According to Schumpeter (1999), an entrepreneur is an agent of change who disturbs the equilibrium of the steady state. Entrepreneurship is the pursuit of opportunity irrespective of limited resource conditions. Shailesh, Gyanendra and Yadav (2013) define entrepreneurship as a dynamic process of creating wealth incrementally. According to these authors, creating wealth involves an individual or group of individuals who through a spirited efforts and commitments take risks of given and inspiring value to some products or services.

That is, entrepreneurship characterises the practical application of dynamism for starting and building an enterprise (Mishra, El-Osta & Shaik, 2010). Also, according to United State Department of Agriculture (2011) entrepreneurship is described as related to path-breaking and dynamic developments within the Small, Micro and Medium Enterprise (SMME) sector. Entrepreneurship involves making decisions and facing the consequence of such decisions. In Ghadiri (2005) the measures of entrepreneurship tend to focus on big non-agricultural firms, by and large, neglected the agricultural sector. The author further alluded that Innovation, Income, wages, survival, and productivity have become most frequent measures of entrepreneurship performance; other performance measures that have been used include profitability and satisfaction of employees and business owners.

On the other hand, entrepreneurs according to Gray (2002) are also defined business minded individuals who are determined to grow and expand businesses with leadership and managerial capabilities for achieving the set goals. In 2003, European Union Commission Green Paper, an entrepreneur is described as an individual with a step taken mind-set to create and develop economic activities with intents for innovation, risk taking and efficient management within a new or existing organisation.

Also, Ronstadt (1991) describes an entrepreneur as an innovator who recognises, appropriates and converted opportunities into profitable ideas, through time add values, effort, skills, money and take risks to carry out the ideas. In describing an entrepreneur, some school of thought believes that entrepreneurs possess certain common personality traits like independence, self-confidence, restlessness and propensity to be a loner. This school of thought holds that entrepreneurs are born and not made. On the contrary, other school of thoughts believe that some entrepreneur personality traits and accompanying behaviours are moulded by different factors such

as perceptions, values, beliefs, environment and background while for some, entrepreneur tendencies come up through education and rigorous training (Knudso, Wysocki, Champagne & Peterson 2004; Krueger & Brazael, 1994). Regardless of the entrepreneurial disposition, potential entrepreneurs needed to be fully equipped with skills and knowledge of entrepreneurship in order to become successful.

On the whole, entrepreneurship has come to be a critical part of economic development strategies in modern economy worldwide, and it has become a subject of interest among the academic and policy makers. In South Africa, government has made efforts to curb the unemployment rate, prioritised the development and increase the awareness of entrepreneurship among the formally disadvantage part of country (Department of Trade and Industry (DTI), 2013). Agriculture sector is one area the government has designed policies to develop entrepreneurial activities among the small-scale farmers in rural locations. According to Whitefield (2010), linking farming and entrepreneurship offers an accelerator for small-scale farmers to discover and exploit different opportunities brought by agriculture and agro-processing. The current study therefore focused on the entrepreneurship in the context of agriculture.

2.2.3 Agricultural entrepreneurship

According to Kahan (2013.p2), “for the survival of small-scale farming in an ever-changing and increasingly complex global economy” agricultural entrepreneurship is important. Agricultural entrepreneurship also known as agripreneurship or agribusiness; it is the combination of agriculture and entrepreneurship. The words ‘agripreneurship’ and ‘agribusiness’ that were used interchangeably in this study represents ‘agricultural entrepreneurship’. The discipline of entrepreneurship is multifaceted and includes a conflation of several disciplines – an indication that it has enormous potential for growth. Nagalakshmi and Sudhakar (2013) refer to

agripreneurship as mostly sustainable, community oriented and directly-marketed agricultural activities. The authors refer 'sustainable' agriculture to mean a holistic systems oriented approach to farming that focuses on the mutual relation of social, economic and environmental process.

Furthermore, agripreneurship is described as use of entrepreneurial ideologies to discover, nurture and succeed in managing sustainable agricultural businesses optimally for profit and livelihoods improvement (Mukembo & Edwards, 2016). Moreover, Alsos, Carter, Ljunggren and Welter (2011) believe that livelihoods in communities and nations depend on agricultural products and changing the agriculture sector to accommodate and support ambitious agricultural entrepreneurs. Agripreneurship helps to develop a country's agriculture and increase the likelihood of food security for its population. Onubuogu, Esiobu and Ibe, ((2015) alluded that the sustainability of agricultural entrepreneurship requires farmers' organisational competency and the development of entrepreneurial skill. Another definition is derived from McElwee (2006) who refer to agricultural entrepreneurship to farmers' entrepreneurship. The foregoing author further defines farmer entrepreneurship as a farm and/or non-farm activity take on by individual's to make earning either on a full time or part time basis.

On the other hand, agripreneur is described as a person or group of persons who introduce, transform or creates a product or services within the agricultural value chain, including adding value to existing products and bearing the risk ultimately to make profit (Bairwa et al., 2014; Tripathi & Agarwal, 2015). In other words, an agripreneur is someone who ventures in agriculture to create wealth. Moreover, Stenholm and Hytti (2014) distinguish between entrepreneur-farmer and producer-farmer; the scholars state that entrepreneur-farmer act as agent of change and create

their identity by addressing challenges in institutional norms, while producer-farmers, focus on following accustomed behaviour. These authors also described agripreneur as innovative change agent who discover opportunities to use land and its resources for specialised, value-added food and agriculture-based businesses. This means that the individual shoulders all risks and benefits resulted from the business. Therefore, the combination of agriculture and business promote agripreneur to innovate, identify market and satisfy needs by developing diverse ways of doing things (Bairwa et al., 2014).

Moreover, Tripathi and Agarwal (2015.p535) state that for farmers to succeed as agriculture entrepreneurs, they need to be:

“active, be curious, determined, persistent, visionary and hardworking. More so, they have to come up with ideas, have strong communication and organisational skills, recognise marketing opportunities as well as manage resources optimally and bear the risks involved in decisions made.”

On the other hand, Diaz-Pichardo, Cantú-González, López-Hernández and McElwee (2012 p.97) stated that to change a person from the status of being subsistence or small-scale farmer to an entrepreneurial farmer involves empowering such an individual or group with the basic entrepreneurial competencies and skills through both formal and non-formal education. Due to these reasons, Kahan (2013) suggested the importance of extension service providers to support and promote development of entrepreneurship skills among rural farmers as well as providing mentoring for potential youth and aspiring farmers. Also, a study funded by the European Union titled

Developing Entrepreneurial Skills of Farmers identified five skills/competencies that farmers need to be successful agripreneurs:

- a) Professional skills, i.e., technical and production knowledge in the area/project that the farmer would like to implement;
- b) Management skills, i.e., financial and human resource management skills, planning and customer care skills;
- c) Opportunity skills, i.e., ability to identify and take advantage of a business opportunity, conduct a risk assessment and management, and being innovative;
- d) Strategic skills, i.e., skills to develop and evaluate the feasibility of a business idea, thinking conceptually, and setting goals; and
- e) Cooperation/networking skills, i.e., leadership, flexibility, teamwork, and cooperation (Rudmann, 2008 p.7).



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2.2.4 Policy frameworks to enhance agricultural sector

There are policies in place for promoting agricultural entrepreneurship in South Africa; such policies have in the past contributed to rural impoverishment. Consequently, the new policies aim to create opportunities for reforms which will provide support for small-scale farmers and youth inclusion through which the agricultural sector can directly contribute to alleviation of poverty and enhance food security nationwide. In this regard, it is important to discuss the existing policy frameworks that are in place for enhancing the agricultural sector.

In 2003, African leaders in Maputo, Mozambique held a summit which gave birth to the first declaration of the *Comprehensive Africa Agriculture Development Programme (CAADP)*. This is a pan-African flagship programme meant to improve economic

growth, wealth creation and food security in the continent. African government through the CAADP pledged to allocate 10% of national public expenditure to agriculture and generate 6% agricultural Gross Domestic Product (GDP) growth annually (de Silva Francisco, 2004). With its fascinating strategy, CAADP emphasized on the role of small-scale farmers to fulfil the overarching goals of the Maputo Declaration. The aim was to foster an inclusive process bringing on-board diverse stakeholders, such as farmers' organizations, the private sector and women's associations, to gain consensus for a national agricultural policy.

In the attempt to achieve the CAADP objectives, the New Partnership for Africa's Development (NEPAD) as well as NEPAD Planning Coordinating Agency (NPCA) facilitates and ensures African countries have their development plans that are consistent with the CAADP. Similarly, Regional Economic Communities (RECs) like South African Development Community (SADC) and the Common Market for Eastern Africa (COMESA) takes a lead in the implementation of CAADP in their countries. Meanwhile, the Regional Strategic Analysis and Knowledge Support System (ReSAKSS) took the responsibility to monitor the national and regional progress through data analysis, supported by the International Food Policy Research Institute (IFPRI). The CAADP as a framework prioritised four areas of focus which include, rural infrastructure and trade related capacities, land and water management, increasing food supply and reducing hunger and lastly agricultural research and technology adoption and dissemination (Zutlevics, 2016).

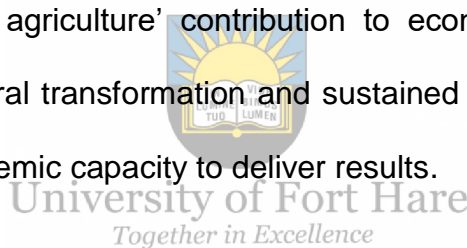
Another declaration was also made in in 2014; second decade of the Maputo declaration. This time it was *Malabo Declaration* tagged "Year of Agriculture and Food Security in Africa" by NEPAD. Although, as stressed by NEPAD (2014) this declaration did not overwrite CAADP rather, it built on it and evangelises Africa's recommitment

to the CAADP. Meanwhile, the Malabo declaration also proffers a new strategy for the period of 2015-2025 and set following goals:

- ending hunger in Africa;
- multiplying agricultural productivity;
- reducing post-harvest losses;
- increasing intra-African trade in agricultural goods and services;
- enhancing resilience of livelihoods and production systems and;
- ensuring agriculture contribute significantly to poverty reduction

NEPAD (2014).

In addition, the four pillars of the first decade of CAADP was replaced by three “specific action areas which is agriculture’ contribution to economic growth and inclusive development, Agricultural transformation and sustained inclusive agricultural growth and Strengthening systemic capacity to deliver results.



South Africa as a country also has several policies for agricultural development. One of such policies is the *land reform policy*. During Apartheid era in South Africa, one of the wide ranges of discriminatory policies implemented was restrictions on the ownership of farm land against the Blacks outside of the former homelands (Mosley & Saika, 2007). From 1994, the post-apartheid successive government has been attempting to return land into the hands of historically disadvantaged groups through land reform, which has led to the post-apartheid government placing land reform at the forefront of its commitment to poverty reduction, particularly in rural areas.

The government through the White Paper on Agriculture (2005) observed that the structure of agriculture and rural communities was characterised by uneven income distribution, but government trust that those shortcomings can be partly addressed by

increasing access to agriculture via land reform, as well as making available the technical and financial assistance of government mainstream programme for the small-scale farmers. As a result, a significant part of public financial resources have been devoted to the land reform (OECD, 2006).

The Land Reform Programme consists of three main components: land distribution, restitution of land to people and communities who have been unjustly dispossessed, and land tenure reform (OECD, 2006). Through the Land Reform Programme, members of the disadvantaged Black population were given grants to acquire land, or to undertake farming in other ways. Moreover, in 2005, new programmes were introduced as part of the land reform process to support the development of market-oriented family farms. This was achieved primarily through the means of investment grants and the provision of micro-credit and financial services in rural areas.

Furthermore, one of the core objectives of Land Redistribution for Agricultural Development (LRAD) was to support Black population to gain access to agricultural land, for use and ownership, through allocation of grants (Louw, Chikazunga, Ndanga, Bienabe, & Jardaana, 2008). But unfortunately, and in contrast to the land restitution programme, the land redistribution programme performed below target. For instance, inadequate institutional capacity, poor financial resources, and a lack of appropriate agricultural support services and coordination were cited as factors affecting the whole programme (OECD, 2006).

The third framework for agricultural development in South Africa is the *South Africa Agricultural Policy*. The White Paper on Agriculture (2005) also states the finance policies for agriculture which stipulate the specific problem area to be addressed is the financing of beginner farmers. The agricultural finance policy states that farmers

wishing to make use of credit must be trained and advised so as to understand budgets and cash flows, the role of interest rates, and the need to repay to ensure future credit worthiness. The policy further states that the Government should facilitate and even subsidize the costs of timing in order to reduce the burden on financial institutions; as such, non-governmental organisations may also be involved.

Generally, the policy states that the farmers without title deeds for farmlands, or do not meet other conventional bank security requirements, are often excluded from accessing to agricultural loans. For such farmers, the agricultural finance policy states that the main criterion should be the ability of the borrower to repay rather than the traditional collateral requirements (White Paper on Agriculture, 2005). This policy further states that the repayment guarantees could include: the credit history of the borrower; group credit rating; greater use of character references; and incentives. The policy also states the access to future loans will be the best incentive to repay a loan. The agricultural finance policy emphasizes that financial institutions need to adjust the payback time to suit the cash inflow of the client.

This policy also states that the ability to repay, the purpose of the loan and the source of the repayment do not necessary have to coincide. Family income and off-family income (i.e. income produced by a family member from extra-familial activities), for example, can be considered as potential repayment services. However, this does not renounce financial institutions from considering certain concepts like purpose of the loan, integrity, managerial ability and security (White Paper on Agriculture, 2005).

The *Micro Agricultural Financial Institutional Scheme of South Africa (MAFISA)* is another policy framework in South Africa; it is a short-term financial service provided by Government to assist the development of micro-level farmers, farm workers, farm

tenants, small landholders, landless, emerging farmers, processors of crops, micro-entrepreneurs and the working poor (Louw et.al 2008). MAFISA was founded to assist the poor to become new agricultural entrepreneurs, to run existing agricultural businesses, and develop these into complete commercial operations. Meanwhile, one of the dark sides of this policy is that small-scale farmers are not subsidized in times of disasters and must repay loans even if there was no production. As such, MAFISA is therefore unlikely to take small-scale farmers great heights.

Agricultural Information Policy is another provision for agricultural development. Emphasis was made in the white paper on agriculture regarding the importance of adequate information on agricultural development. This is because comprehensive information about certain agricultural conditions which include physical and marketing conditions as well as production constraints are prerequisite for planning, including formulation of policy which will support farmers on an on-going basis. This policy advocates that the Department of Agriculture should be responsible for regular data collection on soil moisture, pests such as locusts, and agricultural production and food supplies in all parts of the country. Also, variables such as: data on the climate, agro-meteorological forecasts, dam levels, water availability to households, household food security and nutrition in an early warning system for food and water security should be included and must be accessible to the farmers (White Paper on Agriculture, 2005).

Market Information Policy. Market information is critical for proper market operations, because it promotes efficient arbitrage between markets, which is to the benefit of both consumers and producers. Moreover, in case of insufficient allocation of productive resources, market information improves the bargaining power of producers to efficiently deal with traders and processors, and reduces transaction costs by reducing

risks. If the markets information is improve, farming in rural areas can yield better results.

In this case, South African Government should also understand that accessing appropriate market and marketing information by farmers could best be achieved through agricultural markets deregulation. Supporting this point is the notion of MALA - Ministry of Agriculture and Land Reform (1998) that, if farmers are much included in the marketing procedure, policy becomes advantageous to small-scale production; accessing information by the farmers will be easy and trade volume could equally be stimulated. The consequence of disseminating latest information to farmers is that it will enable them make better decisions regarding what, when and how to produce.

Animal Health Act of 2002 (No. 7) emphasizes on procedures for controlling animal diseases and improving animal health. This act stipulates that owners or users of land for animals rearing purpose must take necessary actions to prevent the infection of animals; to prevent the spreading of any animal's diseases or parasites. The Animal Health Act (Act No. 7 of 2002) acknowledges that when there is a reasonably suspect of an animal infected with any animal diseases or parasite, this must be reported immediately in the prescribed manner to the national executive office and provincial executive officer. So, it is much clearer that the through Act, government put measures for precaution in place to deal with issues surrounding animal health, and it is required of farmers to be familiar with this act.

Agricultural Policy on Cattle Farming. While discussing this policy, MALA (1998) described the policy as one that advocates for animal health improvement. This includes the control prevention of prophylactic inoculations, tick-borne diseases and the treatment of illness and injury. Furthermore, this policy oversees the formation of

competent association of cattle-owners to take over the collective interests previously managed by the Government which is prerequisite to long-term sustainability and improvement of livestock health. He also, mentioned that the association are to be responsible for the organization of tick control; remedies and prophylactic injections; liaison with the private sector suppliers of these commodities; marketing; and management of the common grazing resource. And they are also stand as yardstick for the both internal herds' management and liaison committee between public/private sectors and cattle owners.

Agriculture Policy on Small Stock and Poultry Farming. With the exception of the Eastern Cape, there appears to be a lack of trained extension staff dealing with small stock. In order to achieve improved agricultural sector, there is need for the introduction or strengthening of specialist advisory. In the marketing of fibre products, the formation of wool and mohair growers' associations will be a priority for the small-stock advisory service. These associations will be the means of securing shearing facilities, skilled classing of wool and proper packaging for the market for their members (MALA, 1998).

Irrigation Policy and Agricultural policy. In the past, farmers are encouraged through policy, to consider investing in capital-intensive groundwork like farm irrigation that requires less labour demand. Under the new water legislation, a system of licensing will in time be introduced to regulate accessing by all users to water resources. As competing uses for water resources increase, the cost of water to the end users, including farmers, will inevitably increase (MALA, 1998). This means that agriculture must change to more rational, economic and sustainable cropping and water-use patterns. The overall effect of past policies, which led to the construction of current

irrigation systems, with free or low priced water, and with controlled (and relatively high) output prices, was to reduce the efficiency of irrigation. Agricultural policy reforms, together with implementation of the National Water Act, are designed to improve efficiency so that scarce water is used on high value, often labour-intensive crops (MALA, 1998).

Provincial Growth and Development Plan (PGDP), was formulated by the provincial Government of the Eastern Cape. The main focus of PGDP was on economic growth, employment creation, poverty eradication and income redistribution for the -10- year period 2004 to 2014. The PGDP provided the Eastern Cape the opportunity for medium-to-long range (10 years) strategic planning to address major structural deficiencies in the Eastern Cape (Eastern Cape Provincial Government, 2004). Among its objective is to increase agricultural production, income and employment of the poorest households, particularly in the former homelands.



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The objective recommends that there is need to cluster State programmes in three parts of intervention; promoting food security through expanded small-scale production; expanding the asset base of the poor, particularly through effective land tenure reform; increasing the use of land for commercial agriculture in the former homelands, especially through ownership and institutional mechanisms that benefit the poorest households (Eastern Cape Provincial Government, 2004).

On the final lists of agricultural policy discussed in this study is the *Eastern Cape Provincial Planning Priorities* with the declaration of the Eastern Cape Vision 2030. This provincial vision intends to mobilise all citizens and sectors of the Province around a common vision of creating prospect for revisiting social partnerships and development of common goals among citizens, the state and the private sector. A

development agenda was set for the next 15 years – 2015-2030; building on the Provincial Growth and Development Plan (PGDP) of 2004-2014. The priorities of the vision 2030 agenda includes: Redistributive, inclusive and spatially equitable economic development and growth which specifically has to do with quality health, education, training and innovation and intutional capabilities. Those priorities therefore gave birth to five (5) specific goals of the Vision 2030 PDP:

- Goal 1: A growing, inclusive and equitable economy which seeks to ensure a larger and more efficient provincial economy; more employment; and reduced inequalities of income and wealth;
- Goal 2: A healthy population through an improved health care system for the Eastern Cape;
- Goal 3: An educated, innovative citizenry. This goal seeks to ensure that people are empowered to define their identity, are capable of sustaining their livelihoods, live healthy lives and raise healthy families, develop a just society and economy, and play an effective role in the politics and governance of their communities and nation;
- Goal 4: Vibrant communities. This goal seeks to generate a shift from the focus on state driven quantitative housing delivery that has trumped the need for people to make own decisions, build their own liveable places and transform spatial patterns as basis for vibrant and unified communities; and
- Goal 5: Capable, conscientious and accountable institutions. This goal seeks to build capable, resilient and accountable institutions to enable and champion rapid inclusive development (Eastern Cape Provincial Government, 2004).

In a nutshell, there are policy frameworks in place for development of agricultural entrepreneurship in South Africa as a whole, and Eastern Cape in particular. Even

though most of the past policies may have failed to achieve their goals and objectives, there is need for new policies which gives hope for a better future for the agricultural sector.

2.2.5 Small-scale farmers in South Africa

South African agriculture sector is best described as dual system agriculture, with the first type being described as a well-developed and capital intensive commercial agriculture that contributes significantly to national food security. The second type of agriculture is the less developed and less resourced agriculture occupied by small-scale farmers and subsistence farmers regarded as backward farming (Mudhara, 2010) which is the focus of the present study.

The definition of small-scale farming in South Africa is not the same as other countries. The definition is derived from South Africa's historical background and its formations. Small-scale farmers in South Africa are compared to a non-productive, subsistence and backward farmers found in rural locations; parts being referred to as formal homeland areas (Mudhara 2010). Tshuma (2014) describes small-scale farmers in South Africa as those whose primary concerns in agriculture is to provide food for their families, and only considered the surplus for sale in order to supplement their income and diversify their diet.

To other scholars, small-scale farmers are those that cultivate small size of farm land typically one hectare or less. Small-scale farmers are also referred to as subsistence farmers. Small-scale farmers are described as farmers whose primary motive in farming is not to produce for the market rather central to their farm produce is for the household consumption. Fan, Brzeska, Keyzer, and Halsema (2013) define small-scale farmers as those who consume larger portion of their farm output and those who

are held back from participating more actively in commercially oriented agriculture due variety of constraints. Such constraints may include: poor access to land, lack of on-farm and in-farm infrastructure, and lack of access to finance for production inputs, mechanisation, and transport logistics, limited access to high-value markets as well as, extension and research support services.

Furthermore, The National Department of Agriculture (2008) identified major characteristics of production systems of small-scale farmers to include simple, out-dated tools, labour intensity, and high seasonal fluctuations with women playing an essential part in production. The department also stated that small-scale farmers varies in individual characteristics, farm size, and resource distribution between food and cash crops, livestock and off- farm activities. In addition, Tshuma (2014) stated that small-scale farmers in South Africa are characterised by their socio-economic status such as: demographic characteristics, land holdings, and skills and training. The author argues that small-scale farmers are usually lacking formal education and are typically aged people; they can either be male or female, usually located in remote areas and are geographically dispersed as well as far away from lucrative markets.

Distance to the market, together with limitations mentioned above result in high business costs for small-scale farmers. Also, since they are poor, small-scale farmers find it difficult to compete in lucrative markets due to the high costs of operation. Kherallah and Kirsten (2000) argued that traders with higher social capital are better able to enter more capital-intensive marketing activities such as wholesaling and long-distance transport. On the other hand, traders with poor social networks face major barriers to entry into the more lucrative market segments. Similarly, Adekunle and Fatunbi (2014) refers to small-scale in South Africa as poor people who lack capital assets and need to farm to sustain their livelihoods.

Although, there are several indications that small-scale farmers contribute to food security, for example, Wiggins and Keats (2013) indicate that small-scale farmers have an important role in improving household food security especially and improving nutrition. But sadly, there is exclusion of small-scale farmers from mainstream food markets in South Africa as a result of low quality of their farm produce and high transaction costs. Also, Chikazunga and Paradza (2013) indicated that small-scale farmers in most cases can only access small pieces of land or sometimes only little of hundred square metres like home gardens or food plots of possibly three to five hectares. Whitefield (2010) emphasises that the major exclusion of entrepreneurship in subsistence agriculture is the result of inadequate institutional support systems in the previous years.

Moreover, the New Growth Plan (2012) of South Africa government prioritises agriculture as an important area for development. Specifically, the programme policy set to develop and provide support for the small-scale farmers who could impact positively on poverty alleviation and household food security. Despite this, statistics still show that a significant number of people who are involved in small scale farming are yet to experience effective support from policy makers (Aliber, 2012). Meanwhile, these groups of farmers cannot be overlooked, because their roles towards food security and world food supply is fast gaining centre stage in key world bodies such as the United Nations Commission on Development (Piebalgs 2012).

From the above debate, small-scale farmers have been defined from different scholars and from different perspectives. Although, notions are put in different forms but considering the highlighted characteristics, the meaning is the same. Therefore, the small-scale farmers in the context of this study are farmers who have same attributes

discussed from the above literatures. In other words, the study focused on small-scale farmers who are in rural areas of Eastern Cape Province because they possess the attributes of typical small-scale farmers in South Africa.

2.2.6 Importance of small scale farming

In developing nations such as South Africa, much has been said about the role of small scale farmers' contributions to economies. The extant literature, also pinpoints that policy makers and scholars in agricultural development are advocating the support and development of small scale farmers toward ensuring food security and how to reduce the growing rate of youth unemployment (FAO 2006 p.1).

The questions such as “what is the use of these small scale farmers, how is the nation going to benefit from investing in such farmers?” can better be understood by highlighting some positive roles contributed to a nation by small scale farming sector in African nations and South Africa in particular. For example, Mhlaba and Brey (2014) stated that support to small-scale agriculture can bring a significant impact in improving the livelihoods of rural dwellers. Also, Pierre (2014) noted that to ensure global food security and feeding of rural dwellers, small scale farming is one best instrument to guarantee it. The importance is further enunciated among the following a highlighted below:

Food Security: according FAO (2006 p.1) “food security exists when all people, at all times, have physical and economic access to sufficient, safe and healthy life.” Similarly, World Food Program (WFP) (2016 p.27) states that food security means that everyone is able to have enough healthy food to be well and active. Furthermore, the program also identifies three main elements of food security which include:

- i. "Food availability: food must be available in sufficient quantities and on a consistent basis;
- ii. Food access: people must be able to regularly acquire adequate quantities of food, through purchase, home production, barter gifts, borrowing or food aid; and
- iii. Food utilization: consumed food must have a positive nutritional impact on people."

Small-scale farming is considered to be central in the effort of achieving food security. Xaba (2014) observed that food security forms a big part of the Kwazulu Natal poverty eradication strategy. In broader level as well, the government of South Africa places significant attention on subsistence agriculture in an effort to enhance to food security.

Job Creation: it has been noted overtime that small-scale farming sector creates indirect job opportunities. For instance, a statement made by Zuma (2014), advanced that the refurbishment of the 726 hectares Tugela Ferry Irrigation Scheme in KwaZulu Natal would benefit more than one thousand small-scale farmers and create 2000 seasonal farm worker jobs when the scheme is operating at optimal level. The South Africa government also from their New Path Plan expected agriculture as the primary activity in rural areas to create 1 million jobs by year 2030. Thus, agriculture has been identified as the best instrument to reduce rural poverty by providing most of the employment in rural areas.

Poverty alleviation: Earlier studies from (Deininger, 1999; Rao & Chotigeat, 1981; Sobhan, 1993) as cited by Tshuma (2014) argued that significantly small-scale agriculture contributes to poverty by raising agricultural productivity and rural incomes. The authors indicated that the relationship between farm size and productivity point to the ability of small-scale farmers to increase agricultural productivity. They suggest

that the intensive application of labour inputs by small-scale farms as compared to commercial farms makes them more efficient and productive. Furthermore, small-scale farmer help reduce poverty in rural areas because they can be found in the remotest corners of any nation where poverty levels are well evident.

The possibility of the sector to exist anywhere and more importantly to produce different kind of goods for less, at an affordable price to their communities makes the difference. In addition, part of the argument of success in small-scale farming is the adoption of intercropping practices. This makes small-scale farmers to utilise every piece of their farm land and intensively produce a variety of crops on their farms. In South Africa, one of the efforts by the Kwazulu Natal Department of Agricultural and Rural Development according to Xaba (2014) is to take small-scale farmers to a level where they start earning income from their farming activities. Thus, such a stance may promote activities embarked on by small-scale farmers so that they will be able to earn some income and alleviate poverty.



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2.2.7 Agriculture in Africa: International perspective

According to Acheampong & Esposito (2014), majority of African population are at the bottommost of economic pyramid. This has contributed to incidence of hunger and starvation in the continent especially since 2010 and recently worsened (FAO, 2018). The occurrence of malnutrition in Africa is approximately 22.8% (about 12%) worse off from the global average of 10.8%. In terms of food insecurity, about 53.1% of Africans face food insecurity and 22% worse off from the global average of 25.4% (United Nations, 2019). The occurrence of malnutrition in Africa is approximately 22.8% (about 12%) worse off from the global average of 10.8%. In terms of food insecurity, about 53.1% of Africans face food insecurity and 22% worse off from the global average of

25.4% (United Nations, 2019) The worsening situation has been driven by hostile climatic conditions, locust invasions, overpopulation, conflicts, and difficulties in the global economy. Food production would need to increase considerably to meet rising demand. This has had severe consequences because much of Africa's farmers operate in small-scale agricultural communities.

The International Fund for Agricultural Development (IFAD) notes that agriculture has a significant role to play in Africa (IFAD, 2014). They acknowledged that agriculture contributes to 30% of GDP of African economies and 60% of Africans work in agriculture. Yet, less than 10% of the African land surface has been cultivated and small-scale agriculture communities use less fertilizers compared to farmers operating in other continents. In lieu of this, the FAO (2018) has noted that there are several opportunities for entrepreneurial-led growth in the agricultural sector in Africa especially in small-scale farming communities in rural environments. These opportunities are expected to be driven by growing African food markets, availability of digital platforms and shifting demographics. The Alliance for Green Revolution in Africa also note that agriculture is a proven path to prosperity and remains Africa's surest bet for growing inclusive economies and creating decent jobs mainly for the youth (AGRA, 2017). However, the transformation should not only focus on production but should also be a market-driven agenda that will involve transforming small-scale farming communities into commercial farming entities.

However, academics urge caution with this meta-narrative from policy-making institutions. Diao, Hazell, & Thurlow (2010) indicate that Africa will face several new challenges that were not faced by Asian countries, despite the fact that these African countries cannot bypass a broad-based agricultural revolution to successfully launch their economic transformations. This requires addressing these challenges that are

community and country specific. Another major concern is that there is no reassurance that smallholder farming communities will respond appropriately to commercialization initiatives. “The local context and farmer characteristics and attitudes need to be much better understood in order address the strengths and weaknesses of the sector participants and the opportunities and threats of the external environment” (Poole, Chitundu, & Msoni, 2013). These cautions make it precarious for knowledge creation within of commercialization of agriculture in small-scale farming communities.

Achieving the commercialization objectives in small-scale farming communities, require the application of entrepreneurial strategies appropriate to these contexts (Zelekha & Dana, 2019). This is because study of a community of an agricultural community of farmers report a high failure rate among these enterprises (Acheampong, Narteh, & Rand, 2017) and weak ability to meet local demands (Dana, 2007). In a global perspective, Entrepreneurship has been defined as taking the risks of venturing and assumption of the benefits (Hisrich, Peters, & Shepherd, 2009). It is widely accepted that entrepreneurship has the capability of helping achieve the meta-narratives on agricultural transformation in Africa (Dana, Ratten, & Honyenuga, 2018).

However, specific entrepreneurial strategies are required. These can be either of causal, effectual or bricolage form (Fisher, 2012). Under the causative strategy, entrepreneurs determine an outcome to be achieved and mobilize resources towards that end (Sarasvathy, 2001). This approach can be utilized to explain how agents in agricultural societies determine their goals and act towards those goals in various contexts in Africa. The effectual strategy suggests a dynamic and iterative process to new venture creation (Saravvathy & Dew, 2005). This strategy advocates that entrepreneurs act within their means, take affordable risks, create partnerships and leverage possibilities. This strategy can be useful in understanding resource

configurations in agricultural communities as well as how entrepreneurs deal with uncertainty in these communities. The final strategy is bricolage - making do by applying combinations of resources at hand to new problems and opportunities (Baker & Nelson, 2002). This strategy can also be useful in understanding how entrepreneurs in agricultural communities particularly smallholders deal with resource constraints. These can offer new insights into the area of entrepreneurial communities with emerging strategies of entrepreneurship.

A search for literature on agricultural entrepreneurship in Africa turns up very few publications and when the level of analysis is gauged at the community level at which the majority of small-scale farmers operate the situation is even direr. This indicates the paucity of literature on the subject in Africa. This study therefore contributes significantly to the literature in this area. The study explored various aspect of small-scale farming and agricultural entrepreneurship to ensure that its findings proffers to an understanding of how entrepreneurship in agricultural communities can lead to the achievement of Sustainable Development Goal (SDG) 2 which is Zero Hunger in Africa.

2.2.8 South Africa agriculture in the context of entrepreneurship

Globally, agriculture is increasingly becoming a venture towards economic growth of nations. Historically, South African government during apartheid era laid the foundation for large-scale commercial farming sector but this was done through legislation to separate the white and black farmers, facilitate marketing orderly and several apartheid severances were put in place by government through policy intervention between 1910 and 1980's (Genis, 2012).

After the collapse of apartheid in 1994, South African agricultural sector began to experience transformation; starting with deregulation of the agricultural marketing, land reform policy and other policies and development support programs to open up and make South Africa agricultural sector more productive and sensitive to the world market events (Samardick, 2000). The Department of Land Reform and Rural Development after apartheid era continuously drove towards the improvement of the capacity of small-scale farmers for economic agriculture. Thus particular attention was to ensure that is sustainable through diverse development support programs to land reform beneficiaries and other small scale farmers in rural communities.

Despite the foregoing assertions, the statistics still revealed that agriculture contributes to less than three percent of the Gross Domestic Product (GDP) of South Africa economy (FAO, IFAD & WFP, 2013). This was made possible through the huge contribution from agro-processing industry. However, Practical Action (n.d) posit that South African agricultural sector still possesses many challenges, mostly with the uncertainty of accessing support in terms of finance, technical, information and availability of stable market. Meanwhile, Venter, Urban and Rwigema (2010); Turton and Herrington (2012) mentioned knowledge and skills base as leading challenges faced by small-scale farmers who of course fall under the previously disadvantaged and marginalised section of the.

Moreover, Global Entrepreneurship Monitor (2012) observed that among all developing nations, South Africa has the lowest Total Entrepreneurship Activity (TEA) rate, which signifies that entrepreneurial interest on a variety of measures is extremely low. Also, Herrington, Kew and Kew (2008) hold the view that South Africa's early-stage entrepreneurial rate is 7.8% which is significantly below the average of 13% in comparison with other middle to low-income countries. Moreover, studies in Global

Entrepreneurship Monitor (GEM) over the years have convincingly indicated that the low level of early stage entrepreneurial activity in South Africa is formed by low levels of education; social and entrepreneurial elements that do not inspire entrepreneurship as a career path of choice; a lack of access to finance, mostly in the micro-financing arena and a difficult regulatory environment (Herrington, Kew & Kew, 2009).

Meanwhile, South Africa has displayed a nation-wide effort to support entrepreneurship, which is obvious through the Black Economic Empowerment (BEE) scheme and other similar types of initiatives (Fal et al., 2010). In fact, the South African government through agricultural departments aims to support the small-scale farmers to develop entrepreneurial trait to participate in commercial agricultural economy. However, despite such efforts, the entrepreneurial spirit is yet to set in motion as it should be (Foxcroft et al., 2002). But, in view of the failure in formal sector (both private and public) to engage the increasing number of job seekers in South Africa, governments at all level growing attention has been centred on entrepreneurship and firm creation and its potential of adding to economic growth and job creation (Herrington, Kew & Kew, 2009).

Regardless of the significance placed on promoting entrepreneurship and abundance of resources committed towards encouraging entrepreneurial activities, policymakers mainly have been operating without the benefits of substantive research findings (Dennis, 2000). Hence, the present study sought to explore the level of agricultural entrepreneurship development among the Black small-scale farmers and youth, and design a framework for policymakers both in private and public sector. Empirical evidences from other countries have shown that if proper intervention and adequate implementation policies are prioritised, South Africa can also attain sustainable level in agricultural entrepreneurship like other countries have done.

For example, the progress of agricultural entrepreneurship development in India is a proof that South Africa can also experience breakthrough. More than 85% of livelihoods in rural India depend on agriculture as a result of absence of local entrepreneurship (Hegde, 2015:1). Today, India has become the first country to produce milk, jute-like fibres, pulses; the country is also the second top producer of rice, sugarcane, wheat, cotton and groundnut as well as, a leading nation in the livestock agricultural business (Kumar, 2015). Before its recent declining, agriculture in India had recorded a 31% contribution to GDP (Kumar, 2015:2). The advancement in rural livelihood in India is an indication that agricultural entrepreneurship development is a useful tool to boost economy and job creation.

Similarly, peasant farmers in Kenya have recently received a breakthrough from poverty and achieved economic empowerment by taking the advantage of market-driven innovation. Njeru, (2016) conducted a study in Kenya which showed that eliminating barriers to agricultural entrepreneurial development is possible. The study was on “Peasant transformation in Kenya: focus on agricultural entrepreneurship”; the results showed that household agricultural businesses were established through the introduction of market-driven innovation. Secondly, the development of household agricultural enterprises improved household well-being, increases income, reduced poverty and create economic empowerment; Creation and development of local infrastructures was also achieved through that intervention. Considering these two cases (India and Kenya), building a climate for entrepreneurship and economic empowerment in South Africa is achievable.

Other authors also emphasised on essential factors for agriprenurship development. For example, Xaba (2014) conducted an investigative study on entrepreneurial skills that are crucial in helping South African black farmers convert their small scale

subsistence farming activities into lucrative commercial entities. The study utilized primary data of both a qualitative and quantitative nature. The study investigated the extent to which successful agricultural commercialization is reliant on enterprise management skills, marketing skills, production skills, infrastructural utilization skills, ICT skills, financial management skills and attitude to agricultural business. The findings pointed to a number of attributes that have a significant impact on the likelihood of South African black farmers thriving commercially. These included: strategic planning, clear communication of organisation`s objectives and goals, beforehand knowledge of the market, promotion of own brand, conservation of agricultural practices, knowledge of seasons, timely conveyance of produce to the market, understanding of global agricultural trends, exploitation of ICT facilities, ease of access to funding, and qualified financial management personnel. The study therefore shows that policy engineering around these aspects is likely to improve the lucrativeness of most black-owned farming enterprises.



Preisendörfer, Perks and Bezuidenhout (2014) also conducted a survey in the Walmer Township in Port Elizabeth, South Africa, where 309 black people were sampled considering the spirit of entrepreneurship and entrepreneurial culture was explored by considering entrepreneurial-related cultural factors, entrepreneurship climate, and perceived start-up barriers. Findings from the study showed that informal business activities are considered the most practiced entrepreneurial culture in that area; there was a high turnout of entrepreneurial aspirations than expected. Majority of residents regarded the township entrepreneurial friendly for supporting rudimentary pro-entrepreneurial ideas and initiatives. On the other hand, the respondents identify considerable start-up barriers for entrepreneurs and rather seem content being employed than self-reliant. Moreover, findings of the study indicated that they had low

trust in people. Additional findings confirm that the township can be qualified as a 'low trust culture'. On the contrary, Preisendorfer, Bitz, and Bezuidenhout (2012) reported that some of main problems of black South Africans are risk propensity and low level of self-confidence, collectivism and dependency culture, self-dissociating from entrepreneurship world and lack of entrepreneurial role models.

Although, these practical examples show that achieving economic empowerment through agriculture among farmers possible but there was silence on how policies could also have impacts on the success or setback in agriculture. However, this study built its strength in these examples because, the patterns are eye openers from within and outside Africa; which means, adopting similar approaches along with proper implementation of the existing policies, agricultural entrepreneurship will thrive. Meanwhile, existing policies on agricultural development in South Africa seems to be non-developmental or not adequately implemented. The current study therefore proffers philosophical ideas through field work on how to achieve economic empowerment among small-scale farmers through agricultural entrepreneurship.

2.2.9 Youth and agriculture entrepreneurship in South Africa

South Africa National Youth Policy 2015 – 2020, admits that youth are the key resource for development, agents for social change, economic expansion and innovation. Likewise, Chikezie et al., (2012) stated that youth represent the most significant part and best resources any nation can boast of. More specifically the younger generation are the catalyst for modern economic development goals. Generally, youths are young male or female with abundant energy and strength (physically and mentally).

United Nations General Assembly in 1985 defined youth as individuals between the age of 15 and 24 without prejudice to other definitions by a member state. World Development Report (2007) also described youth and expanded the age range to include every person between age 12 and 24 years. Likewise, in the FAO worldwide rural youth development programs, youth is defined as individuals between the age bracket of 10 and 25 years. In Africa, the African Youth Charter proclaimed in 2006 by African Union described youth as people between the of age 15 and 35 years, while in South African individuals between the age of 15 and 35 years are regarded as a youth (National Youth Commission Act, 1996).

Meanwhile, it has been acknowledged that the global population of youth are on the high increase, especially in Africa. For instance, the Food Agriculture and Natural Resources Policy Analysis Network (FANRPAN) (2012) noted that Sub-Saharan Africa has the world's biggest youth population and 70 per cent of these youths reside in rural areas. In 2005, the International Labour Organisation (ILO) on Global Employment Trend denoted that today's youth represent a group with serious vulnerabilities in the world of work (ILO, 2005).

Furthermore, the South African 2018 first quarter statistics report pointed out that the working-age population increased by 0.4% as compared to the fourth quarter of 2017 and that among the young people, aged 15-25 years the unemployment rate had increased to 38.2%. Because the rise in youth population, increase in labour force participation rate has led to the unchanged rise in youth unemployment rate. Though, the increasing rate of unemployment is not only peculiar to South Africa, according to ILO (2017) about 71 million youth globally face long-term unemployment. Nevertheless, Barau and Afrad (2017) opined that the necessity of the agriculture

sector for food security and sustainability informed the global effort to recognise youth as a critical factor in the development of the agricultural sector.

Moreover, Akpan (2010) stated that the agricultural sector is reasonably endowed with tremendous opportunities to engage unemployed (especially youth) and surplus labour from other sectors of the economy. Globally, and particularly in developing nations this is evidenced in recent years by the increase of scholarly work to identify the link between the problems, challenges and factors that influence youth decision and participation in agriculture. It has been argued that the young people mistaken beliefs about agriculture have long slowed down the number of youth choosing a career in agriculture (Leavy & Hossain, 2014).

South Africa Daily Online News Portal (2018) on youth perceptions on agricultural sector reported that young people describe farming as a tough and out-dated career path. They believe that farming work is labour intensive with little rewards. In addition, its out-dated activities demand to staying away from urban areas and urban life therefore, farmers find it hard to survive. In like manner, Leavy and Hossain (2014) postulate that young rural people aspirations are dominated by employment in the formal sector, modern urban lifestyles and reluctance to look at farming as a chosen career. Also, White (2012) observed two aspects to youth lack of interest in agriculture:

firstly that young people hold 'occupational aspiration' outside the farm with the belief that non-agricultural careers promise to be less laborious, more stable as well as more compensable; and

Secondly, that the youth are powerless to engage in agriculture for lack of access to, or control over, productive assets, such as land, finance.

Furthermore, at the centre of the research works on young people and agriculture development are the scope of thoughts about problems faced by young people problem and its potential consequences; sustainable employment and employment opportunities and the connection between these and 'promotive-transformative' (Sumber & Okali, 2013: p.270). Besides, agriculture has been observed as a significant solution to an increasing youth's unemployment and modernised business-like agriculture in developing economies because of the youth desirable qualities that can promote agriculture (Abdullah, Samah & Othman, 2012).

Likewise, the Economic Commission for Africa (2011) describes agricultural growth, youth employment and food security as complementary as well as interconnected. Hence, globally as well as regional agencies in Africa, developing entrepreneurial initiatives and integrating youth into agriculture has been considered a critical capacity needed for development by researchers and policymakers. However, Vyavahare and Bendal (2012) assert that the push and pull factors identified as the drivers of people to embrace entrepreneurship can as well inspire youth to engage in agricultural entrepreneurship or drive youth away from agriculture. The scholars hold that the push factors arise from situations and circumstances from the environments while, the pull factors involve self-motivation.

Nevertheless, it has been observed that the fault does not lie solely on youth negative impression about agriculture which has in the process slowed down more young people embracing agriculture. The push factors that characterised the situations in rural environment in Sub-Sahara African where most disadvantaged young people live include rural poverty, poor infrastructural development, traditional old-fashioned farm mechanism (the use of hoe and cutlass). Further to this, lack of technology in food

processing and preservation and lack of good and reliable market for farm produce and poor infrastructure has also contributed to agriculture.

Consequently, youth are seeing farming as difficult and unattractive to young people while, even parent themselves have shown the desire towards better fortune for their children in rural areas. For example, FAO (2013) stated that parent portrays agriculture in the negative image when they send their children to school with the intention to escape agriculture. Similarly, Manalo and van de Fliert (2013) observed that in some rural part of the Philippines known for agricultural produce, parents were driven to chart new career path for their children through education plan. Likewise, International Fund for Agricultural Development (IFAD), (2014) reported that youth in rural settings leaving rural areas not because they opposed agriculture or rural areas rather because they desire activities that can give a satisfied livelihood than opportunities in agriculture that could be difficult to explore.



On the other hand, some of the factors identified to influence youth interest in agriculture which can help policy makers to come up with strategies and design appropriate promotion to increase awareness, interest and capacity building in agricultural entrepreneurship include attitude, acceptance and knowledge (Abdullah, 2013; Devi, 2015). To choose and participate in agricultural entrepreneurship, young people need to have a true and positive attitude towards agriculture. Attitude is described as the most powerful factor influencing the intention to entrepreneurship (Ahmad 2014; Devi, 2015). It is described as an individual's degree of like or dislike of a person, thing or an event.

So, to influence change in the negative attitude of youth towards agriculture, there is a need for policymakers to make agriculture more dynamic and attractive than its

present form in Sub-Saharan Africa and particularly in South Africa. This may in the process create possibilities for young people to be persuaded and to have positive views of agricultural sector than they currently do – a positive attitude shape people's perception and decisions. Devi (2015) reported that youth entrepreneurial intention in agricultural sector was influenced by positive attitude factor; whereas fundamentally, intention is an acceptance on a representative relationship. Chireslstein (2001) defined acceptance as a specific act or consequence by means of conduct that demonstrates consent to the terms of an offer in a way invited or required by using the offer; while knowledge in agricultural activities is considered a significant factor to create an interest in young people in agriculture entrepreneurship.

Abdullah and Sulaiman (2013) in their study identified factors that influence youth interest to become an agricultural entrepreneur and the relationships between the factors and the interest of youth to become an agricultural entrepreneur. Two hundred and fifty (250) experienced youth were selected among agricultural entrepreneurs (farmers) in Malaysia as respondents. Using mixed research method, and purposive sampling technique; findings show that all respondent agreed that attitude, acceptance, and knowledge are the factors that influence youth to become agriculture entrepreneurs. The findings further showed that attitude and acceptances significantly influence the youth interest in agriculture entrepreneurship. The findings also showed that knowledge factor does not significantly influence interest of youth to become entrepreneurs. Furthermore, the open-ended questions revealed other factors that influenced young people to become entrepreneurs such as, family support, government support and promotion through carnivals and festivals. The author described the findings as an insight for government officials in the ministry of agriculture to resolve unemployment issues and achieve successful economic growth

through the agriculture sector. This is an indication that, if policies are properly implemented in South Africa, youth will also embrace careers in agricultural business.

2.2.10 Government legislative framework

In post-apartheid Republic of South Africa, on economic participation, the succeeding governments have introduced a range of interventions focused at addressing the inequalities, resulting from the designers of apartheid. These include among others, Land Reform Policies, Black Economic Empowerment (BEE), Employment Equity (EE), Comprehensive Agricultural Support Programme (CASP) and the Co-operative Act of 2005. One of the very first legislative frameworks was the deregulation of the agricultural marketing in 1996 which was done to change the agricultural sector into one that was open and sensitive to the world market (Genis, 2012).

In addition, it has become a major concern by the Department of Land Reform and Rural Development to recapitalise and provide support to the beneficiaries of land reform policy in rural communities to grow and improve their potential for a sustainable agricultural base economy. The agriculture, social development, economic development and education are government departments concerns with consideration to the land reform, rural development and poverty eradication across the country (FANRPAN 2012). To achieve this, the National Department of Agriculture, Forestry and Fisheries (DAFF) have established a Zero Programme Campaign. The DAFF is saddled with responsibility of coordination of the development and implementation of policies, strategies and programmes of agricultural, forestry and fisheries within the country (NDAFF, 2011).

2.2.11 Characteristics that contribute to agricultural entrepreneurship development

According to Kahan (2012) entrepreneurship is described in terms of identifying opportunities, creating vision on how to grow business, innovating and taking risks. The scholar believes that for anyone to be referred to as entrepreneur, there are some qualities and skills that set them apart from other farmers.

Personal qualities: personal characteristics of farmer entrepreneur are categorised according to Kahan (2012 p.50) into six:

- flexibilities (flexible, adaptive, tolerates ambiguity);
- core values (trustworthy and honest);
- problem solving (learn from failure, creative, innovative, imaginative);
- drive (self-motivated, determined, persevering);
- competition (goal driven, takes initiatives); and
- Confidence (risk taker, positive and persuasive).



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These enumerated qualities are the inner factor that pull an individual to seek-out business opportunities, conceptualise and initiate new business ideas, pull the physical, financial and human resources required to start the business, set goals and guide the farm and all its resources.

Knowledge: In agriculture an entrepreneur also needs number of skills that can be acquired or developed through training and experience. For any successful farm business, knowledge is the key factor. It permits farmer to make informed choices. Knowledge can be acquired in diverse ways; through formal training, experience,

observation and verbal or visual information. Agricultural entrepreneurs need knowledge or skills in each of the following key areas:

- main farming function (primary production, harvesting, processing and marketing);
- farm management (planning, implementation and controlling); and
- support function (input supply, financial services, transport, storage and packaging).

Similarly, Azman, D'Silva, Samah, Man and Mohamed (2013) and Silva, Shaffril, Uli and Abu (2010) believes that there are several factors that can stimulate the passion of small-scale farmers as well as the youth to become agriculture entrepreneurs. Knowing the factors that can contribute to agricultural entrepreneurship is crucial as it will act as guidance to policy makers on how to strategize and design appropriate promotion to increase awareness, interest and capacity building in agriculture entrepreneurship. These factors as pointed out in literature include socio-demography, attitudes, acceptance and knowledge as discussed in the subsequent sections.

The Socio-Demography is identified as the first component that influences the attitude and acceptance of agriculture entrepreneur. Demography factors are the variables that findings have suggested to have impact on attitude towards interest in agriculture entrepreneur (Silva et al., 2010). Demographic variables that have been studied include: gender, age, income, locality and ethnicity (Silva et al., 2010). Gender has been indicated as factor that plays a role in young people attitude and acceptance of agriculture entrepreneur. Researchers (Devi, 2015; Silva et al., 2010) found that women have negative attitudes towards agriculture entrepreneurship as compared to men. Concerning age, most empirical literature demonstrated that the average age of

farmers in most developing nations is 46 years. This means that people of 46 years and above were those that are mostly engaged in agricultural activities, which inform in the last decade the awareness and initiatives of most developing nations to attract young people to agricultural activities (Devi, 2015; Silva et al., 2010). Though Silva et al. (2010) stated that early studies indicated that income is not a major determinant in an individual developing positive attitude towards agriculture activities. But in general, lower income people tend to choose agriculture as source of livelihood or as a side income. Agriculture activities are mostly common among rural people dwellers.

Attitude is another characteristic that influences farmer's engagement in agriculture entrepreneurship. These attitudes can be formed based on an individual's degree of like or dislike on something (Bahaman, Jeffrey, Hayrol Azril, & Jegak, 2010). Usually attitude portrays either positive or negative views of a person, place, thing or an event (Bahaman et al. 2010).



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Acceptance is another essential characteristic that demonstrates agreement to the terms and interest to become an agricultural entrepreneur. Youth with positive outlook towards agriculture will be more warmly and motivated to engage in agricultural related business (Bahaman et al., 2010).

Knowledge as well, is considered as vital to establish an interest in agriculture entrepreneurship. Knowledge can lead to more skills needed to establish business in agricultural related areas (Othman & Kutty 2010). Knowledge is also a key factor in influencing a person's perception, and this trend is set to be intensified (Silva et al., 2009). Entrepreneurship education and training are important for economic development, particularly in improving the quality and increasing the quantity of future entrepreneurs. Accordingly Silva et al. (2009) hold that knowledge accumulation and

application in this 21st century will drive people's perception, and possibly increases people's positive perception towards agriculture entrepreneurship. In agreement, Mohamed, Rezai, Aprivanti, Abdullah and Tarman (2017) indicated that education increases agricultural entrepreneurship behavioural intention.

2.2.12 Barriers to agricultural entrepreneurship development

In agricultural sector, entrepreneurial activities are not only an opportunity but form part of essential ways of improving agricultural production and farmers' profitability. However, the rate of success despite government at all levels policies and machineries to promote entrepreneurial agriculture among the rural communities across black South Africa rural location is very low. For instance, Hall and Aliber (2010; 2012) suggests that since the end of apartheid era and birth of democracy in 1994, small-scale farming has received little or not enough attention. Although there have been different policy intervention and programmes, authors such as Hall and Aliber (2010; 2012), Sikwela and Mushunje (2013) argue that there is little progress, if any, in small-scale agriculture in South Africa. The authors pointed that the problem with small-scale farmers is that they lack necessary support they need to be productive. Common barriers among these group of farmers as identified by the Development Bank of Southern Africa (DBSA, 1986) and some scholars (e.g. Tshuma, 2014) are categorised into two: internal and external constraints.

External constraints: this includes factors from the wider agricultural environment which are beyond the control of individual small-scale farmers. These include:

Natural risks: typical to agricultural activity such as pest and disease outbreaks, extreme weather events and drought have been described as one of the major underlying barriers to small-scale farmers not producing for commercial purpose. The

Department of Environment Affairs (DEA, 2013) broadly noted that the projections of climate change to 2050 indicate significant warning on risks associated with the climate change such as higher temperatures, increased evaporation rates, increased pests and diseases that could portend danger for agriculture in South Africa. Agriculture is easily affected by natural events and disaster because it depends on weather and water accessibility to thrive.

Access to credit (Financial constraints): In both developing and developed nations, finance has been described as the most important factor responsible for the survival and growth of business enterprise. For an entrepreneur or business enterprise to increase its operations, upgrade technology and improve or change products and services, access to finance is very critical. However, assessing credits or loans by entrepreneurs through traditional financial service providers are regarded as high risk due to their creditworthiness. Zuwatimwe and Kirsten (2010) noted that it is difficult for small-scale farmers to access external financial services and required resources to increase their farm businesses because of their poor financial state and the lack of having assets that can act as collateral. This affects their chances of credit worthiness as farmers.

Creditworthiness consist of the lender's assessment that the borrower will have satisfactory debt-servicing stashes to meet the terms of the loan contract, and that the borrower will have satisfactory surety to reduce lending risks to an acceptable level (Fenwick and Lyne, 1998). So based on small-scale farmer's poor creditworthiness constrain, the lending institutions are often reluctant to borrow or grant access to credit. This implies that small-scale farmers find it difficult to attract capital that can improve the production. Moreover, marketing of their farm product is the main obstacle to the entrepreneurial development of farmers in rural areas.

Poor institutional support (lack of facilities and technical skills): Limited availability of institutional support inputs (such as lack of on-farm infrastructure and off-farm infrastructure) hinder small-scale farmers from becoming an agricultural entrepreneur. After harvesting, small-scale farmer's lack of access to on-farm infrastructure such as, storage facilities (e.g. store rooms and cold rooms) to preserve their farm produce and processing facilities contributes to barriers facing small-scale farmers. Storage is key to agricultural marketing function because it ensures a continuous flow of farm produce in the market, in that it will help preserve farm produce from the time of harvesting and when they are needed for consumption. Lack of access to storage facilities affect rural farmers bargaining power as well as increase the flexibilities of the farmers selling their produce at a lower price. For example, Bereda, Yilma, and Nurfeta (2013) noted that small-scale farmer lack of storage facilities increases loss of product and poor bargaining power because most farmers end up selling their products for less than the producing price before their products spoil to avoid total loss. Availability of proper storage facility would help rural farmers to improve quality, flexibility and breaking of barriers into becoming an agripreneur farmers. In South Africa, Sikwela (2013) observed that governments have not provided enough infrastructural support to assist small-scale farmers despite several projects initiated to deal with the issue. This scholar further posits that the available projects were only aimed at relief and not for the farmer's entrepreneurship intention in spite of success at different levels achieved on such projects (Sikwela, 2013).

On the other hand, concerning lack of off-farm infrastructure, literature has identified poor physical infrastructural development as the basis of barriers experienced by small-scale farmers because they are mostly found in remote rural areas. In most rural areas, particularly in the formal homeland areas, inadequate physical infrastructure is

a major constrain to small-scale agricultural development in South Africa (Onubuogu, Esiobu & Ibe, 2015). For instance, Gnade (2013) mentioned that South Africa urban areas are generally well-serviced in terms of electricity, water and sanitation, information and communication technology and transportation, while the rural areas fall significantly short in these respect. According to Chaminuka et al. (2008) to achieve higher levels of agricultural productivity, growth and rural development, good infrastructural services are essential. Physical infrastructure will encourage marketing of farmers' farm produce. For instance, good road network would influence small-scale farmers' market participation while communication facilities would facilitate farmer's relationship with the buyers in the market.

2.2.13 Telecommunication

United Nations Economic and Social Commission (2003) noted that despite every country in the world (developed and developing) advanced in communication technology, rural and remote areas still experience poor telecommunication infrastructure. Communication is described as an act of conveying or transmitting information is an important aspect for agricultural development. The growth in communication technologies according to Sala & Moldea (2010) is a vital tool to disseminate information and the knowledge required by small-scale farmers to increase their production level. Adejuwon (2018) argued that all business decisions must first take into account all available relevant information which its rapid and free flow depends largely on extensive communication networks. Hence, accessibility to an effective communication networks plays a significant role in overcoming the information barrier affecting small-scale farmers' entrepreneurial development. Prompt communication is an important aspect of every business survival and growth, and it is very essential for agricultural development.

Access to market: access to productive market by most Black emerging farmers is still an unquestionable challenge in most of the developing nations, and along this line small-scale farmers in South Africa as well, face with this challenge. Globally, access to agricultural formal market is very important for small-scale farmers and young entrepreneurs so that they can to develop from being subsistence farmers to progress to commercial agricultural entrepreneur. Agriculture market accessibility in broad terms entails farmers not only to supply farm produce to buyers, it comprises farmers' ability to acquire information on current prices of different crops both locally and internationally as well as, purchase the needed farm inputs and farm service (IFAD, 2010).

But in many developing nations, formal agricultural market existence or how they effectively function is not known to many small-scale farmers and cannot be guaranteed. For example, Kapungu (2013) noted that access to formal market gives small-scale dairy farmers opportunities to become consistent and reliable producers. While, market accessibility is likely to better livelihoods, small-scale farmers remain poor and disadvantaged, because mainly they participate in informal market. On the other hand, those that knows about the formal market find it difficult to penetrate because it operates on strict documentation such as receipts and invoices, on quality and quantity standard. As a result, this makes it difficult for the small-scale farmer who has no access to financial support to penetrate (Sikwela, 2013). Factors lack of information on markets, lack of markets in rural areas, lack of bargaining power, transaction costs in small scale farming, also market accessibility constraints of small-scale farmers.

Lack of information on markets: different authors have identified lack of information on markets as one barrier that hinders rural farmers to produce quality and participate in

more formal markets. Rural farmer's lack information about potential buyers of their farm produce, the quality required best place and time to sell their products (Kapungu 2013). This in a way affects their ability to sell their farm products efficiently and get full profits from the marketable part of their production. To make sound marketing decisions, farmers' access to market information is vital but most small-scale farmers do not have access to such important information. The market information includes current price index, prediction of market trends, sales timing and other information (Tshuma, 2014). On the other hand, in Poulton, Killick, & Kydd, (2008) market information and marketing information were distinguished. The authors describe market information as mainly comprising of information on prices and sometimes on quantities. While, marketing information comprises of information details on possible market channels, packaging, payment requirements, quality and other information needed by farmer to make a successful sale. Mabuza et al. (2013) posit that when farmers have access to dependable and up to date information, they make better and timely production and marketing decisions.

High transaction costs: A number of scholars have identified transaction costs as the main barriers to small-scale market participation in Sub-Saharan Africa (Mabuza et al., 2013; Tshuma, 2014). Small-scale farmers distance to market along with poor infrastructure and information inefficiencies leads to post-harvesting high transaction costs. Because they are majorly located in rural areas and poor, small-scale farmers find it difficult to market their produce in profitable market due to high business costs which in no doubt contribute to farmer's constraint in agripreneurship. For instance, it has been noted that promotion of institutional innovations such as production and marketing cooperatives; improved information and transport infrastructure; transaction

costs of buying farm inputs and selling farm outputs could be reduced, and this can create a leeway for small-scale farmers to compete better in market.

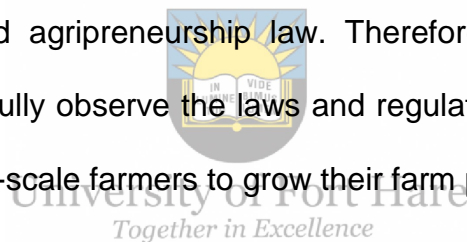
Lack of markets in rural areas: A dearth of access to formal agricultural market in rural areas is a major barrier confronting small-scale farmers in developing nations. This is one factor that causes small-scale farmers moving from subsistence farming to commercial farming. Small-scale farmers are constrained to market their farm produce to local communities in their areas because most of them are located in rural locations where there are no formal agricultural markets or agro-processing industries. Most times they either market the produce at lower prices within their neighbourhood or transport their items to town at a higher cost.

Technical factors in agricultural marketing: In production and marketing of agricultural fresh produce, small-scale farmers are faced with technical constraints such as: inconsistent supply of high quality produce, knowledge of acceptable agricultural practices, capacity to comply with market and regulatory requirements. These constraints according to Baloyi (2010) are influenced by the availability and access to good infrastructural services including: serviceable road, electricity and means of information communication for the small-scale farmers mostly located in rural areas. The technical barriers can only be overcome when rural farmers have access to these basic services. Pote (2008) also identify technical challenges that include: inadequate supply of complementary inputs (such as seeds, chemicals and water) and insufficient human capital as barriers that hinder small-scale farmer's growth to commercial level.

2.2.14 Legislation and regulation barriers

Though literature has identified government efforts through policies and programmes to support and develop small-scale farmers to increase their farm produce to

commercial levels, concerns have been raised that these policies are not well defined. For instance, Modiba (2009) observed that South Africa want to develop small-scale farmers to be agricultural entrepreneur, yet, entrepreneurship is not a well-defined concept. Furthermore, the difference between SMME and entrepreneurship policies is unclear hence the effort to support small-scale farmer to become entrepreneurs tend to be hindered. Also, it has been observed that most of the government programmes are limited, most small-scale are not aware of or have not access any of the government's programmes and structures. Further, Kahan (2012) suggested that government through their policies need to have a positive and clear position on entrepreneurship in agriculture. The common barriers observed that limit the development of successful agripreneurship include: land tenure and ownership, trading regulations and agripreneurship law. Therefore, it is imperative that the government must carefully observe the laws and regulations to make sure that they make it easier for small-scale farmers to grow their farm produce.



Internal constraints: These include factors that affect farmer's ability to function efficiently, regardless of any prospective characteristics the farmer might have to distribute resources in an economically efficient manner. Ordinarily, the farmer has some power over such limitations. These include:

Liquidity problems: Thapa (2010) specified that most small-scale farmer's cultivates on small plots of land found at the back of their yards. The author argued that apart from being caused by lack of physical resources such as farm implements and tractors; it is due to lack of arable land. Thapa (2010) also noted that in some locations such as Zanyokwe, they have made progress in getting title deeds for the land they cultivate while farmers found in Kenton-on-sea all in Eastern Cape Province still cultivate on municipal land because they lack the land of their own.

Moreover, in South Africa, small-scale farmers find it difficult to access financial capital without land as collateral, while those employed in other sectors as well still struggle to finance their farms due to low earnings. Similarly, small-scale poor financial capability most often leads to less production due to inability to acquire necessary inputs for production purposes. Furthermore, in South Africa, small-scale farmers find it difficult to access financial capital without land as collateral, while those employed in other sectors as well still struggle to finance their farms due to low earnings.

Lack of human capital: Often, most small-scale farmers are illiterate, with poor farm technological skills, which can be serious difficulties in evaluating useful formal establishments that shows farmer technological know-how (World Bank, 2002). More so, poor production knowledge in most cases leads to lower quality in farm production. As such a majority of farmers are unable to satisfy the quality expected by fresh farm produce markets and food processors.



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Lack of skills: one common barrier among the majority of small-scale farmers is lack of education which affects change in their attitudes towards agricultural entrepreneurship. Ahmed et al. (2012) indicated that lack of education make subsistence farmers unwillingly to become risk-averse. They prefer to continue with the old and less-productive traditional farming techniques than embrace the recently developed mechanism. The authors agreed that the low level of adoption of agricultural production technology among small-scale farmers is as result of lack in basic education.

According to Kahan (2013), cultural factors that in some instances prevent more effective management of resources. The removal of these constraints will assist the farmer to allocate resources in an economically optimal manner, and operate in an entrepreneurial capacity.

- i. Farming is the only means of survival for majority of the farmers. Lack of adequate resources, knowledge, apposite technology and access to market, becoming commercial farmers becomes for the illiterate farmers;
- ii. Farmers need to be aware of buyer's needs and service benefits before self-employed individuals promote their services to famers
- iii. For commercialization of services, the existing practise of extension service by the Government agencies is very poor. Despite the considerable resources that government invested to support subsistence farmers' family, reach of such support programmes is insufficient. In addition, most rural farmers are either unaware of or have not used any of the government's programmes and structures. In fact, the services of these agencies are not available to small farmers, those living in remote areas in particularly;
- iv. Every self-employed technician needs reliable back up facilities in the form of technical and business information, contact with the marketing agencies, suppliers of critical inputs and equipment and research stations who are involved in the development of modern technologies;
- v. Finance also identified by past related studies as the most important factor determining the growth and survival of agriculture entrepreneur among the small-scale farmer. Financial services are critical in enabling SMMEs to scale up operations, upgrade technology and change or improve products and services. In addition, access to finance is the major problem for a majority of South African small-scale farmers and

this issue must be addressed if an environment promoting agriculture entrepreneurship and SMME development is to be encouraged.

vi. Distant markets confine farmers to selling their farm products mainly to hawkers and within their district. With limited opportunities open to them, they remain firmly rooted in the subsistence economy. Accessibility to proper marketing facilities could help towards better production planning, expansion and better prices, lower risk and better utilisation of resources. Limited coordination amongst farmers and failure to fully utilise local logistics capacity also inhibit the district economic growth. The majority of agricultural businesses are struggling mainly due to improper planning, poor business and management practices, low level of skills due to low levels of education; lack of access to information; underdeveloped infrastructure and lack of entrepreneurial culture. These developments have created a situation in which farmers with high levels of production do not automatically have an acceptable level of income. Nowadays, farmers have to produce and sell products that the customers want to pay for, and they are responsible for their own income.

Even though, literatures (Aliber & Hall, 2012; Pemandu, 2013; Abdullah and Sulaiman, 2013; Adejuwon, 2018; Sala & Moldea, 2010; Ahmad, Nasurdin, Abdul-Halim, & Taghizadeh-Nastaran, 2014) among other scholars have shown a clearer view of the disappointing level and factors contributing to poor performance of agricultural enterprises in the country; they also point out some contributing factors to the poor development in agricultural entrepreneurship. Meanwhile, this study has been able to examine the relationship between three different factors (age, gender, and purpose

for farming) and interest of an individual in agriculture. Similarly, the study was able to explore the relationship between respondents' gender, purpose in agriculture and prospects of achievement in agriculture. This is, the level at which those factors influence each other. Previous studies have left those gaps in research.

2.3 Theoretical framework

2.3.1 Opportunity-Based Entrepreneurship Theory

This theory is propounded by Howard Stevenson and Peter Drucker. It offers a wide-ranging conceptual framework for entrepreneurship research (Fiet, 2002; Shane, 2000). The theory holds that entrepreneurs do not cause change (as claimed by other theories like Schumpeterian entrepreneurial theory or Austrian school of thought) but exploit the opportunities that change (in technology, consumer preferences) and to create (Drucker, 1985). The author clarified further that entrepreneurs, always search for change, embrace change, and grasp the opportunity to explore. Evident in Drucker's opportunity construct show that an entrepreneur has vision more for opportunities created by change than focusing on the problems. Stevenson (1990) extends Drucker's opportunity-based construct to include resourcefulness. This is a research-based ideology to identify the differences between administrative management and entrepreneurial management. His conclusion was that the pursuit of opportunities without relying on the currently controlled resources is the hub of entrepreneurship management. Similarly, Shane and Venkataraman (2000, p. 220) stated that to have entrepreneurship, one must first have entrepreneurial opportunities.

The study adopts opportunity-based theory as propounded by Drucker and Stevenson, so as to explain the barriers that hinder black South Africans from exploiting the

opportunities which were created after the fall of apartheid. The theory maintains that an individual given the status of an entrepreneur constantly hunts for change, reacts to it and utilises it as an opportunity. Although, despite government's effort, drives, and policy after the fall of apartheid for black enterprising, according to some studies such as Preisendorfer and Bezuidenhout (2012) and Xaba (2014) entrepreneurial skills remain underdeveloped. Meanwhile, one of the weaknesses of this theory is that, "its major focus is in the pursuit of opportunity with a less or no concern for the currently controlled resources" (Stevenson 1990, 2). Base on this weakness, the theory was adopted to provide a framework that attempts to explain barriers to agricultural entrepreneurship among small-scale farmers in South Africa despite government efforts.

2.3.2 Sociological entrepreneurship theory

Sociological theory also provides an underlying framework to explain the roles and initiatives of different stakeholders in agriculture business (Landstrom, 1998). The theory builds on four social contexts related to entrepreneurial opportunity (Reynolds, 1991). First are the social networks, which focus on creating social relationships and bonds that promote trust and not opportunism. The theory posits that entrepreneurs must not exploit people's right for their own success rather think success as a product of keeping confidence with people.

Second, Reynolds (1991) refers to it as a life course stage context that involves analysing the life situations and characteristics of black South Africans who have decided to become entrepreneurs. This second context is aligned with the experience of an individual and how they could change their thoughts and activities to use their lives for something meaningful. The third social context describes cultural identification. The context proposed that someone's sociological background may be

a decisive push of becoming an entrepreneur. That is, an individuals' social background influences decision to innovate and determines how far such individual can go. Population ecology is the fourth social context; it is an idea that environmental factors determine the survival of new venture or the success of the entrepreneur. Factors such as government legislation, non-governmental support, customers and competition are some of the sociological factors that influence the entrepreneur success.

Although, this theory focuses much on social context which is one of its criticisms and weakness, yet it creates chances for entrepreneurial opportunity. For example, social relationship can easily be built through social network and strong bond that promote trust can be established. This therefore is the basis for adopting it for this study despite its weakness; it was also adopted to explain the individuals and stakeholder roles in small-scale agricultural entrepreneurship.



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2.3.3 Schumpeter entrepreneurial theory (1983)

The theory of entrepreneurship as propounded by Schumpeter is the major theory that underpinned this study because the theory was very explicit on economic function of and entrepreneur. Meanwhile, one of the key areas in this study is to explain the economic importance of agricultural entrepreneurship by self-drive initiatives and development. To Schumpeter, entrepreneurship is an innovation not imitation. Which means, in entrepreneurship sector, entrepreneur is an innovator, that is, he utilizes new discoveries and inventions to create new combinations (Acs and Audretsch 1988). According to this theory, entrepreneur moves the economy away from its static equilibrium. Marz (1991), indicated that Schumpeterian theory hardly rejected the process of accumulation as the ladder to social prestige and power; but he supposed that the driving force of a functioning entrepreneurial exercise is the influential will to

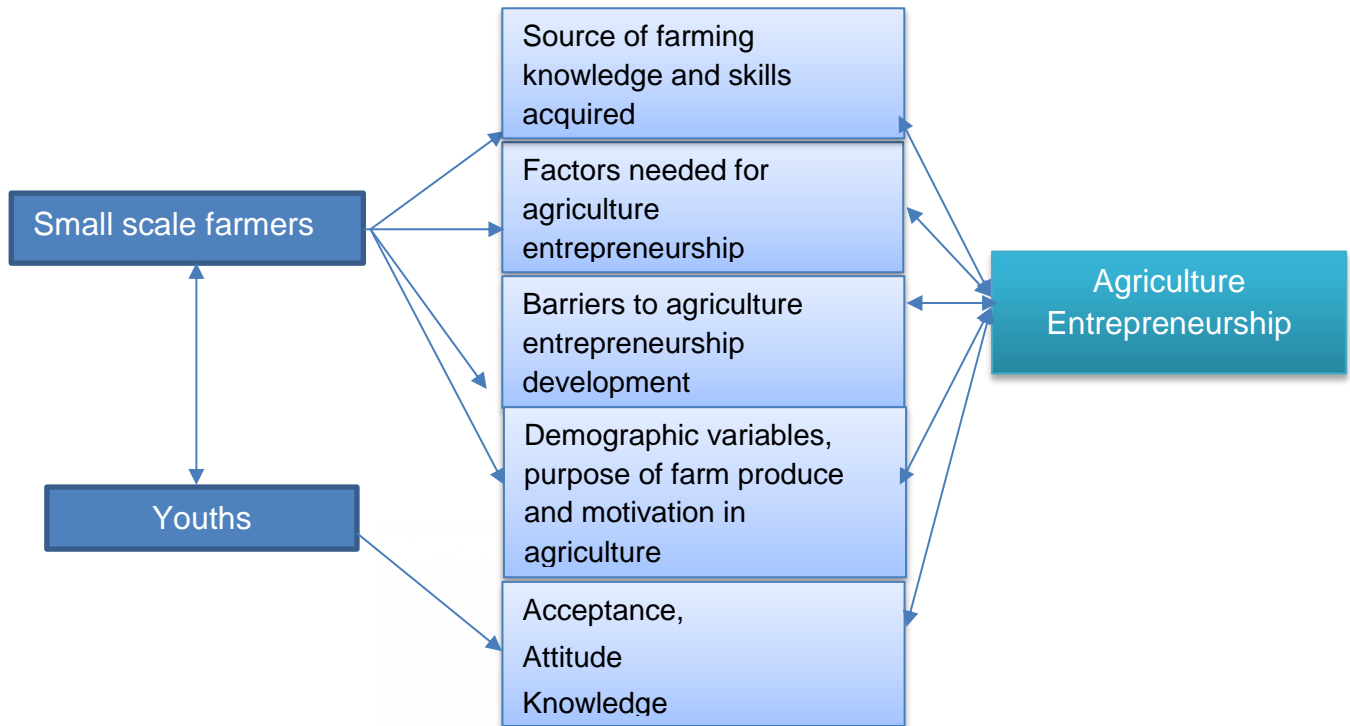
sustain economic leadership. Primary motive is the joy of sailing through innovations; subsidiary to it is the acquisition of social power. New combinations may not be necessarily invented by entrepreneur but he is one who recognises how to convert the new combinations to production (Marz 1991). This philosophical reasoning suggests therefore that considering a business owner to be an entrepreneur depends wholly on his ability to carry out new combinations.

According to Schumpeter (1949) entrepreneurs liberate economies out of stagnant equilibrium by fashioning new approaches to production thereby rendering old approaches obsolete. This is the process of "creative destruction" (creating uncertainty) which Schumpeter saw as the driving force behind economic development. According to the theory, small-scale farmers who move in the direction of assuming risk and taking opportunity by introducing new approaches (Schumpeter, 1949) to their farming system, increase the size of their farmland or livestock with new combinations or increase their production level are referred to as entrepreneurs in agricultural business.

Meanwhile, one of the shortcomings of the theory is that, it is more applicable in the developed countries because there is innovation paucity among entrepreneurs in the context of developing countries (Acs and Audretsch 1988) such as South Africa. This means there exists a small class of innovators as well as low profit expectation in developing countries. The theory also emphasises that private investors are the principal agents for economic growth, but this is not always the case in most developing countries. Despite the weaknesses of this theory, the researcher still found it suitable for this study. The theory provided a framework for the study to investigate factors that will contribute to small-scale farming to be a catalyst for rural economic growth and lay a basis for more productive agricultural activities in South Africans.

Hence, this theory was commensurate with the first and second research question raised by this study.

2.4 Proposed conceptual frame work



Proposed model showing the description of small scale farmers source of farm knowledge, required factors needed and barriers to agriculture entrepreneurship development, as well as the demographic variables, purpose of farm produce and interest, and youth acceptance, attitude and knowledge towards agriculture development.

The proposed conceptual framework is based on the research questions that were developed from the deductions derived from the literature reviewed that encompasses the theoretical background and gaps in empirical findings. The framework as above visually describes the connection between the predictor variables and criterion variable.

2.5 Conclusion

The chapter has extensively discussed the conceptual meaning of the main variables of the study which include agriculture, entrepreneurship, agricultural entrepreneurship,

small scale farmers. An explanation of the meaning of small-scale farmers in South Africa context and the importance of small scale farming was also highlighted. Furthermore, the chapter also gave an outline of agriculture in the South African context of an entrepreneur, youth and agricultural entrepreneurship and government legislative and regulatory framework. Moreover, characteristics that contribute to agricultural entrepreneurship development, as well as, the barriers that hinder the growth of agricultural entrepreneurship development were enumerated. Examples for past findings also contributed to empirical evidences to give explicit reasons for the essence of the present study. And lastly, theoretical frameworks adopted in this study were elucidated and how they aligned with the variables of the study.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Firstly, this chapter gives the description of the area where the study was conducted. Secondly, four main research paradigms were discussed; they include post-positivism, constructivism, transformative and pragmatism. Further explanation was given on what a research design entails, as well as the research explanation on mixed method which was the research approach adopted by this study. Likewise, a detailed account was given on the population of the study, sampling and sample size, data collection methods, data analysis methods as well as discussion on ethical issues and the chapter was summarised.



3.2 Description of the Research Area

This study was conducted in the Eastern Cape Province (ECP) of South Africa, with a focus on two out of nine district municipalities. For a concise but clear view of what ECP is, a brief overview of the country is given as follows:

The ECP is a famous Province in the Republic of South African (RSA). RSA occupies the southernmost part of the African continent and it is divided into nine provincial districts that includes Kwa-Zulu Natal, Northern Cape, Western Cape, Gauteng, North West, Limpopo Mpumalanga, the Free State and of course the Eastern Cape, where the current study was carried out. ECP is located on the south-east along the Indian Ocean covering over 168 960km², approximately 13.5% of South Africa's land areas (Moya-NILU 2013).

ECP is the second largest in terms of surface area after Northern Cape which has land areas of 372 889 km². It houses two of the country's formal homelands; Transkei and

Ciskei, borders by the Indian Ocean in the South-East, the Free State Province and the Kingdom of Lesotho in the North, the Western and Northern Cape Provinces in the south west and KwaZulu Natal Province in the North-East. Both formal homelands are characterised by high levels of poverty and unemployment – 72.9% and 37.4% respectively (STATS SA 2019), caused by historical economic neglect of the areas during the apartheid eras. The Province has two metropolitan municipalities called Nelson Mandela and Buffalo City metropolitan, and six district municipalities – Amatole, Alfred Nzo, Sarah Baartman, Chris Hani, Joe Gqabi and OR Tambo district municipalities. This study was carried out in two of the six district municipalities which are Chris Hani and OR Tambo district municipalities.

Moreover, 72% of the gross domestic product (GDP) of ECP is generated in Nelson Mandela Bay Metro and Amathole district; the two municipalities contain 42% of the provincial population (ECSECC 2017:23). Manufacturing accounts for 88% of all provincial GDP in the aforementioned two districts municipalities (ECSECC 2017b). The major crops grown in the provincial area includes teff, barley, wheat, faba bean, sorghum, finger millet, maize, and chickpea. Also, different vegetables and fruits such as tomato, potato, onion, pepper, lettuce, carrot, garlic, cabbages, spinach, pumpkin among others grows in ECP. Livestock rearing in the area includes cattle, goats, sheep and poultry.

Figure 1: Map of Eastern Cape

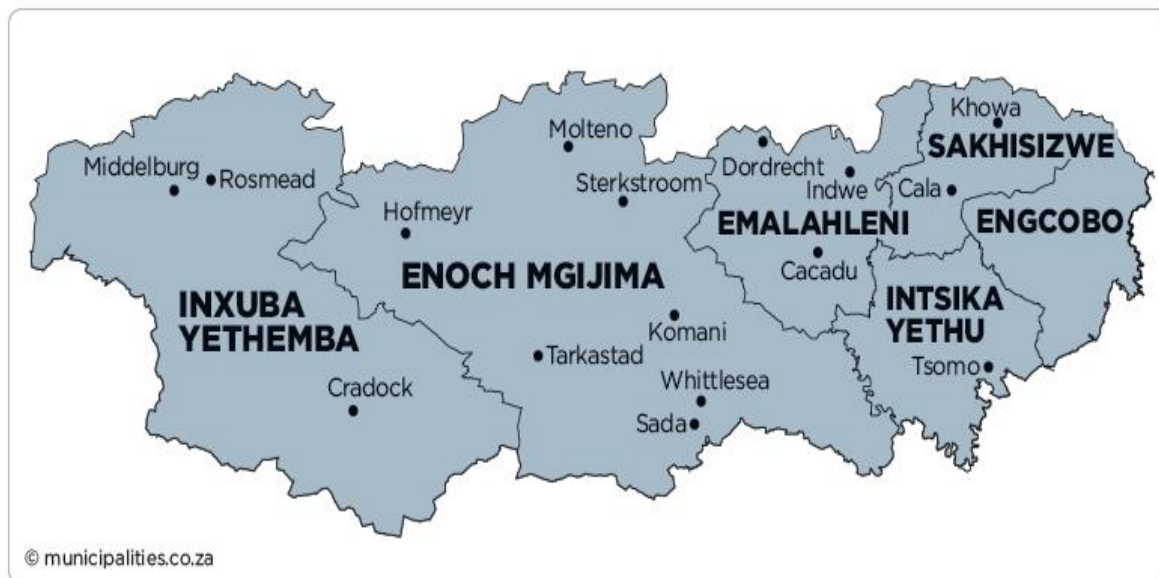


Source: Moya-NILU (2013)

Chris Hani and OR Tambo are the two district municipalities that formed the study areas of this research. Chris Hani is regarded a “category C municipality” under the Municipal Structures Act, 117 of 1998. Chris Hani District Municipality (CHDM) is located the northern part of the province with land area of 36,144km². It shared borders with OR Tambo district municipality to the east, Joe Gqabi district to the north, Sarah Batman and Amathole district to the south and Northern Cape Province to the west. CHDM is not just second largest district in the Eastern Cape but it also a link node to all regions in the province. There are six local municipalities in CHDM – Inxuba Yethemba, Intsika Yethu, Enoch Mgijima, Engcobo, Sakhisizwe and Emalahleni, while its main cities are Cala, Cradock, Cofimvaba, Elliot, Engcobo, Dordrecht, Hofmeyr, Indwe, Lady Frere, Middelburg, Molteno, Mount Zebra National Park, Queenstown, Sada, Tarkastad, Sterkstroom, Tsomo, and Whittlesea. The main economies in the district are agriculture, transport, trade, community services and manufacturing. In 2016, the CHDM population stood at 842 000, which accounts for 12% of the entire population in Eastern Cape Province (Chris Hani District Municipality

2018:11). Literature shows that 53% of households in the district are headed by women, and IsiXoha is the predominant language with 93.3% speakers (Chris Hani IDP, 2013).

Figure 2: Map of Chris Hani District Municipality



Source: municipalities.co.za

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On the other hand is the OR Tambo district municipality, which is the second municipality that formed the study area in this study, also falls under a “category C municipality” in the Eastern Cape Province. This municipality is situated in the eastern part of the province covering a land area measured 12,096km² (ECSECC). In the north, it bordered Alfred Nzo district, Joe Gqabi to the north-west, Chris Hani to the west and Amathole district to the south-west. Major towns in the municipality are Libode, Flagstaff, Lusikisiki, Mthatha, Mqanduli, Port St Johns, Ngqeleni, Tsolo and Qumbu. All these areas formed the marginalised homeland called Transkei; the major economies are agriculture, trade, transport, community services, construction, mining and manufacturing. The OR Tambo district municipality housed 1.47 million people –

21.0% of Eastern Cape population and 2.6% of the entire population in South Africa (ECSECC 2017b:10). Meanwhile, unemployment rate in the district stood at 41.9%.

Figure 3: Map of OR Tambo District



Source: http://www.localgovernment.co.za/img/districts/or_tambo_big.jpg Municipality

3.3 Research paradigm

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According to Creswell (2013), research paradigm is also known as philosophical worldview. It is a general philosophical orientation concerning the world and the type of research that the researcher brings into the study (Creswell, 2013). Terreblanche and Durrheim (1999) described research paradigm as all-inclusive system of interrelated practice and rationale that describes the nature of inquiry along ontology, epistemology and methodology. Besides, Thomas (1962) was the first to use the term 'paradigm' which was coined from Greek word 'paradeigma', meaning 'pattern.' Kuhn (1977) define paradigm as: "an integrated cluster of substantive concepts, variables and problems attached with corresponding methodological approaches and tools." Olsen, Lodwick, and Dunlop (1992: 62) described paradigm as a "pattern, structure and framework or system of scientific and academic ideas, values and assumptions."

Moreover, in research methodology, there are four main types of research paradigm which comprises post-positivism, constructivism, transformative and pragmatism (Creswell, 2013; Martens, 2014). This study adopted pragmatism, because achieving the research objectives requires a functional method like pragmatic approach that suits the proffers solution to the current problems rather than a fixed theory or fixed ideas on problem solving. Research paradigms explained as follows:

Pragmatism: according to Sekaran and Bougie (2016), pragmatism does not take a specific stand on what constitute good research. Rather, the research paradigm believes that any study based on either objective, observable phenomenon or subjective meanings has potential to produce valuable knowledge depending on the research questions of the study. The pragmatists' assumption is that the researchers must concentrate on the research problems and use all approaches to understand the problems rather than focusing on the research methods (Creswell, 2013; Martens, 2014). The paradigm simply echoing the relationship between theory and practice, that is, the focus is on practically applied research where different viewpoints on research and the subject under examination are helpful in solving the research problems (Sekaran and Bougie, 2016).

The present study adopts a pragmatic approach to examine the variables of concern in the study because it uses a mixed method research approach – quantitative and qualitative. The quantitative method was used to gather adequate information about factors and barriers to agricultural entrepreneurship development among small-scale farmers in the Eastern Cape Province. While, qualitative method was used to gather in-depth information on the environmental constraints, perceptions of the respondents toward development of agricultural entrepreneurship.

Other research paradigm that exists includes:

Post-positivism: positivists holds that the goals of every research is to define a phenomenon which can directly be observed and objectively measured, using deductive reasoning to proof theories by means of predetermined research design (Sekaran and Bougie, 2016). According to Martens (2014), post-positivism opined that only scientific research is absolutely objective, valid, certain and accurate. While Creswell (2013) believe that the types of post-positivism research paradigm embraces is a deterministic method; cut down ideas into small and distinct set to test; carefully observes and measures reality that exists and; confirms existing theory. The outcome is varied (multiple), and often subjective based on the individual's social and historical backgrounds.



Constructivism: disagrees with the positivist notion which preached the objective truth. Constructivism belief that the world is fundamentally and mentally constructed, so the research paradigm does not seek for the truth rather look out to understand the rules people use to make sense of world they live and work by studying people's past experience (Creswell, 2013; Sekaran and Bougie, 2016). It is also known as interpretivism (Creswell and Creswell, 2005, Wahyuni, 2012); and the assumptions more inclined to the qualitative research method.

Transformative: this came up partly because of the criticism of the positivism and constructivism, it is a research belief by individuals who experienced discrimination and oppression, these individuals comprises: the feminists, people with disability, people of colour and so on (Martens, 2014). The paradigm argued that research inquiry needs to be entwined with politics and political change which challenge social oppression of marginalised people in society (Creswell, 2013). This type of research

depicts a picture of situations being tested, the population to be study and the change that is needed.

3.4 Research Design

Mugenda and Mugenda (2013) defines research design as steps which a researcher takes in the course of attempting a research process from the primary stage of research to the end; a procedure that allows the researcher to know the vital component of the research and steps to guide him in the whole process. In other words, it is defined as a conceptual framework that constitutes the blueprint for the collection, measurement, and analysis of data (Kothari, 2004). Similarly, Bryman and Bell (2007) stated that research design provides a framework for data collection and analysis. Precisely, researchers identify and select research method based on the research questions and objectives of the study, as well as also make choices on the type of research within qualitative, quantitative and mixed methods approaches to use (Creswell, 2013). The present study is a descriptive research design that adopts a mixed method approach strategy. The method is further explained below.

3.4.1 Mixed method research approach

Mixed method approach push for all kinds of complementary and balanced research approach. Gamon, Harrol, & Creswell (1994) stated that mixed method approach help to presents facts about the nature and status of the situation as it exists at the time of study. Similarly, Hamlin (2015) claims that mixed method research are natural complement to the conventional quantitative and qualitative researches. It stays in between a continuum of both quantitative and qualitative approaches in a study because it incorporates the elements of the two research methods with the researcher's intention to create a research design that provide answers to the research questions. Quantitative research method involves numerical data, testing objective

theories by examining the relationships or differences between variables. While qualitative research involves analysing words to give meaning to social or human problem; it does not involve the use of numerical data. Creswell (2013) identified three different procedures that can be used for mixed methods research approach, and it comprises convergent parallel mixed methods, exploratory sequential mixed methods and explanatory mixed methods.

3.4.2 Convergent parallel mixed methods

According to Creswell (2013), it is a mixed method research approach where researcher's merges or converges qualitative and quantitative methods so as to have an all-inclusive understanding of the research problem. Procedurally, the researcher collects data simultaneously and integrates the findings to comprehend the research problem (Hamlin, 2015).



3.4.3 Exploratory sequential mixed methods

According to Creswell (2013), the research utilising this mixed approach start with qualitative research method that explores the views of the participants at the first phase. Then the data is analysed and used to develop the second phase where quantitative data will be collected. The qualitative core component in this research method use inductive reasoning as it feeds into the quantitative component (Hamlin, 2015).

3.4.4 Explanatory sequential mixed method

This type of mixed methods first collects quantitative data which is followed by the collection of qualitative data (Creswell, 2013; Hamlin, 2015). It is being referred to as explanatory because qualitative data are used to further support the quantitative data results. Also its being refers to as “sequential” because the initial stage of quantitative

data collection is followed by collection of qualitative data (Creswell, 2013). Hence, the quantitative core component is deductive, using the qualitative component to inform and complement the quantitative data (Hamlin, 2015).

The present study adopted explanatory mixed method. It utilised a structured questionnaire, one on one interviews and focus group discussion, targeting small-scale farmers, youths, government officials, and non-governmental officials to describe the factors and challenges affecting small-scale farmer's agricultural entrepreneurial development. The questionnaire was used to collect quantitative data, while the one-on-one interviews and focus group discussion represents the qualitative approach. Explanatory mixed method is utilised to complement any inadequacy in both quantitative and qualitative methods as well as to have a rich data (Neville, 2007). Similarly, this study used the explanatory mixed method to present facts about the nature and challenges of agricultural entrepreneurship in Eastern Cape.



3.5 Population

Cooper and Schindler (2006,402) defined population as “the total collection of elements about which inferences can be made.” It simply describes the entire group of people, things or events that a researcher seeks to explore in order to make inference (Sekaran and Bougie, 2016). The population of the present study is the entire small-scale farmers and youths in the OR Tambo and Chris Hani district municipalities. The total population of the two municipalities are 1,365 million and 795,461 respectively (STATS SA 2012). Meanwhile, there are towns and rural villages within the district. Towns and villages where data were collected are Mthatha, Mchonco, Port St Johns, and Tyityani in the OR Tambo district municipality; and Cradock and Elliot in the CHDM. These areas were chosen in order to gather adequate information regarding farmers' experience, their challenges and barriers to agricultural

development, since their major means of livelihood is farming. Another reason being that the poverty and unemployment rate is high in those areas.

3.6 Sampling procedure and sample size

3.6.1 Sampling procedure

Sampling involves the process of selecting the number of individuals from the population of the study through which an inference can be made about the entire population (Creswell, 2013). Non-probability sampling techniques which comprises purposive and convenience sampling methods were used for the study. A non-probability sampling technique refers to an instance where the probability of including each component of the population in a sample is unknown (Bless and Higson-Smith, 1995).



Firstly, the purposive sampling based on judgement of the researcher to select samples for composed of elements in this study such as, attitudes towards farming, level of access to market, government intervention, and background of the respondents that best satisfy the study objectives and answers the research questions (Saunders, Lewis, & Thornhill, 2009). Purposive sampling was also used in order to select elements of the population such as youths, older farmers, male and female and black farmers; that best fit the main focus of the study – exploring factors and barriers to agricultural entrepreneurship development among black farmers. Malhotra et al., (2010) also referred this type of sampling as judgemental sampling techniques.

Secondly, the convenience technique was used in order to select elements of the population that are easily accessible and provide rich information that deepens the study findings. Malhotra et al., (2010) describe convenience sampling technique as a less expensive and less time-consuming techniques, with elements of the population

being easily accessible, cooperative and easy to measure among all other sampling techniques.

The small-scale farmers who were available on their farms and houses; and accepted to participate in the study were considered to the part of the sample. These farmers were selected purposively from Eastern Cape Province. Although samples were drawn from two district municipalities of Chris Hani and OR Tambo District Municipalities, participants were specifically sampled using convenience sampling method; this was done at different local municipalities like Port St John, Inxuba Yethemba, Sakhisizwe and Nyandeni. Those areas were selected because their major economy is agriculture which is the focus of the study.

3.6.2 Sample size

According to Malhotra et al., (2010) a sample is described as a subset or a small group of a population chosen to represent the whole population. Fraenkel, Hyum, & Wallen (2012) stated that a researcher should depend on a sample size which is not too large or too low to get the needed data at less cost and within affordable time. The present study utilised Cochran (1963) equation of estimating sample for proportions with approximate of 95% confidence level to determines the sample sizes. The formula for the equation is:

$$n_o = \frac{z^2 pq}{e^2}$$

e^2

Equation i: Cochran equation

where the sample size is the n_o , while the value of a coordinate of the normal curve on the horizontal axis is z^2 at the tails ($1 - \alpha$ equals the desired confidence level, e.g. 95%)¹, the precision desired level is e , while the attribute of estimated proportion present in the population is p , and $1-p$ is q . So, to calculate the base of the unknown

variability in the proportion of the population, the study assumes $p = .5$ (maximum variability), confidence level at 95%, and precision at $\pm 5\%$. The result of the sample size used is demonstrated in the equation below:

$$= \frac{(1.96)^2 (.5)(.5)}{(.05)^2}$$

$$= 385 \text{ farmers}$$

Based on the calculation the sample size for the study is 385. Because this study adopted a mixed method design (that is an explanatory sequential mixed method) which involved the quantitative and qualitative method of data collection the sample was broken down into:

For quantitative data collection, a total of 350 small-scale farmers and youths were projected to be sampled from two District Municipalities (OR Tambo and Chris Hani) in Eastern Cape Province, which was distributed as follows: 175 small-scale farmers (men and women who are into crop farming and livestock farming across the rural locations in Port St Johns, Mchonco, Tyityani, Cradock Mthatha and Elliot. Similarly, 175 youths (young male and female, employed and unemployed, literate or illiterate, not yet into crop farming or livestock farming, and are above 18 years) projected to be sampled, in order to gather information about their awareness and attitude towards agricultural entrepreneurship.

For qualitative data collection, 35 different individuals in agriculture were sampled, these includes small-scale farmers, government officials and non- governmental organisation, and youths required to be sampled purposively through structured interviews and focus group interview respectively. The study sampled fourteen (14)

black small-scale farmers (males and females) who are into crop and livestock farming at Port St Johns, Mchonco, Tyityani, Cradock Mthatha and Elliot; sixteen youths above age 18 to make up a group each at the two District Municipalities utilised in the study (8 in a group from each of the two municipal districts where the data were collected) in Eastern Cape Province; two non-governmental organisations that are into agricultural development/ support available to small-scale farmers in rural locations and three government officials in the agriculture sector. This part of qualitative is very important so as to avoid bias in results that may occur in the quantitative part of this study, as well as to support the quantitative findings.

3.7 Data collection methods

This study used three primary data collection instruments which are questionnaire survey for quantitative part. A questionnaire is an efficient research instrument for data collection that comprises a set of predetermined questions to which the respondents' answers (Sekaran & Bougie, 2016). Meanwhile, semi-structured questionnaire is one out of questionnaire types that exists; usually, it contains both structured and unstructured questions, in which most of its items (questions) are determined beforehand (Ann, 2013). Semi-structured questionnaire was used for quantitative data collection because of its flexibility; and its open-ended aspects gave the opportunity for more explanation by the participants.

Moreover, the method maintained respondents' anonymity; it allowed the respondents to express their inner beliefs and perceptions freely and thereby gave truthful and valid responses. The questionnaires used were of two categories; one for the farmers and the other for the youths. This was done in order to get specific information about the two distinct groups, as the study seeks to understand factors that can contribute to agricultural entrepreneurial development among small-scale farmers in South Africa.

The questionnaires were administered by the researcher with the help of two assistants who are native (Xhosa speakers) of where the samples were collected. The researcher along with the assistants went to all the sampled areas to administer the questionnaires and to conduct interviews. Some of the questionnaires items were adapted from previous similar studies done on the variables of interest in the present study. Samples of the questionnaires utilised were attached in the appendix page. The items of the two set of questionnaires were design under two sub-headings: section A and section B, these are explained below.

Section A: this section for farmers' group contained the socio-demographic information of the respondents which include age group, gender, marital status, education level, and number of household members, and key information relating to the respondents' knowledge of entrepreneurial opportunity, farm types, skills and training in agriculture. While section A of the youth questionnaire comprised age, gender, marital status, education level, occupational status, background in agriculture, and knowledge in agricultural entrepreneurship.

Section B: this section in the farmers' questionnaire comprises information about the respondents' personal attributes, farming skills, challenges towards entrepreneurship, development needs of entrepreneurs, farmers' responses on key developmental needs to grow and enhance their agricultural entrepreneurship. While the section for the youth questionnaire include the youth responses on the acceptance towards venturing into farming business, attitudes towards agricultural entrepreneurship, knowledge on agricultural entrepreneurship, and their perception towards engaging in agricultural entrepreneurship.

Secondly, for the qualitative part of the study, data was collected using one-on-one in-depth interview method based on a pre-designed interview guide on questions drawn from the objectives of the study. According to Ndirangu (2010), interview techniques in mixed method approach is an appropriate instrument because it gives the respondents more opportunity to open up on more information for clearer understanding of the phenomenon under consideration. Malhotra et al., (2010) describe in-depth interview as an unstructured, one-on-one interview with the goal of uncovering underlying motivations, views, attitudes and feelings of a concern subject.

Thirdly, instrument used was the focus group interviews; it was used to gather information from youths who were not willing to fill up questionnaires. Although, the focus group interview was an incidental approach because many of the youths in the study areas refused to be interviewed by the researcher and his two research assistants, yet it was later useful during the field work. Malhotra et al., (2010) described a focus group discussion as an interview carried out in an unstructured and natural environment with a small number of participants. Similarly, focus group interview defines by Saunders, Lewis, and Thornhill (2009) as a non-standardised discussion done with two or more individuals in a setting. This is mostly done in order to gain more insightful information by listening to a set of people sharing information on a particular subject matter. This instrument gave the researcher more opportunity to gather useful information and understand the views of the farmers, youths.

Prior to the research crew to the field, the instruments were translated to IsiXhosa in order to IsiXhosa language to avoid language barrier for those who cannot speak, read or write English language.

Thereafter, the researcher along with the two research assistants visited each rural location randomly; visiting selected areas in OR Tambo Municipality came first followed by visits to villages in Chris Hani Municipality with an average of two days in a week for six weeks to achieve a considerable amount of data. Both researcher and research assistants participated in conducting the interview; interviews were done in language choice of the respondents – English or IsiXhosa. Each session of the interview takes between 30 – 45 minutes, and was audio recorded. A sample of the interview guide utilised is attached in appendix page.

Three hundred and fifty (350) questionnaires were printed; targeting one hundred and seventy-five (175) small-scale farmers and one hundred and seventy-five (175) youths respectively. Meanwhile, some of the farmers as well as youths that showed interest in completing the survey instruments either failed to complete the questionnaire or did not complete it properly. So out of the 175 questionnaires administered in the farmers category, only one hundred and eleven (111) were correctly completed and good for analyses, while one 105 out of 175 questionnaires in the youth category were valid for analysis.

3.8 Gaining Entry and Challenges

In most villages where the study was conducted, there are village heads (chiefs in most cases); before research exercises was carried out, it was required of the researcher and his crew to meet these village heads, discuss the aim of the research and seek their approvals. In few cases where these chiefs were not available, the research crew met with other older men and in some areas it was a group of famers (a sort of farmers' association).

Although, very few challenges like inability to read and write was encountered during interaction with older farmers, but much cooperation and willingness to share information was displayed by them. In contrary, it was a huge challenge to gather information from the youth, particularly those who displayed lack of interest in agriculture; none of them were willing to give information. For example, in one of the locations in OR Tambo district named Tyityani, the youth confessed their lack of interest in agriculture and its activities therefore, were not ready to participate in the interview or surveys on agriculture. Meanwhile, the chief of the village managed to convince some youth, and he advised the research crew to return for another visit on a given date.

Despite several efforts, the youth were not ready to participate in one-on-one interview, therefore, the research crew re-strategized by replacing the one-on-one interview with focus group method. That was how the method became an accidental approach in the study – it was not pre-planned. This method opened door for interactive sessions for collecting data from youth both in Chris Hani and OR Tambo districts. In some cases, the research crew arranged for lunch (food) for the youth, in form of incentives. Such initiative may not be ethical, but it was done instead of giving monetary incentives to youth who demanded for money in a claim of hunger, though, such cash can be used for buying cigarette or alcohol. Literature has shown that giving incentives is permissible in field research. Zutlevics (2016 p.138) mentioned that in the absence of harm to the individual, encouraging more people to participate in research would appear to be a good thing, so far as it will lead to statistically more robust research outcomes, which can then be translated into better healthcare and other practice

In the case of service providers, the researcher visited the offices in the Department of Rural Development and Agrarian Reform in Mthatha and the Department of Agriculture and Forestry in Chris Hani, to get permission from the Head of the Department to conduct interview with some of the staffs especially the extension officers. A designed interview guide was used for the conduct of the interview, and it took the researcher crew six trip to achieve a considerable number of interviews for the study. Some of challenges encountered also include the absence of the participants in their offices. Each of the interview sessions were audio recorded. The breakdown of the interviewed conducted were listed below:

	OR Tambo	Chris Hani
Agricultural Extension Officers	5	6
Non-governmental organisation	1	1
Small-scale farmers	3	3
Focus group interview for youths	8	8
	(6 male and 2 female)	8 (7 male and 1 female)

3.9 Methods of data analysis

Data analysis according to Marshall and Rossman (1999: 150) is a technique of ordering, structuring and bringing meaning to the collected raw data. For the quantitative data, the raw data was prepared, cleaned, arranged and coded in Microsoft Excel, the process of this quantitative data analysis was done through Statistical Package for Social Sciences (SPSS) version 20. The data was analysed using descriptive instruments which comprise of bar charts, pie charts and simple frequency and percentage tables and Chi-square to analyse the items of the questionnaire and answer the research questions.

For the qualitative data, the responses of the interviews were transcribed and analysed using content analysis to classify the answers into themes/ key issues in support of the findings of the quantitative analysis. That is, thematically, both the quantitative and qualitative results are discussed in relation to the stated objectives of the study.

3.10 Ethical consideration

In research, ethical consideration is of utmost importance in that it allows researchers to carry out their study in a distinguished manner with decency and respect for human rights (Welman et al., 2007). Prior to the commencement of data collection process, permission to conduct the study was sought from the University of Fort Hare Research Ethics Committee which was granted by issuing an ethical clearance certificate – A copy of the certificate is attached in Appendix page. After receiving an ethical clearance certificate (with the certificate reference number: MON041SAKI01) from the University, the researcher went to the Provincial Department of Agriculture Office in Port Elizabeth to express the study interest, seek permission as well as to collect information on small-scale farmers in the district municipalities/ rural locations where the field study was conducted.

The researcher also visited the Department of Department of Rural Development and Agrarian Reform in Mthatha as well as the Department of Agriculture and Forestry in Chris Hani to seek the permission for the researcher interest and information that will help in the process of data collection. In addition, the researcher employs two research assistants who are natives (Xhosa speakers), in order to avoid language barrier.

Prior to the commencement of data collection process, the researcher informed the participants about the purpose of the study; he assured them that their participation in the survey was only on voluntary basis; and that they free to opt out anytime without

any consequence. The questionnaires were designed such that it gave the participants a high level of anonymity as information such as names and addresses of the participants were not provided for in the questionnaires. Also, the researcher emphasised confidentiality in the course of the study, and give the participants opportunity to ask questions for clarification on issues relating to the study. Also, no part of the questionnaires depicts information that can emotionally harm the participants. Similarly, for the one-on-one in-depth and focus group interviews, participants were pre-informed of the purposes of the study, their choice of voluntary participation in the study; the researcher also seek their permission before interview were recorded.

3.11 Conclusion

The chapter has broadly and sequentially explained the actual methods and techniques utilised in the course of carrying out the study. It was stressed that the study is a descriptive research and it adopts a mixed method approach in order to gather a reach and authentic data and thereby achieve the set objectives. Furthermore, the chapter emphasised that the population of the study are the black famers in OR Tambo and Chris Hani district municipalities in the Eastern Cape Province of South Africa. The areas which the study was conducted are Mthata, Port St John, Mhconco, Tyatyani, Cradock and Elliot. Further, quantitative and qualitative data were collected through the research instruments like questionnaires, interviews and focussed group. The importance of ethical issues in research is of course a great one and was not overlooked in this study as well; rigorous process was taken to make sure the rights of respondents was protected, such process include acquiring an ethical clearance certificate before going to field, seeking permission from provincial

and district authorities and employing research assistants that speaks local languages so as to avoid issues relating to language and cultural disputes.



CHAPTER FOUR

DATA PRESENTATION

4.1 Introduction

This chapter thematically and simultaneously presented the data that were collected using questionnaires, one-on-one interviews and the focus group interviews. Data were presented under themes based on the research objectives listed in chapter one.

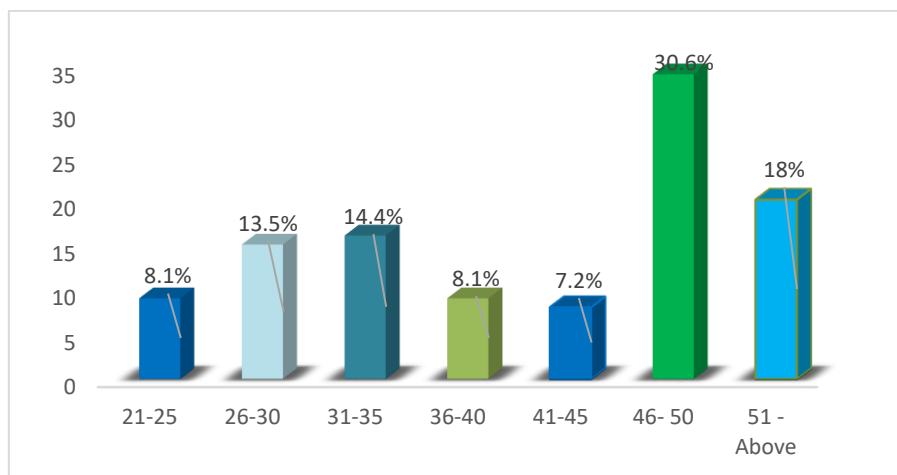
4.2 Socio-demographic information of respondents

The socio-demographic information collected through the questionnaire survey is divided into two major parts: the general background information and social information of respondents with regard to their farming activities.

4.2.1 Respondents background information

The information analysed and presented in this section includes the age distribution, gender, marital status, and respondents' household members.

Figure 4: Age Distribution

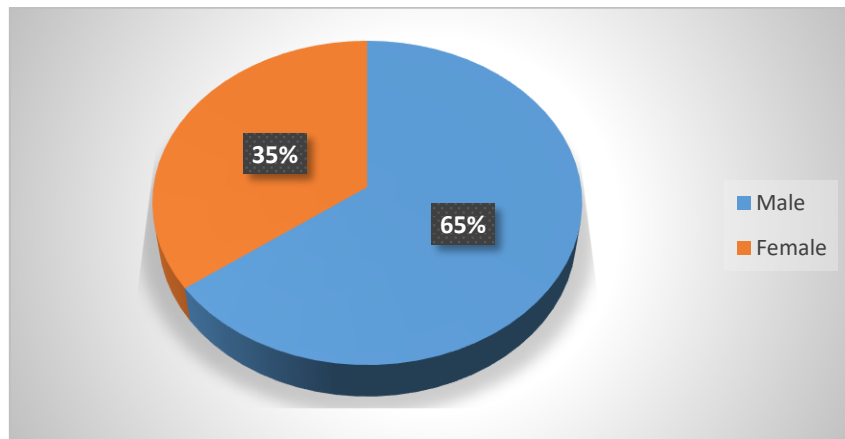


Source: Response to Question (annexure)

The largest group in this research is represented by respondents who were aged between 46-50 years, and these constituted (30.6%) of all respondents. The age group

of 51-above represented 18% of the respondents whereas, 14.5% were between the ages of 31 – 40 years, 13.5% were between the age of 26 – 30 years, 8.1% of the respondents were between age 36 – 40 years, 7.2% were between the ages of 41 – 45 years, while and 21 – 25 years.

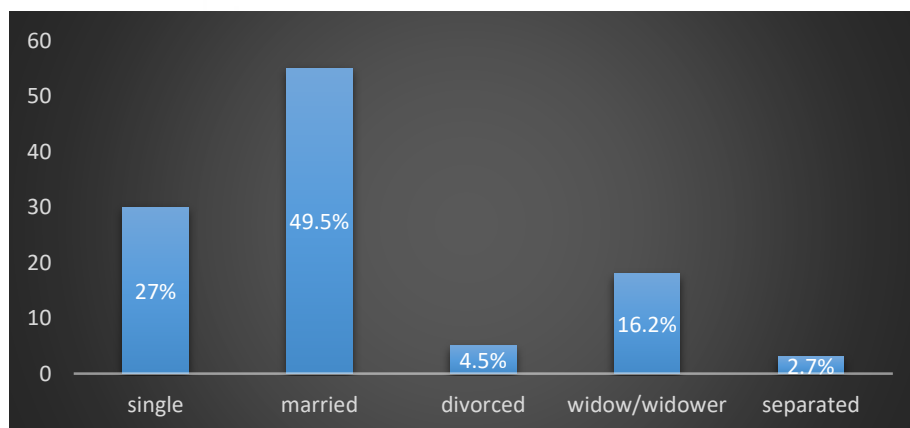
Figure 5: Gender



Source: Response to Question (annexure)

Majority (65%) of the respondents were male, while 35% were female.

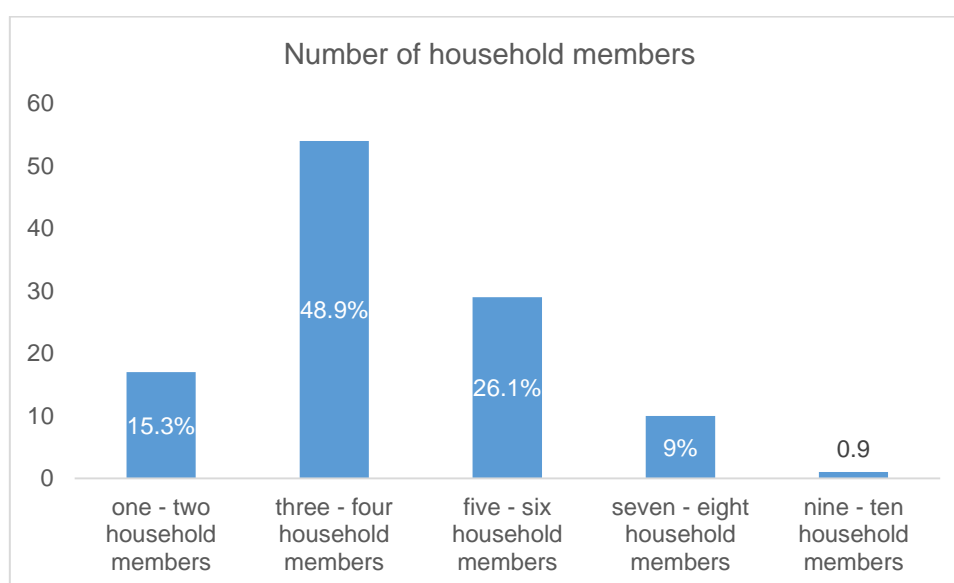
Figure 6: Marital Status



Source: Response to Question (Annexure)

The findings of the study also showed that a majority (49.5%) of the respondents were married, 27% were single, 16.2% were widow/widower, 4.5% were divorced and very few (2.7%) were on separation with their partners.

Figure 7: Number of household members



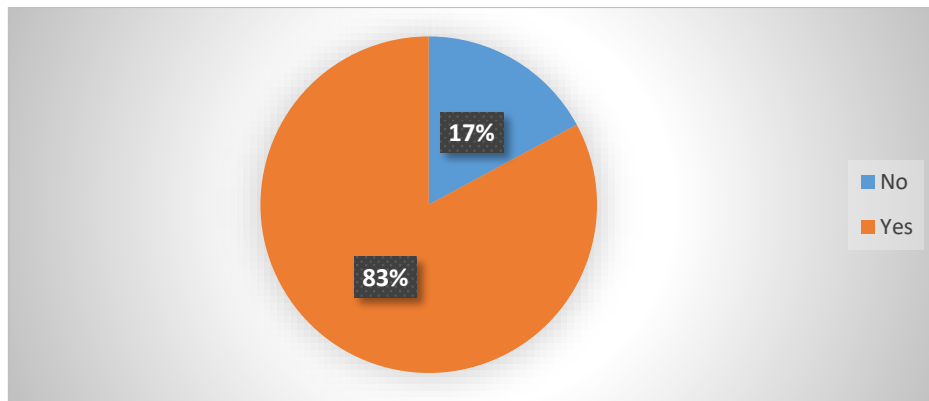
Source: Response to Question (Annexure)

In this research it was revealed that a majority (48.9%) of the respondents had between three and four household members, 26.1% had between five – six household members, 15.3 % had between one and two household member, 9% have between seven – eight household members, while very few (0.9%) have between nine – ten household members.

4.2.2 Respondents' Information on farm activities

This section revealed the rate of small-scale farmers that have a real understanding of what agricultural entrepreneurship is. It is important to show this so as to know whether the farmers themselves have a deep understanding of what they are doing. The section also presented the purpose of farmers' engagement in their farming activities (e.g. for business and consumption purpose) as well as the types of farming they practice.

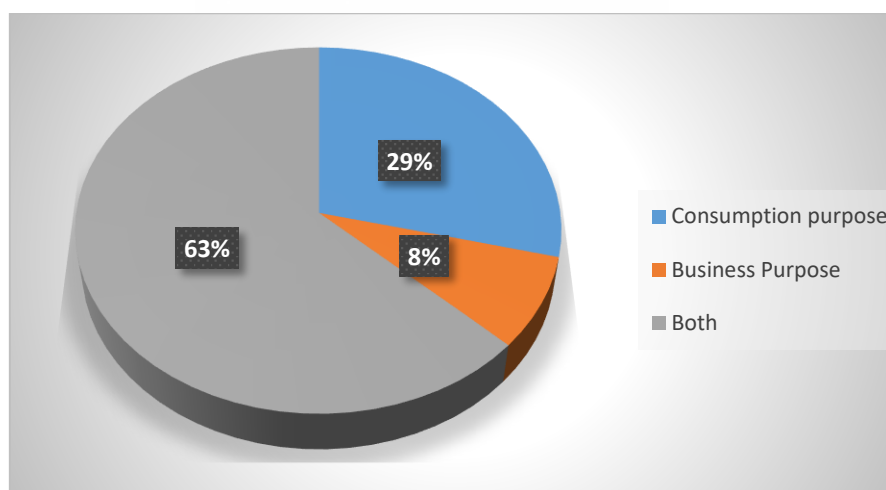
Figure 8: Respondents understanding of agricultural entrepreneurship



Source: Response to Question (Annexure)

A larger proportion (83%) of the respondents showed that they understood that agricultural entrepreneurship means farming for business purpose, while 17% did not understand that agricultural entrepreneurship meant farming for business purposes.

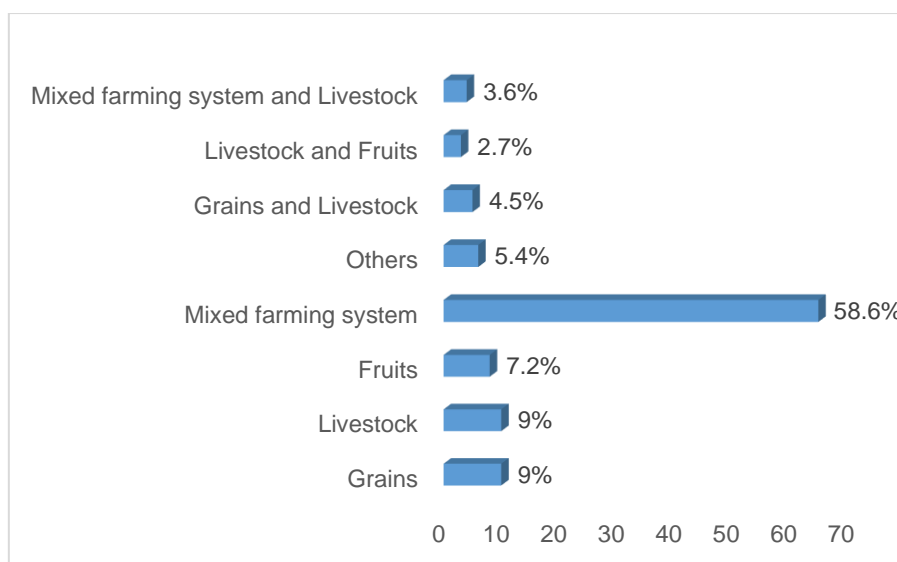
Figure 9: Purpose of farming



Source: Response to Question (Annexure)

A majority (63%) of the respondents highlighted that the purpose of venturing into agriculture was for both consumption and business purposes. On the other hand, 29% stated that the purpose for venturing into agriculture was to produce for consumption purpose and 8% highlighted that it was practiced agriculture for business purposes.

Figure 10: Type of farming system



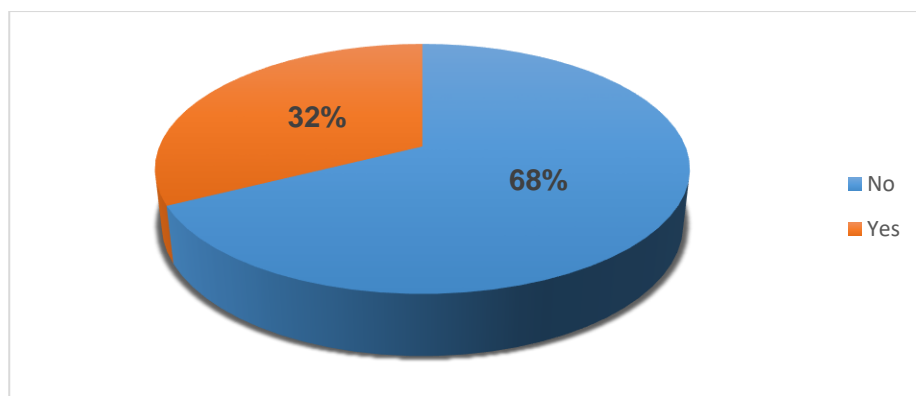
Source: Response to Question (Annexure)

A larger percentage (58.6%) of the participants practiced mixed farming system, 9% dealt with grains only, another 9% engaged in livestock only, 7.2% were involved in fruits farm produce. In addition the findings showed that 4.5% were involved in grain and livestock farming, 3.6% were engaged in mixed farming system and livestock. It also was revealed that, 2.7% were involved in fruits farming and livestock, while 5.4% claimed to be engaged in other farming activities without stating their core farming nature.

4.2.3 Source of farm knowledge and training

The level of skills possessed by each small-scale farmer through the type of training received and the source of training could determine their success or failure in agriculture. The first objective of this study was to describe farmers' source of farming knowledge and training on agriculture entrepreneurship. It is therefore, necessary to present data that reveals the percentage of trained farmers, the source of training, types of training and efficient of such training.

Figure 11: Trained and non-trained farmers

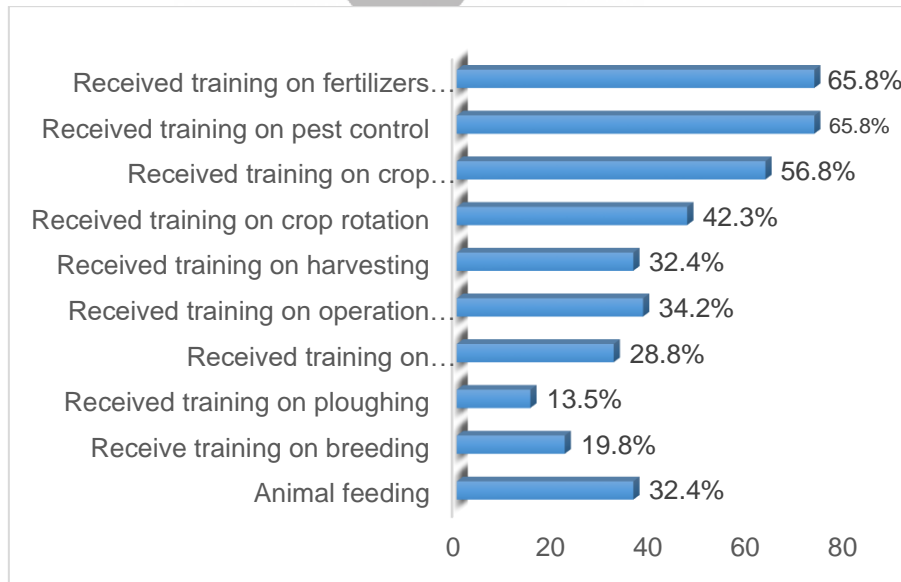


Source: Response to Question (Annexure)

From figure 11 it could be deduced that a majority (68%) of the respondents did not receive any agricultural training, while 32% reported to have received training. Figure 11 further showed that a larger proportion of small-scale farmers in the study area have never received agricultural training that could afford them necessary skills and knowledge to advance in their farming business.



Figure 12: Type of training received

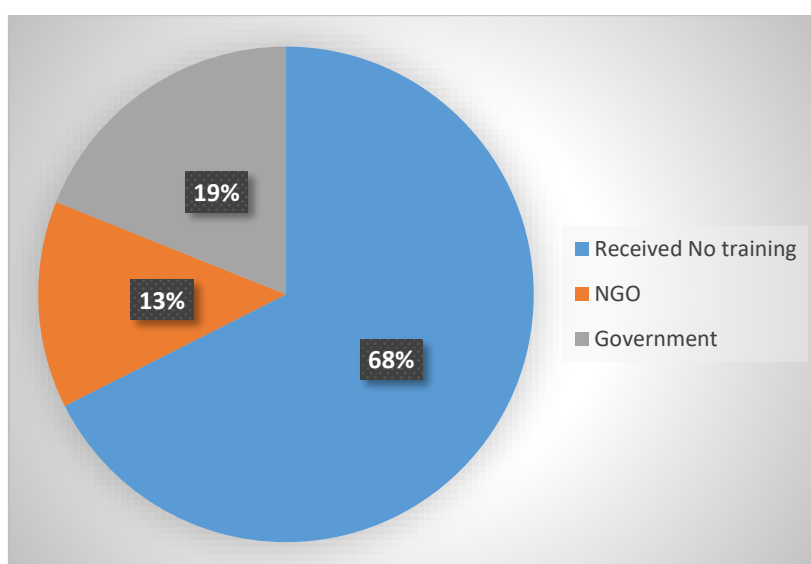


Source: Response to Question (Annexure)

As shown in figure 11, not all the respondents have previously received agricultural training. Figure 12 therefore shows the types of training were received by some of the participants. The emerging results illuminate that a majority (65.8%) of respondents

that had been trained received training on fertilizers usage, 65.8% received training on pest control, 56.8% received training on crop production. in addition figure 12 indicates that, a total of 42.3% received training on crop rotation, 34.2% received training on how to operate irrigation equipment, 32.4% reported to received training on harvesting. A total of 32.4% highlighted that they had received training on animal feeding, 28.8% received training on maintenance of farmland, 19.8% received training on breeding and 13.5% have received training on ploughing.

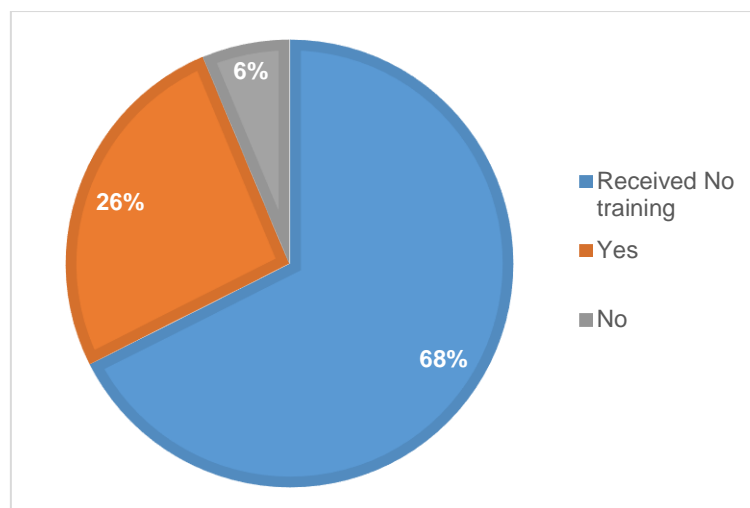
Figure 13: Sources of training



Source: Response to Question (Annexure)

This study also sought to find out the sources of training. The results of the study indicated that among those who received training, 19% were trained by non-governmental agency while, 13% were trained by the government.

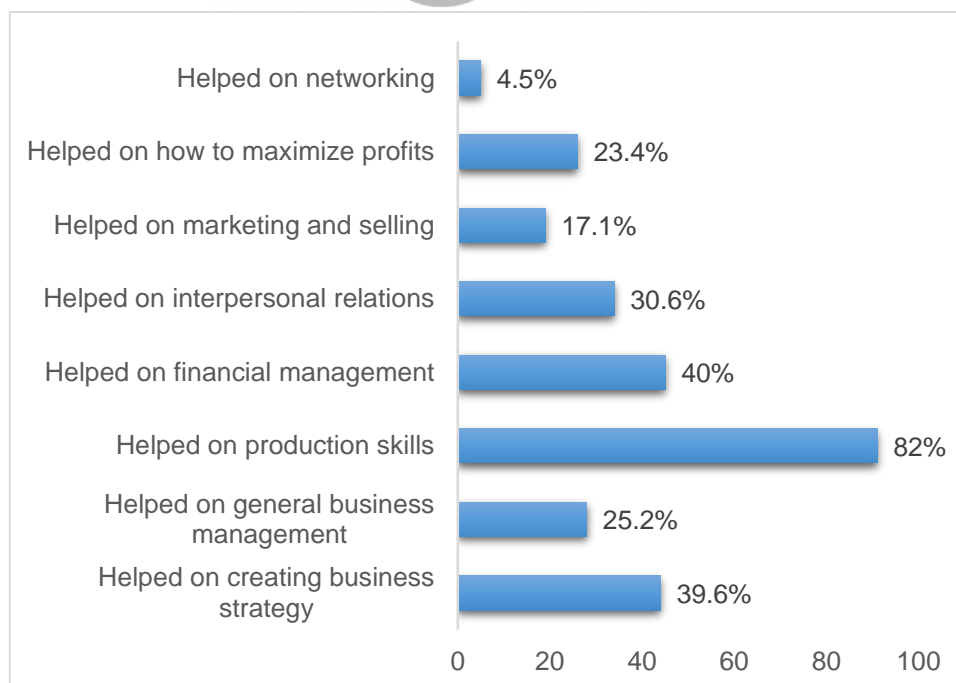
Figure 14: Effectiveness of the training



Source: Response to Question (Annexure)

When the respondents were asked if the training received had been effective, only a few (6%) reported that the training received was not effective while, 26% confirmed that the training received was effective. The above figure shows that much is required of government in terms of giving training to farmers.

Figure 15: Efficient aspects of training

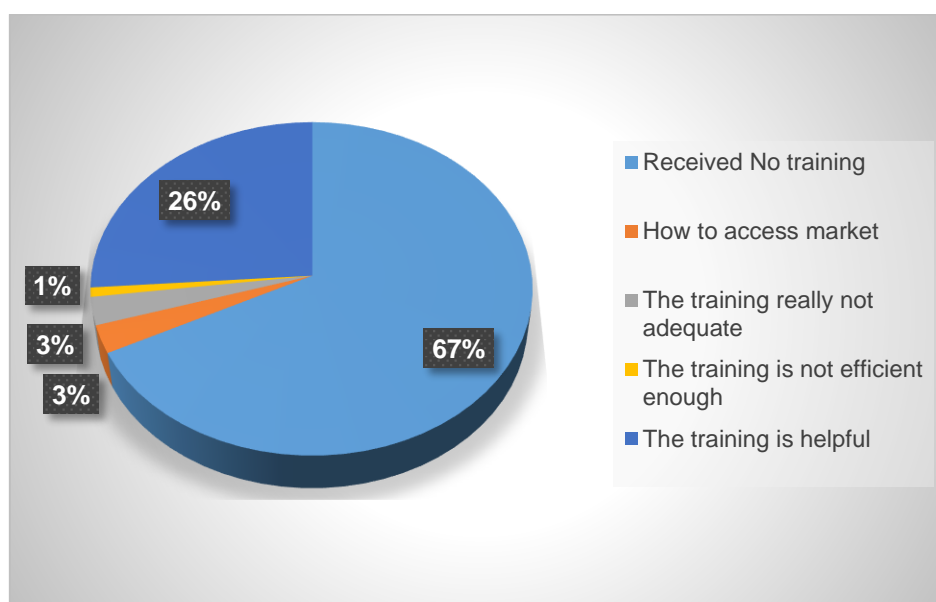


Source: Response to Question (Annexure)

The following statistics shows aspects where the training were effective: thus, a majority (82%) of the respondents found training being effective on production skills,

40% financial management, 39.6% creation of business strategy. a further 30.6% revealed that they found trained effective on interpersonal relations, 25.2% general business management, 23.4% found the training effective on how maximise profits and 4.5% confirmed the effectiveness of training on networking. As shown in the above figure, more still needs to be done in terms of training, apart production, farmers found other aspect of training they received not much efficient. This is in agreement with the notion of Foxcroft et al., (2002) stressing that government effort is yet to satisfactorily promote entrepreneurial spirit among black South Africans.

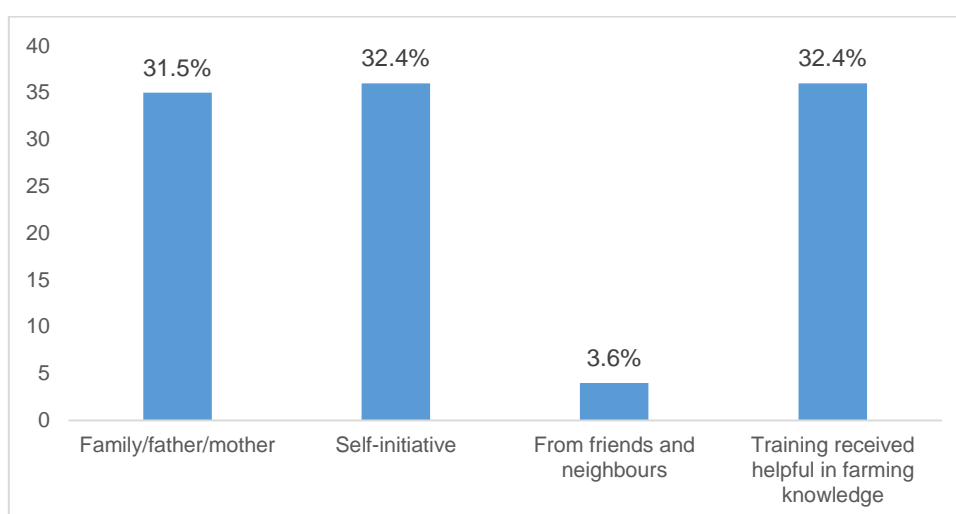
Figure 16: Inefficiency in the training



Source: Response to Question (Annexure)

While some respondents found the training efficient (figure 15), some reported that the training is inefficient (figure 16). For instance, 3% of the respondents reported that the training did not touch the aspect of market accessibility, 3% just reported that training was not adequate without specifying the aspect and 1% reported the trainers were not good trainers. This shows that although, majority of the participants did not receive training, but a large proportion of those who received training confirmed that such training is helpful.

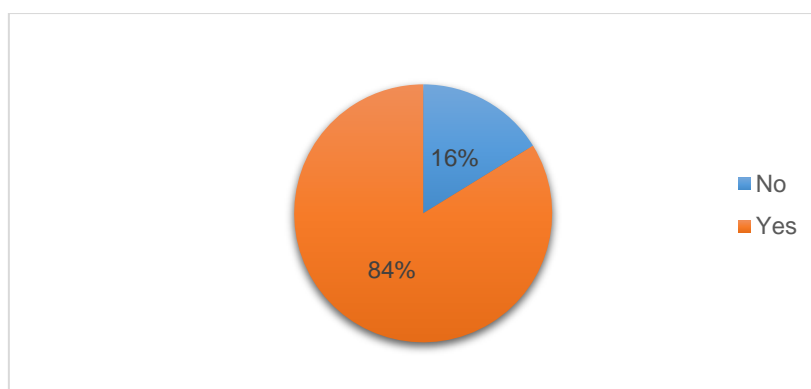
Figure 17: Other sources of training and effects



Source: Response to Question (Annexure)

Those who did not receive formal training on agriculture reported their source of skills and its effects. As such, the emerging results illuminated that 32.4% of the respondents acquired their agricultural skills through self-initiatives, 31.5% acquired theirs from family, and 3.6% learned the skills from friends and neighbours. Meanwhile, 32.4% of these respondents reported that these other sources of skill are efficient. This information shows that there are other means of acquiring knowledge and skills among the farmers themselves. Which means part of those who did not receive training from either government or NGOs got their farming skills from families and relatives.

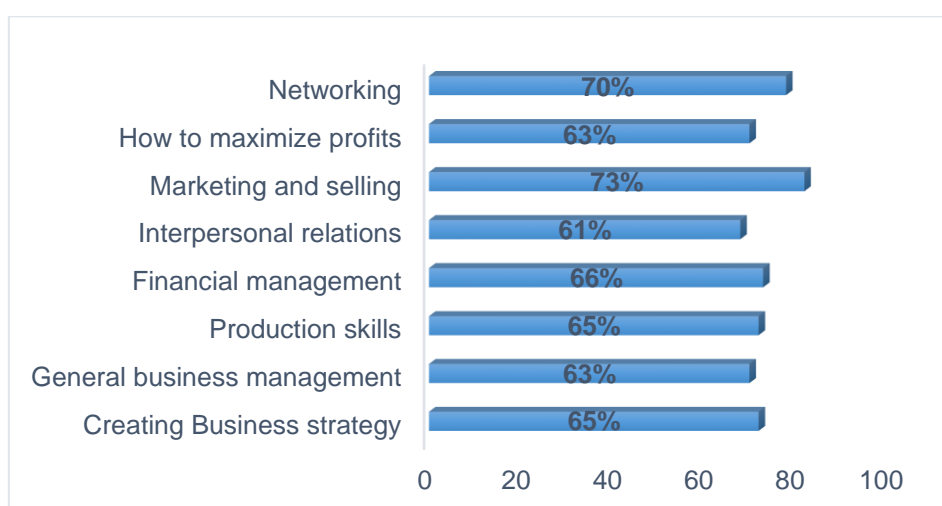
Figure 18: Needs for training on Agriculture



Source: Response to Question (Annexure)

As highlighted in figure 18. It may be concluded that a larger percentage (84%) confirmed that they needed training on agriculture, while 16% need no training.

Figure 19: Aspects where more training is required



Source: Response to Question (Annexure)

Statistics from the above figure show that 73% of the respondents required training on marketing and selling, networking (70%), profit maximization (63%), financial management (66%), production skill (65%), business strategy (65%), general business management (63%), interpersonal relations (61%). This higher percentage of small-scale farmers who still require more training in market and selling skills (figure 19 and table 1) shows that lack of marketing skills provides limited opportunities for small-scale farmers for sell their product (Chikazunga 2013).

4.2.4 Factors contributing to agriculture entrepreneurship development

The second research objective of this study was to identify factors contributing to agriculture entrepreneurship. The section first shows the ability of farmers on the skills required for agricultural business, followed by farmers' key developmental needs to grow their farming activities towards entrepreneurship. The results are presented in table 1 and figure 20 below.

Table 1: Level of skills of respondents

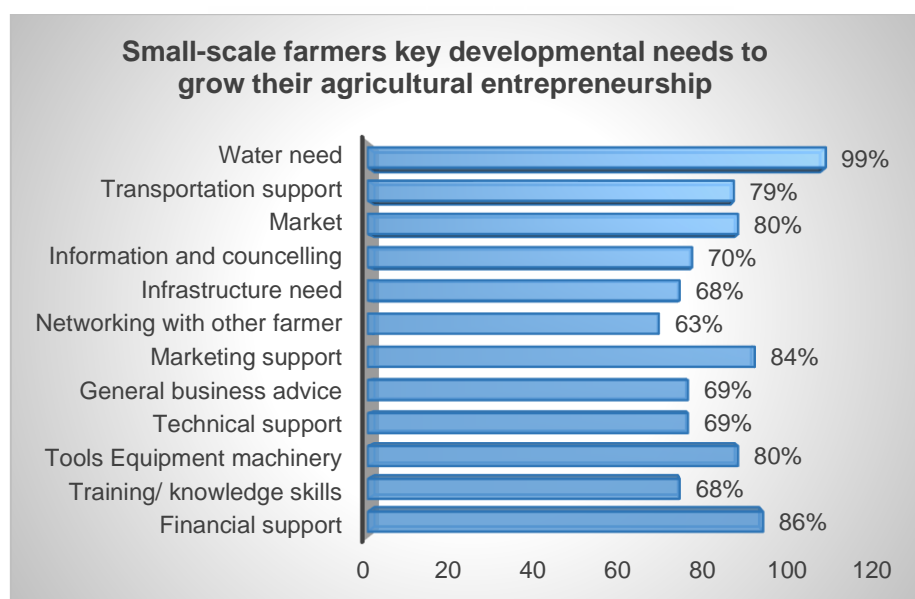
	Very weak	Weak	Not sure	Strong	Very strong
General business management skills	27 (24.3%)	33 (29.7%)	3 (2.7%)	44 (39.6%)	4 (3.6%)
Cooperation and networking skills	39 (35.1%)	44 (39.6%)	8 (7.2%)	16 (14.4%)	4 (3.6%)
Financial management skills	22 (19.8%)	23 (20.7%)	9 (8.1%)	53 (47.7%)	4 (3.6%)
Marketing and selling skills	56 (50.5%)	38 (34.2%)	3 (2.7%)	11 (9.9%)	3 (2.7%)
Interpersonal relations skills	17 (15.3%)	30 (27%)	19 (17.1%)	38 (34.2%)	7 (6.3%)
Production skills	3 (2.7%)	5 (4.5%)	3 (2.7%)	57 (51.4%)	43 (38.7%)
Utilizing opportunities	17 (15.3%)	24 (21.6%)	15 (13.5%)	49 (44.1%)	6 (5.4%)
Creating business strategy	32 (28.8%)	56 (50.5%)	2 (1.8%)	16 (14.4%)	5 (4.5%)
Decision making skills	18 (16.2%)	17 (15.3%)	9 (8.1%)	59 (53.2%)	8 (7.2%)
Networking	71 (64%)	25 (22.5%)	3 (2.7%)	10 (9%)	2 (1.8%)

Source: Computed from Field Survey Data, 2019

The results showed that a majority (54%) of the respondents are weak in general business management skill while, 43% showed strong management skills. A total of 75% indicated that they had weak skills in cooperation and networking while, 18% had strong skills. In financial management skill, 51% of the respondents are strong while

40.5% are weak. In marketing and selling skill, a majority (85%) of the respondents are very weak while 13% are strong. 42% of the respondents account for weak skill in interpersonal relation while 40.5% are strong. On production level, the majority (90%) had a very strong skill, while production skill of 7% is weak. Furthermore, 49.5% confirmed their strong skills in utilising opportunity while, 37% are reported weak. In creation of business strategy, 79% of the respondents possess weak skills while 19% have strong skill. The decision making skill possessed by 60% are strong while 32% of the respondents have weak skill. Lastly, 87% of the respondents are weak in networking while 11% are strong.

Figure 20: Developmental needs for small-scale farmers



Source: Response to Question (Annexure)

The above figure shows those small-scale farmers' responses regarding key developmental needs to nurture agricultural activities from home garden to agricultural entrepreneurship level. The results showed that virtually all the respondents (86%) were in need of financial support and 68% wanted to acquire training/knowledge. Meanwhile, 80% suggested tools/machinery, 69% suggested technical support; also, 69% suggested business advice. Furthermore, 84% suggested marketing support,

63% suggested platform for networking among farmers, and 68% suggested infrastructure. While 70% suggested information and counselling, 80% suggested an improved access to market, 79% suggested transportation support, and 99% recommended of water supply. Similar to the above results, Onubuogu, Esiobu & Ibe (2015) highlighted physical infrastructure as a need to small-scale agricultural development in South Africa.

4.2.5 Barriers to agricultural entrepreneurship development

Various factors could be barriers to agricultural entrepreneurship development, some of which were analysed in this section. Small-scale farmers in the Eastern Cape keep of facing these barriers as they endeavour to nurture their small-scale farming towards entrepreneurship level; the section shows how those barriers hindered them from achieving their goal. In addition to quantitative data, qualitative information was presented in this section; this was done to enrich and to complement quantitative data. The qualitative data presented in this section are extracts of the key factors only; some respondents share same views, therefore, in order to avoid repetition, the researcher arranged similar views and represented them with one. The information in this section correlates with the third objective of this study.

Table 2: Barriers to entrepreneurship development drive in agriculture in Eastern Cape

	Strongly disagree	Disagree	Neutral view/ not	Agree	Strongly agree
Lack of education and training (in general)	9 (8.1%)	9 (8.1%)	5 (4.5%)	25 (22.5%)	63 (56.8%)

Difficult to obtain financing		1 (0.9%)	1 (0.9%)	23 (20.7%)	86 (77.5%)
Lower access to land		1 (0.9%)	2 (1.8%)	27 (24.3%)	81 (73%)
Lack of self-confidence			1 (0.9%)	22 (19.8%)	88 (79.3%)
Great fear of failure	1 (0.9%)		2 (1.8%)	26 (23.4%)	82 (73.9%)
Lack of infrastructures (roads, telephone, computers etc.)		1 (0.9%)		29 (26.1%)	81 (73%)
Lack of relevant information				32 (28.8%)	79 (71.2%)
No interest in producing for business purposes				31 (27.9%)	80 (72.1%)
Poor access to market information				30 (27%)	81 (73%)
Lack of storage and warehousing facilities			1 (0.9%)	26 (23.4%)	84 (75.7%)
Poor access to farming equipment and inputs				29 (26.1%)	82 (73.9%)
Poor weather				25 (22.5%)	86 (77.5%)
Lack of advisory support from government officials			1 (0.9%)	27 (24.3%)	83 (74.8%)
Poor land fertility for arable farming			1 (0.9%)	27 (24.3%)	83 (74.8%)
Lack of technical skills (animal feeding skills, irrigation skills)		1 (0.9%)		31 (27.9%)	79 (71.2%)
High rates of crime		1 (0.9%)		26 (23.4%)	84 (75.7%)

Source: Computed from Field Survey Data, 2019

As shown above, a larger percentage of the small-scale farmers strongly agreed that all the factors in the table were barriers to entrepreneurial development in agriculture among small-scale farmers in the study area (Eastern Cape Province). This alluded to the notion of Khapayi & Celliers (2016) who highlighted lack of transportation to the market, poor roads network, and lack of apposite information, lack of marketing skills,

poor market information, high transaction cost and poor market infrastructure among major constraints to agricultural development.

Extracts from interviews (Qualitative insights):

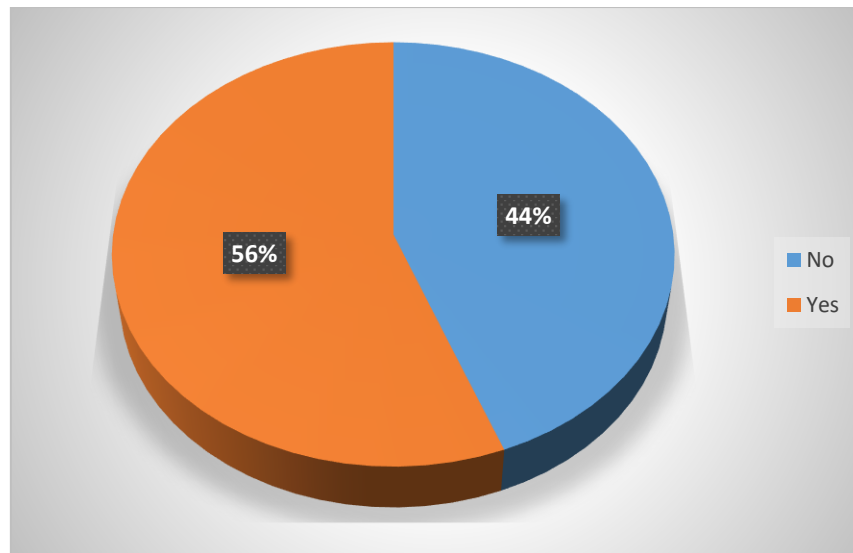
Information from NGOs showed that challenges to agricultural entrepreneurship development are far beyond the views of the society. In an attempt to share his view an NGO official is quoted below:

"Challenges are numerous, but land challenge is dominant. The issue of land ownership is the major one. People also battle with start-up finance, and that is why we provide assistance. Although, we have limited resources but we try our best to see that our people are being catered for. Water is another challenge as well as drought." (NGO official 1, Mthatha).

In addition, the NGO official 1 above also compared farmers in South Africa and farmers in developed countries like America and European countries in terms protection of farmers' rights, he then made the statement below to show there is need for a working policy that will protect farmers' rights and interest:

"Far beyond that, there are several challenges that hinders the development of agriculture in South Africa. For instance, in South African there is no protection for farmers when it comes to the issue of tariffs against global competitors, unlike in America or European countries. Farmers in that side are much protected. And the truth is that South African farmers are yet to have right to a safe and economically viable environment where their farming business can grow." (NGO officer 1, Mthatha).

Figure 21: Respondents who faced challenges in farming business



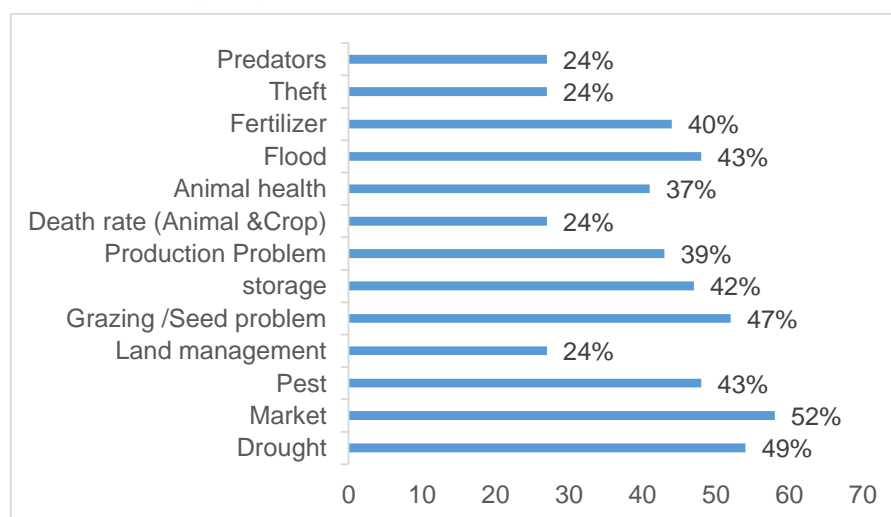
Source: Response to Question (Annexure)

Results of the study showed that a majority (56%) of the respondents reported that they face challenges in their farming business because they did not received agricultural training while, 44% reported they do not have challenges. Xaba (2014) also noted that most small-scale farmers encounter challenges due to lack of adequate training.



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Figure 22: Types of challenges faced by respondents



Source: Response to Question (Annexure)

Finding of the study also showed that a majority (52%) of the respondents reported market as a challenge, 49% struggled with drought, 47% battles grazing/ seed

problem, 42% storage problem, 43% faces pest problem, 43% flood problem, 40% lack of fertilizer, 39% faces production problem, 37% faces animal health problem while 24% battles with land management skill, 24% high death rate of livestock and crops, 24% theft problem and 24% predator's challenge. In the above figure, market is the most disturbing challenge, meanwhile, van Schalkwyk et al., (2012) also confirmed market as a great challenge among small-scale farmers.

Qualitative Extracts:

The following are the responses from government officials regarding challenges faced by small-scale farmers in Eastern Cape Province:

"The first challenge I see is land. It is not easy to acquire land for production. At least, we all know the issue of land in South Africa is a big challenge. Another challenge they face is capital, which is why we render assistance to them, although we don't give out assistance in monetary form but we supply whatever the farmers want to grow their business. There is lack of infrastructure as well, Draught, depleted soil due to unsustainable farming methods from the past generations. By unsustainable farming methods I mean, mono-cropping, deep tillage, nutrients and residues burning." (Government official 2,3,4,5, Mthatha)

The above information shows that, there was agreement in the views of extension officers and farmers regarding the challenges faced by small-scale farmers in the Eastern Cape Province.

4.2.6 Age, gender, purpose of farm produce and interest in agriculture

Research objective four sought to understand the relationship between farmers' age, gender, purpose of farm produce and their interest in agriculture towards agriculture entrepreneurship development. The objective was approached with two research questions: first, the relationship between farmers' age, gender, purpose of farm produce and interest in agriculture; second, the relationship between farmers age,

gender, purpose of farm produce and agreement to prospects of achievement in farming business. The objective was answered using chi-square for independence statistical tools. The results were presented in table 3 to 12. The tables are broken into small sizes for easy interpretation; table (3 and 4), (5, 6 and 7) revealed the analysis of relationship between age, gender, purpose of farm produce and interest in agriculture. While, table (8 and 9), (10, 11 and 12) analysed gender, purpose of farm produce and agreement to prospects of achievement through farming business.

Table 3: Relationship between farmers' gender, purpose of farm produce and interest in agriculture

			Consumption purpose	Business Purpose	Both	Total
Agriculture is a potential industry nowadays	No	Male	9	0	12	21
	Yes		6	8	37	51
	No	Female	7	0	1	8
	Yes		10	1	20	31
$\chi^2= 14.703$; $df= 2$; $p <.001$		Total	32	9	70	111
Agriculture has the ability to attract investors compared to other entrepreneur business, it has so much to offer	No	Male	9	2	15	26
	Yes		6	6	34	46
	No	Female	10	0	6	16
	Yes		7	1	15	23
$\chi^2= 9.072$; $df= 2$; $p <.011$		Total	32	9	70	111
Agriculture encourages transfer of technology	No	Male	11	2	18	31
	Yes		4	6	31	41
	No	Female	11	0	7	18
	Yes		6	1	14	21
$\chi^2= 11.629$; $df= 2$; $p <.003$		Total	32	9	70	111
Agriculture is profitable	No	Male	11	0	9	20
	Yes		4	8	40	52
	No	Female	12	0	4	16
	Yes		5	1	17	23
$\chi^2= 33.175$; $df= 2$; $p <.000$		Total	32	9	70	111

Source: Computed from Field Survey Data, 2019

The table above shows the statistical differences in gender and purposes of farming and factors that influence small-scale farmers' interest in agriculture. The table reveals a statistical significant difference ($\chi^2 (2, n = 111) = 14.70$; $p < .001$) between small-scale

farmers gender, purpose in farming and those that agree and disagree that agriculture is a potential industry nowadays; The results further show that a majority of the respondents' male (51) and female (31) whose interest in farming is either for consumption purpose, business purpose or both agreed that agriculture is a potential industry nowadays, while very few males (21) and females (8) disagree.

The results also shows significant difference (χ^2 (2, n= 111) = 9.07; p <.011) between those that believed and did not believe that agriculture had the ability to attract investors compared to other entrepreneurship. The majority of the respondents male (46) and female (23) whose primary agriculture was either for consumption purpose, business purpose or both agreed that agriculture had the ability to attract investors compared to other business sector, while males (26) and females (16) disagreed. Also, the findings of the study indicated that there was significant difference (χ^2 (2, n= 111) = 11.63; p <.003) between those that agree that agriculture encourages transfer of technology; and (χ^2 (2, n= 111) = 33.18; p <.00) those that agree agriculture is profitable. The majority, males (41) and females (21) whose interest in agriculture was either for consumption purpose, business purpose or both agreed, while a few respondents both male and female whose interest was in agriculture disagreed.

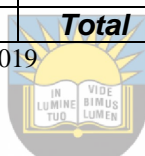
Decision rules: when the p-value is less than our chosen significance level $\alpha = 0.05$, we conclude that there is an association between age, gender, purpose of farm produce and motivation in agriculture.

Table 4: Relationship between farmers' gender, purpose of farm produce and interest in agriculture, (cont.)

			Consumption purpose	Business Purpose	Both	Total
I believe Agriculture has good future	No	Male	11	2	12	25
	Yes		4	6	37	47
	No	Female	9	0	6	15
	Yes		8	1	15	24

$\chi^2= 13.703$; $df= 2$; $p <.001$		Total	32	9	70	111
Agriculture is a respected profession	No	Male	13	2	19	34
	Yes		2	6	30	38
	No	Female	14	0	10	24
	Yes		3	1	11	15
$\chi^2= 19.775$; $df= 2$; $p <.000$		Total	32	9	70	111
Agriculture has a guaranteed market for the products that have been produced	No	Male	14	5	40	59
	Yes		1	3	9	13
	No	Female	14	1	18	33
	Yes		3	0	3	6
$\chi^2= 2.149$; $df= 2$; $p >.341$		Total	32	9	70	111
agripreneurship involves low risks	No	Male	11	7	37	55
	Yes		4	1	12	17
	No	Female	13	0	17	30
	Yes		4	1	4	9
$\chi^2= .064$; $df= 2$; $p >.968$		Total	32	9	70	111
To provide food for myself and my family	No	Male	5	8	40	53
	Yes		10	0	9	19
	No	Female	6	1	14	21
	Yes		11	0	7	18
$\chi^2= 22.973$; $df= 2$; $p <.000$		Total	32	9	70	111

Source: Computed from Field Survey Data, 2019



The above table reveals a statistical significant difference (χ^2 (2, n= 111) = 13.07; $p <.001$) between small-scale farmers in terms of gender, purpose in farming and those that believe and do not believe that agriculture has a good future. Similarly, there is statistical significant difference (χ^2 (2, n= 111) = 19.78; $p <.00$) between those that believed and did not believe that agriculture is a respected profession. The results of the study highlighted that a majority of respondents both males (47) and female (24) whose interest is either for consumption purpose, business purpose or both agreed that agriculture had A good future. On the other hand, male (38) and female (15) agreed that agriculture was a respected profession. More so, the table also revealed that there is no significant difference (χ^2 (2, n= 111) = 2.15; $p >.34$) between small-scale farmers that agree or disagree that agriculture has a guaranteed market for the products that have been produced. The result show that a majority, both male (59)

and female (33), whose main interest is either for consumption purpose, business purpose or both disagreed that agriculture had a guaranteed market for the farm produce, while very few male (13) and female (6) believed there was guaranteed markets for agriculture.

Table 6.3.2 also shows that there is no significant difference (χ^2 (2, n= 111) = .06; p >.97) between those that agree or disagree that agriculture business involves low risk. The results show that majority, both male (55) and female (30), whose main interest is either for consumption purpose, business purpose or both disagree that agriculture business involves low risk. While very few male (17) and female (9) believe that agriculture business involves low risk.

Lastly, the table shows that there is significant difference (χ^2 (2, n= 111) = .22; p <.00) between those that agree and disagree that their interest in agriculture is to provide food for myself and my family. Majority of the respondents' male (40) and female (14) whose interest in agriculture is both for consumption and business disagreed that their interest in agriculture is to provide for themselves and their families, while very few males (9) and females (7) were in agreement.

Decision rules conclusion: when the p-value is less than our chosen significance level $\alpha = 0.05$, we conclude that there is an association between age, gender, purpose of farm produce and motivation in agriculture. On other hand, for the case where the p-value is greater than our chosen significance level ($\alpha = 0.05$), we conclude that there is not enough evidence to suggest an association between age, gender, purpose of farm produce and motivation in agriculture.

Table 5: Relationship between farmers' age, purpose of farm produce and interest in agriculture

			Consumption purpose	Business Purpose	Both	Total
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Agricultures is a potential industry nowadays	No	Early Adulthood/ Youth	9	0	5	14
	Yes		4	5	17	26
	No	Middle Adulthood	4	0	7	11
	Yes		8	4	28	40
	No	Late Adulthood	3	0	1	4
	Yes		4	0	12	16
$\chi^2= 14.703$; $df= 2$; $p <.001$		Total	32	9	70	111
Agriculture has the ability to attract investors compared to other business, it has so much to offer	No	Early Adulthood/ Youth	8	2	4	14
	Yes		5	3	18	26
	No	Middle Adulthood	6	0	10	16
	Yes		6	4	25	35
	No	Late Adulthood	5	0	7	12
	Yes		2	0	6	8
$\chi^2= 9.072$; $df= 2$; $p <.011$		Total	32	9	70	111
Agriculture encourages transfer of technology	No	Early Adulthood/ Youth	8	2	5	15
	Yes		5	3	17	25
	No	Middle Adulthood	8	0	12	20
	Yes		4	4	23	31
	No	Late Adulthood	6	0	8	14
	Yes		1	0	5	6
$\chi^2= 11.629$; $df= 2$; $p <.003$		Total	32	9	70	111

Source: Computed from Field Survey Data, 2019

In the table above, statistical data shows differences in age phases, purpose of farming and factors that influence small-scale farmers' interest in agriculture. The table reveals a statistical significant difference (χ^2 (2, n= 111) = 14.70; $p <.001$) between small-scale farmers age in phases, purpose in farming and those that agree and disagree that agriculture is a potential industry nowadays. The results show that a majority of the respondents' in middle adulthood (40), youth (26), and late adulthood (16) whose main interest in agriculture either for consumption purpose, business purpose or both agreed that agriculture is a potential industry nowadays. While very few in early adulthood/youth (14), middle adulthood (11), and late adulthood (4) disagreed.

The table also shows significant differences (χ^2 (2, n= 111) = 9.07; $p <.011$) between those that believed agriculture has the ability to attract investors as compared to other

entrepreneur business. The majority, in middle adulthood (25), youth (18), and late adulthood (6) whose main interest in agriculture was either for consumption purpose, business purpose or both agreed that agriculture has the ability to attract investors compared to other entrepreneur business. While, very few in early adulthood/youth (14), middle adulthood (11), and late adulthood (4) disagreed. Again, there is significant difference (χ^2 (2, n= 111) = 11.63; $p < .003$) between those that agree that agriculture encourages transfer of technology. The majority, in middle adulthood (31), youth (25), and late adulthood (6) whose main interest in agriculture is either for consumption purpose, business purpose or both agreed that agriculture encourages transfer of technology. While very few in middle adulthood (20), early adulthood/youth (15), and late adulthood (14) disagreed.

Decision rules conclusion: when the p-value is less than our chosen significance level $\alpha = 0.05$, we conclude that there is an association between age, gender, purpose of farm produce and motivation in agriculture.

Table 6: Relationship between farmers' age, purpose of farm produce and interest in agriculture, (cont.)

			Consumption purpose	Business Purpose	Both	Total
Agriculture is profitable	No	Early Adulthood/ Youth	0	5	15	10
	Yes		5	17	25	3
	No	Middle Adulthood	8	0	6	14
	Yes		4	4	29	37
	No	Late Adulthood	5	0	2	7
	Yes		2	0	11	13
$\chi^2 = 33.175$; $df = 2$; $p < .002$		Total	32	9	70	111
I believe Agriculture has good future	No	Early Adulthood/ Youth	10	2	8	20
	Yes		3	3	14	20
	No	Middle Adulthood	5	0	6	11
	Yes		7	4	29	40
	No	Late Adulthood	5	0	4	9
	Yes		2	0	9	11
$\chi^2 = 13.703$; $df = 2$; $p < .001$		Total	32	9	70	111
	No		10	2	10	22

Agriculture is a respected profession	Yes	Early Adulthood/ Youth	3	3	12	18	
	No	Middle Adulthood	11	0	13	24	
	Yes		1	4	22	27	
	No	Late Adulthood	6	0	6	12	
	Yes		1	0	7	8	
$\chi^2= 19.775; \text{ df}= 2; p <.000$			Total	32	9	70	111

Source: Computed from Field Survey Data, 2019

In continuance, the above table revealed a statistical significant difference (χ^2 (2, n= 111) = 33.18; $p <.001$) between those that agreed and disagreed that agriculture is profitable. The table further show that the majority, in middle adulthood (37), early adulthood/ youth (30), and late adulthood (13), whose main interest in agriculture is either for consumption purpose, business purpose or both agreed that agriculture is profitable. On the other hand, very few respondents in early adulthood/youth (10), middle adulthood (14), and late adulthood (7) disagreed. Equally, the above table shows significant differences (χ^2 (2, n= 111) = 9.07; $p <.011$) between those that believe and do not believe that agriculture has good future. Furthermore, the results in table 6 show that those in middle adulthood (27), early adulthood/ youth (18), and late adulthood (8), whose main interest in agriculture is either for consumption purpose, business purpose or both believe that agriculture has good future. While those in early adulthood/youth (20), middle adulthood (11), and late adulthood (9) did not believe that agriculture had a good future.

The table also revealed statistical significant difference (χ^2 (2, n= 111) = 19.78; $p <.00$) between those that believe and do not believe that agriculture is a respected profession. The table show that the majority in early adulthood/ youth (22), considerable number in middle adulthood (24) and late adulthood (12) whose main interest in agriculture is either for consumption purpose, business purpose or both do not believed that agriculture is a respected profession. While respondents in middle

adulthood (27), early adulthood/ youth (18), and late adulthood (8) believed that agriculture is a respected profession.

Decision rules conclusion: when the p-value is less than our chosen significance level $\alpha = 0.05$, we conclude that there is an association between age, gender, purpose of farm produce and motivation in agriculture.

Table 7: Relationship between farmers' age, purpose of farm produce and interest in agriculture

			Consumption purpose	Business Purpose	Both	Total
Agriculture has a guaranteed market for the products that have been produced	No	Early Adulthood/ Youth	10	4	18	32
	Yes		3	1	4	8
	No	Middle Adulthood	11	2	27	40
	Yes		1	2	8	11
	No	Late Adulthood	7		13	20
	Yes					
$\chi^2 = 2.149$; $df = 2$; $p > .341$		Total	32	9	70	111
Agripreneurship involves low risks	No	Early Adulthood/ Youth	9	4	17	30
	Yes		4	1	5	10
	No	Middle Adulthood	10	3	27	40
	Yes		2	1	8	11
	No	Late Adulthood	24	7	54	85
	Yes		8	2	16	26
$\chi^2 = .064$; $df = 2$; $p > .968$		Total	32	9	70	111
To provide food for myself and my family	No	Early Adulthood/ Youth	3	5	18	26
	Yes		10	0	4	14
	No	Middle Adulthood	6	4	28	38
	Yes		6	0	7	13
	No	Late Adulthood	2	0	8	10
	Yes		5	0	5	10
$\chi^2 = 22.973$; $df = 2$; $p < .000$		Total	32	9	70	111

Source: Computed from Field Survey Data, 2019

As shown above, further analysis revealed that there is no significant difference ($\chi^2 (2, n = 111) = 2.15$; $p > .34$) between small-scale farmers that agree or disagree that agriculture has a guaranteed market for the products that have been produced. The results showed that a majority of the respondents, in middle adulthood (40), early adulthood/ youth (32), and late adulthood (7) whose main interest in agriculture is

either for consumption purpose, business purpose or both disagreed that agriculture has a guaranteed market for farm produce.

Meanwhile very few respondents belonging to the middle adulthood (11) and early adulthood/youth (8), late adulthood (4) believed there is a guaranteed market for agriculture farm produce. Likewise, table 6.4.3 as well shows that there is no significant difference (χ^2 (2, n= 111) = .06; $p > .97$) between those that agree or disagree that agricultural entrepreneurship involves low risk. The results further illuminate that a majority of the respondents in the middle adulthood (40), early adulthood/ youth (30), and late adulthood (10) whose main interest in agriculture was either for consumption purposes, business purposes or both, disagreed that agricultural entrepreneurship involves low risk. On the other hand, very few in middle adulthood (13) and early adulthood/youth (10), late adulthood (10) agreed that agriculture business involves low risk.



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Lastly, the table shows that there is significant difference (χ^2 (2, n= 111) = .22; $p < .00$) between those that agreed and disagreed that their interest in agriculture is to provide food for myself and my family. The results show that a majority in middle adulthood (38), early adulthood/ youth (26), and late adulthood (10) whose main interest in agriculture is either for consumption purposes, business purposes or both disagreed that their interest in agriculture was to provide for themselves and their families. The findings also indicated that, very few in middle adulthood (13) and early adulthood/youth (14), late adulthood (10) agreed that their interest in agriculture is to provide for themselves and their families.

Decision rules conclusion: when the p-value is less than our chosen significance level $\alpha = 0.05$, we conclude that there is an association between age, gender, purpose

of farm produce and motivation in agriculture. On other hand, for the case where the p-value is greater than our chosen significance level ($\alpha = 0.05$), we conclude that there is not enough evidence to suggest an association between age, gender, purpose of farm produce and motivation in agriculture.

4.2.7 Age, gender, purpose of farm produce and prospects of achievement in agriculture

In this section, results are presented in tables 8 to 12. Table 8 and 9 covered analyses on the relationship between respondents' gender, purpose farm produce and prospects of achievement in agriculture. While, tables 10, 11 and 12 show analyses on respondents' age, purpose farm produce and prospects of achievement in agriculture

Table 8: Relationship between respondents' gender, purpose in agriculture and prospects of achievement in agriculture

			Consumption purpose	Business Purpose	Both	Total
Job independence (self-reliance)	No	Male	1	0	0	1
	Yes		14	8	49	71
	No	Female	1	0	0	1
	Yes		16	1	21	38
$\chi^2= 5.028$; $df= 2$; $p <.081$		Total	32	9	70	111
Increase in savings	No	Male	5	0	1	6
	Yes		10	8	48	66
	No	Female	2	0	1	3
	Yes		15	1	20	36
$\chi^2= 11.525$; $df= 2$; $p <.003$		Total	32	9	70	111
Empowerment of less-privileged people	No	Male	3	0	2	5
	Yes		12	8	47	67
	No	Female	2	0	1	3
	Yes		15	1	20	36
$\chi^2= 4.983$; $df= 2$; $p <.083$		Total	32	9	70	111
Job creation	No	Male	2	0	1	3
	Yes		13	8	48	69
	No	Female	2	0	1	3
	Yes		15	1	20	36
$\chi^2= 4.553$; $df= 2$; $p >.103$		Total	32	9	70	111
Increase in economic growth	No	Male	1	0	0	1
	Yes		14	8	49	71
	No		1	0	0	1

	Yes	Female	16	1	21	38
$\chi^2 = 5.028$; $df = 2$; $p < .081$		Total	32	32	9	70

Source: Computed from Field Survey Data, 2019

The above table shows the statistical differences in gender and purposes of farming and agreement to what can be achieved through farming business. The table revealed a statistical significant difference ($\chi^2 (2, n = 111) = 5.03$; $p < .08$) concerning the gender of small-scale farmers, purpose in farming and those that agreed or disagreed on achieving job independence (self-reliance) in agricultural entrepreneurship. The results show that a majority of the respondents' male (71) and female (38) whose main interest in agriculture is either for consumption purposes, business purposes or both agreed that job independence (self-reliance) is possible in agricultural entrepreneurship. While very few male (1) and female (1) disagree.

The table further shows significant differences ($\chi^2 (2, n = 111) = 11.53$; $p < .003$) between those that agreed agriculture can increase farmers saving, ($\chi^2 (2, n = 111) = 4.98$; $p < .083$) those that agreed that agriculture can empower the less privileged people, and ($\chi^2 (2, n = 111) = 5.03$; $p < .081$) those that agreed that agriculture can increase the economic growth. Majority of the respondents' both male and female whose main interest in agriculture is either for consumption purposes, business purposes or both agreed that an increase in saving, empowerment of less privileged and an increase in economic growth were possible in agricultural entrepreneurship. While only very few male and females disagreed.

Besides, the table also revealed a non-significant difference ($\chi^2 (2, n = 111) = 4.55$; $p > .10$) between those that agreed and disagreed that agriculture can be a source of job creation. This implies that all the small-scale farmers whose main interest in agriculture is either for consumption purpose, business purpose or both do not believe agricultural entrepreneurship can be a source of job creation.

Decision rules conclusion: when the p-value is less than our chosen significance level $\alpha = 0.05$, we conclude that there is an association between sex, purpose in agriculture and agreement to what can be achieve through farming business. On other hand, for the case where the p-value is greater than our chosen significance level ($\alpha = 0.05$), we conclude that there is not enough evidence to suggest an association between sex, purpose in agriculture and agreement to what can be achieve through farming business

Table 9: Relationship between respondents' gender, purpose in agriculture and prospects of achievement in agriculture, (cont.)

			Consumption purpose	Business Purpose	Both	Total
Increase in profits	No	Male	3	0	1	4
	Yes		12	8	48	68
	No	Female	1	0	0	1
	Yes		16	1	21	38
$\chi^2= 6.720$; $df= 2$; $p <.035$		Total	32	9	70	110
Dignity (self-respect)	No	Male	5	0	4	9
	Yes		10	8	45	63
	No	Female	3	0	3	6
	Yes		14	1	18	33
$\chi^2= 5.758$; $df= 2$; $p <.056$		Total	32	9	70	110
Increase in the role of family decision making	No	Male	4	0	4	8
	Yes		11	8	45	64
	No	Female	3	0	2	5
	Yes		14	1	19	34
$\chi^2= 5.058$; $df= 2$; $p <.080$		Total	32	9	70	110
Improvement of living standards	No	Male	3	0	0	3
	Yes		12	8	49	69
	No	Female	1	0	1	2
	Yes		16	1	20	37
$\chi^2= 6.720$; $df= 2$; $p <.035$		Total	32	9	70	110
Women and youth empowerment	No	Male	4	0	1	5
	Yes		11	8	48	67
	No	Female	1	0	1	2
	Yes		16	1	20	37
$\chi^2= 6.718$; $df= 2$; $p <.035$		Total	32	9	70	110

Source: Computed from Field Survey Data, 2019

Table 9 above shows the significant differences in gender and purposes of farming and agreement to what can be achieved through farming business. The table further

reveals that there is significant difference (χ^2 (2, n= 111) = 6.72; p <.04) between gender, purpose in farming and those that agree and disagree that agricultural entrepreneurship increases profits; (χ^2 (2, n= 111) = 5.76; p <.06) that agricultural entrepreneurship brings self-respect (Dignity), (χ^2 (2, n= 111) = 5.06; p <.08) that agricultural entrepreneurship increases the role of farmers in family decision making; (χ^2 (2, n= 111) = 6.72; p <.04) that agricultural entrepreneurship improve farmers standards of living, and (χ^2 (2, n= 111) = 6.72; p <.04) that agricultural entrepreneurship can empower women and youth. The results showed that a majority of the respondents' male and female whose main interest in agriculture is either for consumption purposes, business purposes or both agreed that all the factors can be achieve through farming business. While only few male and females were in disagreement.



Decision rules conclusion: when the p-value is less than our chosen significance level $\alpha = 0.05$, we conclude that there is an association between sex, purpose in agriculture and agreement to what can be achieve through farming business. On other hand, for the case where the p-value is greater than our chosen significance level ($\alpha = 0.05$), we conclude that there is not enough evidence to suggest an association between sex, purpose in agriculture and agreement to what can be achieve through farming business.

Table 10: Relationship between respondents' age, purpose in agriculture and prospects of achievement in agriculture

			Consumption purpose	Business Purpose	Both	Total
Job independence (self-reliance)	No	Early Adulthood/ Youth	2	0	0	2
	Yes		11	5	22	38
	No	Middle Adulthood	0	0	0	0
	Yes		12	4	35	51
	No	Late Adulthood	0	0	0	0

	Yes		7		13	20
$\chi^2= 5.028; df= 2; p <.081$		Total	32	9	70	111
Increase in savings	No	Early Adulthood/ Youth	5	0	1	6
	Yes		8	5	21	34
	No	Middle Adulthood	2	0	1	3
	Yes		10	4	34	48
	No	Late Adulthood	0	0	0	0
	Yes		2	0	6	8
$\chi^2= 11.525; df= 2; p <.003$		Total	32	9	70	111
Empowerment of less-privileged people	No	Early Adulthood/ Youth	4	0	2	6
	Yes		9	5	20	34
	No	Middle Adulthood	1	0	1	2
	Yes		11	4	34	49
	No	Late Adulthood	0	0	0	0
	Yes		7	0	13	20
$\chi^2= 4.983; df= 2; p <.083$		Total	32	9	70	111

Source: Computed from Field Survey Data, 2019

The above table shows the statistical differences in age phases, purpose of farming and agreement to what can be achieved through farming business. The result revealed a statistical significant difference ($\chi^2 (2, n= 111) = 14.70; p <.001$) between small-scale farmers age in phases, purpose in farming and those that agree and disagree that job independence (self-reliance) can be achieved in agricultural entrepreneurship. The table shows that a majority of the respondents' in middle adulthood (51), early adulthood/ youth (38), and late adulthood (20) whose main interest in agriculture is either for consumption purposes, business purposes or both agreed that job independence (self-reliance) is possible in agricultural entrepreneurship. While very few respondents particularly in the early adulthood/ youth (2) disagreed.

Similarly, the table also shows that there is significant difference ($\chi^2 (2, n= 111) = 11.53; p <.003$) between those respondents who were of the view that agricultural entrepreneurship can increase farmers saving and ($\chi^2 (2, n= 111) = 4.98; p <.083$) as compared to those respondents who that agreed that agricultural entrepreneurship

can empower the less privileged people. The majority of the respondents', in middle adulthood, early adulthood/ youth, and late adulthood whose main interest in agriculture was either for consumption purpose, business purpose or both agreed that with agricultural entrepreneurship farmers can achieve increased savings and empowerment of less privileged. While very few in middle adulthood, youth, early adulthood and late adulthood disagreed.

Decision rules conclusion: when the p-value is less than our chosen significance level $\alpha = 0.05$, we conclude that there is an association between sex, purpose in agriculture and agreement to what can be achieve through farming business.

Table 11: Relationship between respondents' age, purpose in agriculture and prospects of achievement in agriculture, (cont.)

			Consumption purpose	Business Purpose	Both	Total
Job creation	No	Early Adulthood/ Youth	3	0	1	4
	Yes		10	5	21	36
	No	Middle Adulthood	1	0	1	2
	Yes		11	4	34	49
	No	Late Adulthood	0	0	0	0
	Yes		7	0	13	20
$\chi^2 = 4.553$; df= 2; p > .103		Total	32	9	70	111
Increase in economic growth	No	Early Adulthood/ Youth	2	0	0	2
	Yes		11	5	22	38
	No	Middle Adulthood	0	0	0	0
	Yes		12	4	35	51
	No	Late Adulthood	0	0	0	0
	Yes		7	0	13	20
$\chi^2 = 5.028$; df= 2; p < .081		Total	32	9	70	111
Increase in profits	No	Early Adulthood/ Youth	4	0	1	5
	Yes		9	5	21	35
	No	Middle Adulthood	0	0	0	0
	Yes		12	4	35	51
	No	Late Adulthood	0	0	0	0
	Yes		7		13	20
$\chi^2 = 6.720$; df= 2; p < .035		Total	32	9	70	111

Source: Computed from Field Survey Data, 2019

The table shows that there is non-significant difference ($\chi^2 (2, n= 111) = 4.55; p > .10$) between those that agreed and disagreed that agriculture can be a source of job creation. This implies that all the small-scale farmers whose main interest in agriculture is either for consumption purposes, business purposes or both do not believe agricultural entrepreneurship can be a source for job creation. However, the table also showed that there is significant difference ($\chi^2 (2, n= 111) = 5.0353; p < .08$) between those who agreed that agricultural entrepreneurship can boost economy and ($\chi^2 (2, n= 111) = 6.72; p < .083$) those who agreed that agricultural entrepreneurship can only increase farmer's profits. The majority of the respondents', belonging to the middle adulthood, early adulthood/ youth, and late adulthood whose main interest in agriculture was either for consumption purposes, business purposes or both agreed that farmers saving can increase and empowerment of less privileged also can be achieved through agricultural entrepreneurship. While only very few in middle adulthood, early adulthood/ youth, and late adulthood disagreed.

Decision rules conclusion: when the p-value is less than our chosen significance level $\alpha = 0.05$, we conclude that there is an association between sex, purpose in agriculture and agreement to what can be achieve through farming business. On other hand, for the case where the p-value is greater than our chosen significance level ($\alpha = 0.05$), we conclude that there is not enough evidence to suggest an association between sex, purpose in agriculture and agreement to what can be achieve through farming business.

Table 12: Relationship between respondents' age, purpose in agriculture and prospects of achievement in agriculture, (cont.)

			Consumption purpose	Business Purpose	Both	Total
	No		5	0	6	11

Dignity (self-respect)	Yes	Early Adulthood/ Youth	8	5	16	29	
	No	Middle Adulthood	3	0	1	4	
	Yes		9	4	34	47	
	No		Late Adulthood	0	0	0	0
	Yes			7	0	13	20
$\chi^2= 5.758$; $df= 2$; $p <.056$		Total	32	9	70	111	
Increase in the role of family decision making	No	Early Adulthood/ Youth	3	0	5	8	
	Yes		10	5	17	32	
	No	Middle Adulthood	3	0	1	4	
	Yes		9	4	34	47	
	No	Late Adulthood	1	0	0	1	
	Yes		6	0	13	19	
$\chi^2= 5.058$; $df= 2$; $p <.080$		Total	32	9	70	111	
Improvement of living standards	No	Early Adulthood/ Youth	3	0	1	4	
	Yes		10	5	21	36	
	No	Middle Adulthood	1	0	0	1	
	Yes		11	4	35	50	
	No	Late Adulthood	4	0	1	5	
	Yes		28	9	69	106	
$\chi^2= 6.720$; $df= 2$; $p <.035$		Total	32	9	70	111	
Women and youth empowerment	No	Early Adulthood/ Youth	4	0	1	5	
	Yes		9	5	21	35	
	No	Middle Adulthood	0	0	1	1	
	Yes		12	4	34	50	
	No	Late Adulthood	1	0	0	1	
	Yes		6	0	13	19	
$\chi^2= 6.718$; $df= 2$; $p <.035$		Total	32	9	70	111	

Source: Computed from Field Survey Data, 2019

The above table further revealed that there is significant difference (χ^2 (2, n= 111) = 5.76; $p <.06$) between small-scale farmers that agree or disagree that through agricultural entrepreneurship farmers can achieve dignity (self-respect), (χ^2 (2, n= 111) = 5.06; $p <.08$) those that agreed and disagreed that agricultural entrepreneurship can increase the role of farmers in family decision making, (χ^2 (2, n= 111) = 6.72; $p <.04$) those that agreed and disagreed that agricultural entrepreneurship can improve farmers living standards, and (χ^2 (2, n= 111) = 6.72; $p <.04$) those that agreed and disagreed that agricultural entrepreneurship can source of empowerment for women

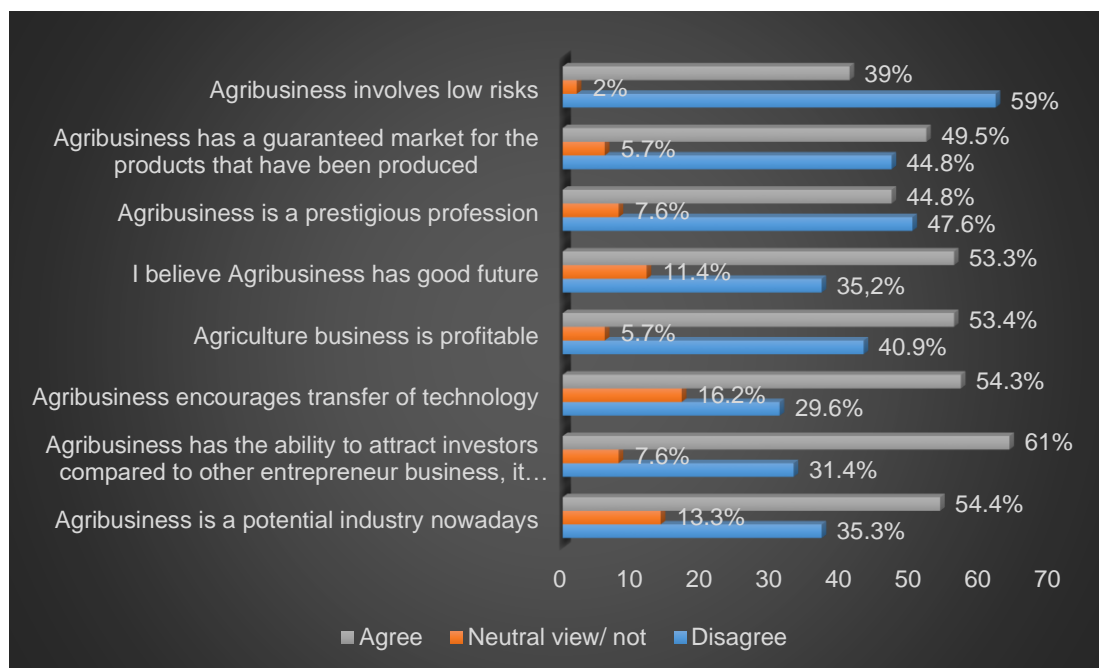
and youth. The majority of the respondents', in middle adulthood, early adulthood/ youth, and late adulthood whose main interest in agriculture is either for consumption purposes, business purposes or both agreed that with agricultural entrepreneurship farmers can achieve dignity (self-respect), promote the role of family decision, improvement of living standard and as well as, achieve women and youth empowerment. While only very few in middle adulthood, early adulthood/ youth and late adulthood disagreed.

Decision rules conclusion: when the p-value is less than our chosen significance level $\alpha = 0.05$, we conclude that there is an association between sex, purpose in agriculture and agreement to what can be achieve through farming business.

4.2.8 Youth and agricultural entrepreneurship

In order to address the fifth objective of this study, this section presents data on level of acceptance, attitudes and knowledge of youth towards embracing agriculture. The results are presented in Figure 23, 24, 25 and table 13 below:

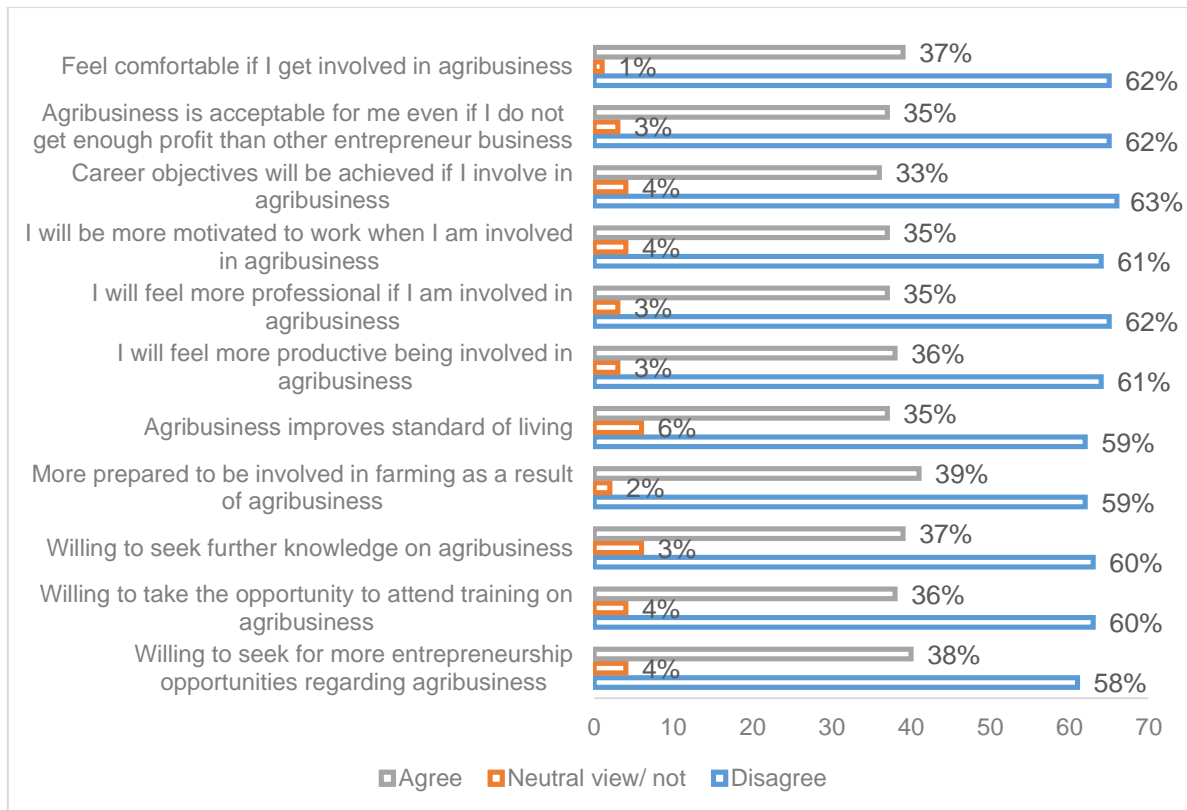
Figure 23: Youth acceptance towards agriculture



Source: Response to Question (Annexure)

The above figure shows that there is good level of youth acceptance towards agriculture entrepreneurship. The results showed that a majority (54.4%) of the respondents agreed that agricultural entrepreneurship is a potential industry nowadays, (61%) agree that agricultural entrepreneurship has the ability to attract investors compared to other entrepreneur activities, whereas, (54.3%) agreed that agricultural entrepreneurship encourages transfer of technology, (53.4%) agree that agricultural entrepreneurship is profitable, and (53.3%) were of the believe that agricultural entrepreneurship had a good future. However, on item 6, 7, 8 a majority of the respondents disagreed. For example, (47.6%) disagree that agricultural entrepreneurship is a prestigious profession, while, (59%) disagreed that agricultural entrepreneurship has guarantee markets for the product, and lastly, (59%) disagreed that agricultural entrepreneurship involves low risk.

Figure 24: Youth Attitude towards agriculture



Source: Response to Question (Annexure)

The above figure showed a very poor level of youth attitude towards agriculture entrepreneurship. The results showed that all the respondents disagree on all the items measuring their attitudes towards agriculture. The results revealed that a majority (58%) of the respondents disagreed that they are willing to seek for more entrepreneurship opportunities regarding agricultural entrepreneurship. meanwhile, (60%) disagree that they are willing to take the opportunity to attend training on agricultural entrepreneurship and (60%) disagree that they are willing to seek further knowledge on agricultural entrepreneurship, (59%) disagree that they are more prepared to be involved in farming as a result of agricultural entrepreneurship, also, (59%) disagree that agricultural entrepreneurship improves standard of living. Furthermore, (61%) disagreed that they would feel more productive being involved in agricultural entrepreneurship, (70%) disagreed that they will feel more professional if they are involved in agricultural entrepreneurship, (61%) disagree that they will be

more motivated to work when they are involved in agricultural entrepreneurship. Similarly, (63%) disagreed that their career objectives would be achieved if they were involved in agricultural entrepreneurship, (62%) disagree that agricultural entrepreneurship is acceptable for them even if they do not get enough profit than other entrepreneur business, and lastly, (62%) disagree that they feel comfortable if they get involved in agricultural entrepreneurship.

In addition to the quantitative data, interview with some youths, the findings revealed some of the negative mind set of youths towards agriculture, the following extracts confirms it:

“We don't like to work in the farm or even venture into commercial farming, because nothing good will come from it,”
(focus group interview, Chris Hani).

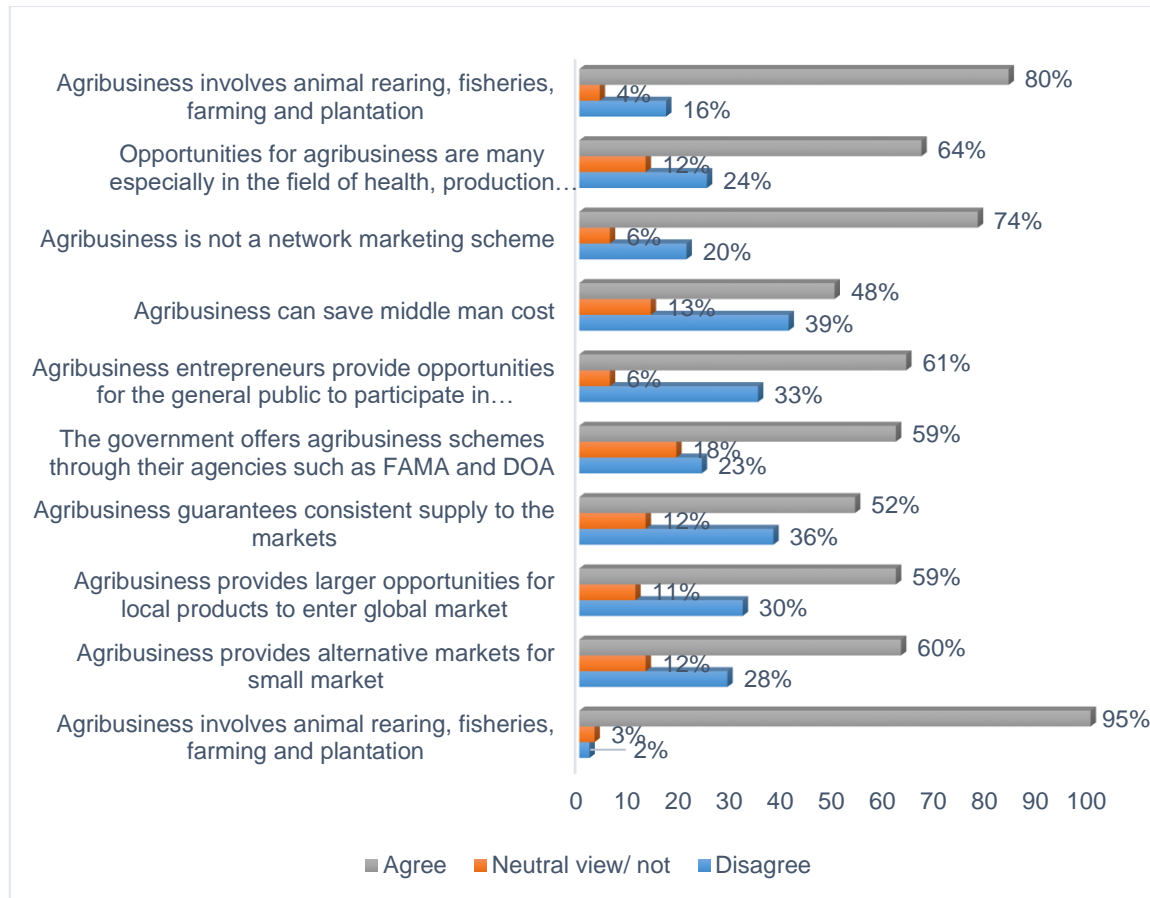
“We have seen our parents labouring for years on the farm but nothing to show for it,” **(youth focus group interview, OR Tambo).**

In addition, some of the youths said this:

“Even the government official that claims to be assisting our parents was just doing that for their own benefits. For example, some things like seeds and other farm products that were supposed to be given to our parents for free were given in exchange for money. Meanwhile, all of our parents struggled to get that money, and some used their pension money,” **(youth focus group interview, Chris Hani).**

“Even, no market for our parents to sell their products, so at the end of the day, we eat most of the farm produce and the other get spoilt that is the end. So looking at such situation, you don't expect us to follow the same steps,” **(youth focus group interview, OR Tambo).**

Figure 25: knowledge on agriculture



Source: Response to Question (Annexure

In the above figure, there is good level of knowledge concerning agriculture entrepreneurship. The figure revealed that all the respondents agreed to all the items seeking to know their knowledge on agriculture. For instance, a majority, (95%) agreed that agricultural entrepreneurship involved animal rearing, fisheries, farming and plantation, (60%) agreed that agricultural entrepreneurship provides alternative markets for small market, (59%) agreed that agricultural entrepreneurship provides larger opportunities for local products to enter global market, (52%) agree that agricultural entrepreneurship guarantees consistent supply to the markets, (59%) agree that the government offers agricultural entrepreneurship schemes through their agencies such as FAMA and DOA. Furthermore, (61%) agree that agricultural entrepreneurs provide opportunities for the general public to participate in agricultural

entrepreneurship as investors, (48%) agree that agricultural entrepreneurship can save middle man cost, (74%) agree that agricultural entrepreneurship is not a network marketing scheme, (64%) agree that opportunities for agricultural entrepreneurship are many especially in the field of health, production process, raw meat products, market., Lastly, (80%) agreed that agricultural entrepreneurship involves animal rearing, fisheries, farming and plantation.

Table 13: Youth consideration for practicing agriculture by the level acceptance, attitude and knowledge of agriculture entrepreneurship

		Would you consider practicing Agriculture	
		No	Yes
Youth acceptance of agriculture	Low	7	0
	Moderate	36	9
	High	20	33
$\chi^2= 23.113$; $df= 2$; $p <.000$		63 (60%)	42 (40%)
Attitudes towards agriculture	Weak	42	4
	Moderate	18	2
	Strong	3	36
$\chi^2= 70.744$; $df= 2$; $p <.000$		63 (60%)	42 (40%)
Knowledge of agriculture	Low	6	0
	Moderate	40	3
	High	17	39
$\chi^2= 44.042$; $df= 2$; $p <.000$		63 (60%)	42 (40%)

Source: Computed from Field Survey Data, 2019

The chi-square table results showed a significant association between youth level of acceptance of agriculture (χ^2 (2, n= 105) = 23.113; $p <.000$), attitude towards agriculture (χ^2 (2, n= 105) = 70.744; $p <.000$) and knowledge of agriculture (χ^2 (2, n= 105) = 44.042; $p <.000$) entrepreneurship and consideration of engaging in farming business. Though, there is association on the above mentioned variables, the table further show that majority (60%) of the youth are not willing to practice farming business while 40% responded yes to consider practicing farming business.

Extracts from interviews (Qualitative insights):

Information gathered from parents, extension officers in government organisations and NGOs officials shows experiences regarding the youth's level of acceptance and attitude towards taking up agriculture as career. Focus group interview was also conducted with youth to authenticate the parents and official views. As show below, there is low youth turnout both in OR Tambo and Chis Hani Districts:

"There are more turnouts from old people, but very few of the youths want to take up farming as a profession, they are not interested" **(NGO officials, OR Tambo).**

"Based on our records, most of our youths seem not to be interested in farming" **(Chris Hani)**

The agricultural extension officers in government sector also had similar views; their sentiments were recorded through session of interview:

"The older people are more interested than the youths. We recorded just few cases of youths that really approach us for assistance. So most of the beneficiaries of our programs are older people, meanwhile our programs are for all (young and old)," **(a group of five Government officials; Mthatha).**

"Currently, we still see older people doing agriculture than youths," **(Government officials, Chris Hani).**

These qualitative responses aligned with results shown in figure 24 which shows that majority (59%) of youth are not willing to take up a carrier in agriculture; table 13 also shows that majority of youth are not willing to take up career in agriculture.

It is not ideal to limit the inquiry to the service providers. Farmers, of course are stakeholders and most farmers from the study areas are parents blessed with children. Therefore, it paramount to know parents' views regarding youth attitude towards agriculture. They did not hesitate to share their experience in this regards. The following responses formed part of the qualitative data:

"Our children who eat food from the produce of the farm gardens don't even assist us on the farm; they don't see it as their duties to work on the farm to assist parents. Some will even say that " either they work on the family garden or not, they have the right to eat from it as children," **(Older Farmers, Chris Hani).**

"Many of our children (youths) are not interested in farming. They usually say that their parents have been doing it for years but nothing to show for," **(Older Farmer, Chris Hani).** "


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The above responses also complement item 7 on figure 24 which shows that 59% of youth have attitude that agriculture cannot improve standards of living.

The, study also gave equal chance to youths parents (Older farmers) and officials, to share their views. So, findings contends to the notion of White (2012) that youth lack interest in agriculture, because they hold 'occupational aspirations' outside the farm with the belief that non-agricultural careers promise to be less laborious, more stable and more compensable. Can we then argue that lack of interest in agricultural activities by the youth is because the profession is labour intensive?

Meanwhile, as some youth lack interest in agriculture, others showed positive attitude and interest in the sector but with a clause:

“if our parents makes fortunes or if they can get sponsor in terms of funding (money), then we also can do farming, but looking at their community situation currently, we don't think we want to do farming, (focus group interview, Chris Hani).

The above response from Chris Hani youths is a bit different from the previous responses. This shows that some youth are still willing to venture into agriculture as career but such decisions must be triggered by some factors. This is in line with the notion of Vyavahare and Bendal (2012) that push and pull factors identified as the driver of people to embrace entrepreneurship can as well inspire youth to engage in agricultural entrepreneurship or drive youth away from agriculture.

4.2.9 Sustainable intervention for agricultural entrepreneurship to thrive

This section presents qualitative information that addressed the last objective of this study. Responses from NGO officials and government officials were presented in form of interview extracts. The personnel suggested interventions for the development of entrepreneurial skills among small-scale South Africans.

When it comes to rendering development assistance to the small-scale farmers, the roles of NGOs cannot be overlooked. Even though, small farmers are still struggling to attain commercial level, Preisendorfer & Bezuidenhout, (2012) and Xaba, (2014) did not single out NGOs among the lists of stake holders in agricultural development process. These scholars among other scholars commend private sectors and NGOs as supporting institutions. Extracts from field reports show that there is limitation to the extent that NGOs can go in terms of their services to small-scale farmers, the following interview responses accorded to it:

“Actually, we are NGO and if you could agree with me, we are not able to perform the duties of the government. All we do is to add to what

government put in place. So, if we assist people to start their gardens and they want to take it to commercial level it is a very good thing, in that case government interference is very crucial. In other words, our programs can be more effective if government can come in and promote those who really desire to venture into farming business, which means to us, so that people will not continue to be subsistence farmer alone but, commercial farmers that can also contribute to the development of the country."

Although government is trying its best but more is still required (NGO Officer 1, Mthatha)"

The limited ability of the NGOs in terms of their services does prevent them to proffer full solutions that could be used for building viable agricultural entrepreneurship climate. The following extract shows efforts of some NGOs to build an enabling environment for agriculture:

*"Actually, we try our best as a department to address some local challenges such as **water**, we also liaise with village chiefs on **land matters** so they can lend lands to local farmers; we also provide **fund and source for fund to assist farmers**; these are solutions that are still within our reach. The other part is beyond our reach, **so governments at the top level or the law makers are in the position to address that and hopefully they will,**" (NGO Officer 1, Mthatha).*

Speaking on achievements, the following was recorded:

"we have assisted at least 60 households to start their home garden in good ways, we provided all they needed to kick-start, but there are to

be done if they need to progress fully into entrepreneurship. And as you know that include securing land, modern farm machinery, and that is just few among what is needed, but as NGOs we don't have such capacity except if government wants us to collaborate" (NGO officials, Mthatha)

He also said:

There should be frequent training sections or workshops to educate these farmers because some are not that educated. Also, they need to be enlightened and be motivated on their production for business, because some of them do not even aim to do commercial farming"

The above statement actually calls for collaboration between government and the NGOs. Furthermore, in an endeavour to build a climate for agricultural entrepreneurship across South Africa, the NGO official highlighted several services that they had rendered to small-scale farmer in the community.

There is need for positive change in both farmers and youth mind-set and attitude towards agriculture. Young rural people aspirations are dominated by employment in the formal sector, modern urban lifestyles and reluctance to look at farming as a chosen career (Leavy and Hossain 2014). Most youths believed that agriculture is labour intensive with little reward; they also believe that farmers find it hard to survive because of their out-dated style which demands a stay away from urban life. Such ideas are not healthy for the sector and needed to be changed; the following response alluded to that:

*"Government need to develop a **strategy to change people's mind-set especially youths, so as to enable them understands the***

prospects in agriculture. The NGOs and the farmers themselves need to bring in ideas and support on the table because government alone cannot succeed in doing that,” (Government official 4 & 5, OR Tambo).

The statement suggested the need for partnership between government and NGOs as well as farmers themselves, to change young people’s mind-set on what agriculture entails. It means that small-scale should be part of decision making (i.e. programs should not be designed without listening to farmers opinions regarding their challenges and needs).

4.3 Conclusion

Findings have shown that small-scale farmers are faces rigorous challenges such as lack of education, lack of training, lack of access to land, lack of finance, poor weather, thefts, pest challenges among others. Findings also show that larger percentages of youth are not willing to take up career in agriculture because they portray the attitudes that such profession is meant for old people; similarly, they are not motivated by lack growth in their parents’ farming businesses. Although, a few percentages of youth are willing to embrace agriculture provided that government gives adequate supports in terms of finance, training, market availability and availability of modern machinery.

Agricultural service providers also confirmed that some of the farmers remain as small-scale farmers due to challenges like: lack of entrepreneurial skills, lack sufficient training, flood, drought, lack of access to market, land issues and theft. Suggestions were given that government should develop strategies for changing youth’s perceptions and attitude on agriculture; collaboration between government and NGOs were also suggested. Among other suggestions was, creating access to market, access to finance, provision of adequate training, giving farmers access to land and

protecting farmers against high tariff; these factors could contribute to the growth of the small-scale farmers to commercialisation. Data presented in this chapter were fully analysed and discussed in the next chapter.



CHAPTER FIVE

ANALYSIS OF THE MAJOR FINDINGS

5.1 Introduction

In the previous chapter, related data were presented. This chapter discussed and analysed findings presented in the previous chapter. Findings are analysed in relation to the six research objectives of the study using evidences from literature.

5.2 Socio-demographic characteristics of respondents

Demography factors are an important part of a study; it impacts attitude towards interest in agricultural entrepreneurship (Silva et al., 2010). Similarly, the 'sociological entrepreneurship theory', which is one of the theories adopted in this study, confirms the importance of social context in entrepreneurial opportunity (Reynolds, 1991). Tshuma (2014) also alluded that South African small-scale farmers are attributed by demographic characteristics. Therefore this study deemed it important to consider socio-demography in the analysis. Demographic variables in this study are characterised by gender, age, marital status and number of household members (as presented in chapter four).

Most of the respondents in this study were older population. As shown in figure 4, more than 55% of the respondents are above age forty. There is a general opinion that agriculture is a yardstick for rural economy especially in Eastern Cape meanwhile, young people view farming as career for old people. This is in line with Cheteni (2016) that, young people in South Africa portray poor attitude to embracing farming.

Another important factor considered under socio-demography is gender. Findings from the study show that, the population of the respondents was 65% males against female (35%) who are farmers (figure 5). This also confirms the notion of Tshuma

(2014) that small-scale farmer can either be male or female. Although, the percentage of women recorded from the findings may be low compared to men, it only shows the rate of women who are independent farmers and mostly in households where women are the family heads. This suggested that, there are other women who support their husbands in farming which findings did not reveal. Therefore, it is correct that women also play essential roles in agriculture as mentioned in The National Department of Agriculture (2008).

The study also considered marital statuses as part of the socio-demographic characteristics. Although, this does not measure a specific objective in the context of the study, yet, it shows that agriculture is not meant for a particular group of people. Even though, the percentage of married people who are engaged in farming are more than single people, the most important point is that agriculture is meant for all categories of people – married, single, divorced and widow, as shown in figure 6. That also shows that agriculture is not just a way of life but an occupation.

Findings also show that, more than 70% of households in the study areas had between three to six family members while part of the analyses in chapter four shows that some of the farmers produced for the purposes of consumption (figure9); this shows that, most households grow their own food. After all, Wiggins and Keats (2013) pointed at small-scale farmers play significant roles in ensuring household food security.

Farm activities in this study revealed respondents purposes of farming which were either for consumption or business purposes and both purpose in some cases. In this study farming activities of the respondents also included livestock and crop farming as well as mixed farming. Mixed farming is the combination of crop cultivation and animal rearing. Findings showed that a majority (58%) of the respondents practice mixed

farming. The extant literature is also in support of the research findings and highlights that mixed farming is normally practiced by most small-scale farmers (National department of Agriculture 2008) because of their intent towards household food security. Some of the crops that farmers cultivate in the study areas are grains, vegetables, fruits among others. While their livestock include, cows, sheep, fowl, goat and so on.

In the previous chapter, figure 9 showed that a majority (63%) of the respondents engaged in agriculture for both consumption and business purposes, very few (8%) practice agriculture for business purpose only while, 29% produces from consumption only. This could be the reason why Fan et al. (2013) described small-scale farmers as farmers who consume larger proportion of their farm produce.

5.3 Objective one: Source of farming knowledge and training

Literature has shown that it is important for small-scale farmers to possess adequate knowledge on agriculture as that will add to their chances of success. Findings from this study showed that participants got their farming knowledge from different sources such as family, some by self-initiative, while some got the knowledge through training provided by NGOs and Government officials. Also, very few of the farmers' reported that friends and neighbours helped them with the knowledge of farming. In terms of formal training received from NGOs or government officials, findings show that very few of the small-scale farmers received training on agricultural production while a majority of them had not received training on any agricultural production. Also, it gives support to the source of farming knowledge where two-third of them either learn farming from their family, relatives, friends or self-initiative, in a few cases.

According to Othman & Kutty (2010) and Silver, Henriques, & Carvalho (2009) Knowledge as a key factor in influencing a person's perception, it can lead to more skills needed to establish business in agricultural related areas. In this case, findings showed participants still lack the formal and adequate knowledge of agricultural entrepreneurship. Small-scale farmers in this study possess basic knowledge for cultivating home garden; such knowledge is inadequate for entrepreneurship in agriculture. The Schumpeter's entrepreneurial theory denoted that entrepreneurship is an innovation, not imitation. Adequate knowledge is therefore require of an innovator to enable him formulate and utilize new discoveries for the formulation of new combinations (Acs and Audretsch 1988). This means that it will be difficult for small-scale farmers who acquire insufficient from friends or neighbours to transform such insufficient knowledge into entrepreneurship



In addition, most of those who received formal training were mostly trained on fertilizers usage, pest control, crop production and crop rotation. On the other hand, a considerable number of famers reported to have received training on how to operate irrigation equipment, on harvesting and animal feeding; few respondents received training on maintenance of farmland, ploughing and animal breeding. However, findings show that comprehensive training were not been given on aspect that can enable a small-scale farmer to survive as an entrepreneur.

Furthermore, in an attempt to deduce whether farmers face challenges because they did not receive formal agricultural training, findings show that most of the challenges faced by small-scale farmers are due to lack of formal training. Some of those challenges include market/marketing problem, drought, grazing/ seed problem, pest, flood challenges, production problems, animal health, land ownership, death rate (livestock and crop), theft, and predator's challenges. This therefore implied that the

truly, an agricultural entrepreneur can only become an innovator if he possess adequate knowledge regarding entrepreneurship and not just farming. That was also confirmed as most of the respondents reported that they needed training on agricultural production to grow their farm beyond the level of home garden. This shows that according to Venter, Urban and Rwigema (2010); Turton and Herrington (2012) poor knowledge and skills is among the leading challenges faced by small-scale farmers who belong to the group of previously disadvantaged and marginalised.

5.4 Objective two: Factors contributing to agricultural entrepreneurship development

In the attempt to explore factors that contributes to agricultural entrepreneurship development, findings from this study show that specific entrepreneurial skills are necessary to agriprenueurship development. Such factors are general business management skills, cooperation and networking, marketing and selling skills, interpersonal relation skills, business strategy skills, networking skills. Though, some of the participants possess most of these skills but lack others.

The above skills especially farmers' networks, are what Reynolds (1991) in the 'sociological entrepreneurship theory' refers to in 'social context' of entrepreneurial pursuit as essentials for building and promoting a viable entrepreneurship opportunity. In other words, building strong social bonds that promotes trust among other farmers is essential to success. Meanwhile, this can only be achieved if small-scale farmers possess adequate networking skills.

This theory though highlighted factors that are essential to the success of entrepreneurships. Yet, it failed to acknowledge the social constructions of entrepreneurs, such as separate identity and resource inequalities among other social

construct deficiency. For instance, the participants in this study are from rural area where they experience poor or no access to proper communication devices (e.g. mobile phones, television, and internet) and therefore been deprived the opportunity to get latest information on agricultural related issues.

Xaba (2014) is also one of the authors that identified the needed entrepreneurial skills to turn subsistence farming activities to a viable business ventures. He examined the extent to which successful agricultural commercialisation is dependent on some entrepreneurial skills that include enterprise management skills, production skills, financial management skills, infrastructural utilisation skills and attitude to agricultural business. The empirical findings pointed to a number of attributes that have a significant influence on the likelihood of small-scale farmers in South Africa thriving commercially.



This means, for farmers to succeed in agricultural entrepreneurship, they will need professional and management skills, strategic skills, opportunity as well as networking skills or cooperation. In addition to primary production skills, technical skills are considered as entrepreneurial skills. This means, lack of these aforementioned skills has resulted to poor performance of small-scale farmers in this study during their respective farming activities.

5.5 Objective three: Barriers to agricultural entrepreneurship development

Findings from this study have shown varieties of factors that create barriers. For example, all respondents strongly agreed that lack of education and training (in general), difficulty to obtain finance, lower access to land, lack of self-confidence, great fear of failure, lack of infrastructures (roads, telephone, computers etc.), lack of

relevant information, low interest in producing for business purposes, poor access to market information, lack of storage and warehousing facilities, poor access to farming equipment and inputs, bad weather, lack of advisory support from government officials, poor land fertility for arable farming, lack of technical skills (animal feeding skills, irrigation skills) and high rates of crime were all barriers to entrepreneurial development in agriculture among small-scale farmers.

Although, some of these factors can promote agricultural development but its insufficiencies are barriers to agricultural entrepreneurship among small-scale farmers. For example, Ahmed et al. (2012) indicated that lack of education make subsistence farmers unwillingly to become risk-averse, and this could be reason behind Diaz-Pichardo et.al. (2012 p.97) notion that, “to change a person from the status of being subsistence or small-scale farmer to an entrepreneurial farmer involves empowering such an individual with the basic entrepreneurial competencies and skills through both formal and non-formal education”

Findings further, revealed other types of challenges faced by small-scale farmers in the study areas such as drought, access to market, pest, flood, fertilizer problem, storage facilities, grazing/ seed problems, animal health and production problems. While some struggle with land management problem, death rate (animal and crop), theft and predators.

The interview with NGOs and government officials confirmed the challenges as identified by the farmers as barriers to small-scale farmers' progress. Almost all the respondents that were interviewed emphasised that land is the leading barrier, followed by start-up finance. A confirmation to this finding is the notion of Thapa (2010) purporting that most small-scale farmer's in Eastern Cape cultivates on small plots of land found at the back of their yards.

Other barriers identified include: access to market and price, theft, drought, seedling, land, and fencing problems. Also, infrastructure depleted soil due to unsustainable farming methods by the past generations; bad farming methods such as, monocropping, deep tillage, nutrients and residues burning, land for grazing of livestock, and shortages of water.

Findings from the current study confirm Khapayi and Celliers (2016) study which found that the possible factors limiting emerging farmers include: poor physical infrastructure that comprise roads, lack transportation to the markets from the farms. The scholars further identified insufficient land availability for farm expansion, lack of agricultural implements to improved production, poor production, poor farm management skills, lack of marketing skills and information; poor market infrastructure, high transaction costs as well as poor level of education as factors limiting the growth of emerging farmers in Eastern Cape Province of South Africa.

In view of effort of the Department of Agriculture in South Africa, it is crucial to understand factors that hinder the growth of emerging farmers reach out to emerging farmers towards their transition to agricultural entrepreneurship. Also, consistent with the present study, Mutero, Munapo, and Seaketso (2016) found that small-scale farmers in Ethekewini Metropolitan for example lacks sufficient funding, access to markets, access to information and access to technology and which hinders their sustainability. The authors further observed that a majority of the small-scale farmers possess land portion that are less than 0.5 acres under cultivation. Farmers also lack irrigation system, water storage facilities, tractors and transport. Meanwhile, these same barriers were identified in this study as causes for setback to agricultural entrepreneurship development in the study area.

5.6 Objective four: Determinants to farmers' interest in agriculture entrepreneurial development

The research objective four was addressed by research question on whether there was difference in age, gender, farmers' purpose of farm produce and factors that determine small-scale farmers' interest in agriculture towards agriculture entrepreneurial development. The findings revealed a statistically significant difference between small-scale farmers' gender, purpose in farming and those that agree and disagree on some factors that influence small-scale farmers' interest in agriculture towards agripreneurial development. Findings further showed that for a majority of the male and female respondents interest in farming was either for consumption purpose; business purpose or both, agreed that agriculture is a potential industry nowadays; it has the ability to attract investors compared to other entrepreneur business; it encourages transfer of technology; it is profitable; has good future and is a respected profession; they also indicated that their interest in agriculture is to provide for themselves and their families

Emerging findings of the study showed that few males and females disagreed that the above factors are determinant of interest in agriculture. On the other hand, the findings also revealed that there is no statistically significant difference between small-scale farmers that agree or disagree that agriculture has a guaranteed market for the products that have been produced, and also, that agriculture as a business involves low risk. The findings showed that a majority, both male and female whose main interest is either for consumption purposes, business purposes or both, disagree that agriculture has a guaranteed market for the farm produce; as well, that agricultural business involves low risk. On the other hand, only very few male and females

believed that there is a guaranteed market for agriculture farm produce and that agricultural business involves low risk.

Also, the findings revealed a statistically significant difference between small-scale farmers' age in phases, purpose in farming and those that agree and disagree on factors that influence small-scale farmers' interest in agriculture towards agripreneurial development. The findings showed that a majority of the study participants in middle adulthood, late adulthood and youth whose main interest in agriculture was either for consumption purpose, business purpose or both agreed that agriculture:

- i. is a potential industry nowadays;
- ii. agriculture has the ability to attract investor compared to other entrepreneur business;
- iii. agriculture encourages transfer of technology.
- iv. is profitable;
- v. has good future.
- vi. is a respected profession; and
- vii. that their interest in agriculture is to provide food for myself and my family

The results of the study revealed that very few respondents belonging to the early adulthood/ youth, middle adulthood, and late adulthood disagreed on the first four items. But those in early adulthood/youth did not believe that agriculture has good future. Similarly, majority in early adulthood/ youth, and few in middle adulthood and late adulthood whose main interest in agriculture is either for consumption purposes, business purposes or both do not believe agriculture is a respected profession. While those in middle adulthood and late adulthood believed that agriculture is a respected profession. The findings also revealed that there was no statistically significant difference between small-scale farmers that agree or disagree that agriculture has a guaranteed market for the products that have been produced, and that agribusiness



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involves low risk. The findings showed that a majority, in middle adulthood, early adulthood/ youth, and late adulthood, whose main interest in agriculture is either for consumption purposes, business purposes or both disagreed that agriculture has a guaranteed market for the farm produce; as well that agribusiness involves low risk.

Moreover, the findings further revealed statistically significant differences in gender and purposes of farming and agreement to what farmers can achieve through farming business. The findings revealed a significant difference between small-scale farmers' gender, purpose in farming and those that agree and disagree that:

- i.job independence (self-reliance) can be achieve in agribusiness;
- ii.agribusiness can increase farmers saving;
- iii.agribusiness can empower the less privileged people;
- iv.agribusiness can increase the economic growth;
- v.agribusiness increase in profits;
- vi.agribusiness brings self-respect (Dignity);
- vii.agribusiness increases the role of farmers in family decision making;
- viii.agribusiness improves farmers' standards of living; and
- ix.agribusiness can empower women and youth

The results further showed that a majority of the participants; male and female whose main interest in agriculture is either for consumption purposes, business purposes or both agreed that all the factors can be achieved through farming business. While very few male and female disagreed. On the contrary, the findings revealed a statistically non-significant difference between those that agreed and disagree that agriculture can be a source of job creation. This implies that all the small-scale farmers whose main interest in agriculture is either for consumption purpose, business purpose or both do not believe agribusiness can be a source of job creation.

Next, the findings revealed a statistical difference in farmers' age in phases, purpose of farming and agreement to what can be achieved through farming business. The findings revealed a statistically significant difference between small-scale farmers' age in phases, purpose in farming and those that agree and disagree that:

- i. job independence (self-reliance) can be achieved in agribusiness;
- ii. agribusiness can increase farmers' savings;
- iii. agribusiness can empower the less privileged people;
- iv. agribusiness can increase economic;
- v. agribusiness can increase farmer's profits;
- vi. through agribusiness farmers can achieve dignity (self-respect);
- vii. agribusiness can increase the role of farmers in family decision making;
- viii. agribusiness can improve farmers' living standards; and
- ix. agribusiness can be a source of empowerment for women and youth

The findings showed that a majority of the respondents who were in their middle adulthood, early adulthood/ youth, and late adulthood whose main interest in agriculture is either for consumption purposes, business purposes or both agreed that the above mentioned achievements are possible in agribusiness. While very few in their middle adulthood, early adulthood/ youth, and late adulthood disagreed. In contrast, the findings revealed that there is no significant difference between those that agreed and disagreed that agriculture can be a source of job creation. This implies that all the small-scale farmers whose main interest in agriculture is either for consumption purpose, business purpose or both do not believe agribusiness can be a source of job creation.

There have been arguments about agriculture being a source of job creation in the literature; Mhlaba and Brey (2014) maintained that embracing and supporting

agriculture has a significant impact not only on ability to improve the livelihoods of rural dwellers but also has ability to create jobs. Similarly, it has been noted overtime that small-scale farming sector creates indirect job opportunities. For instance, by Zuma (2014), stated that the refurbishment of the 726 hectares Tugela Ferry Irrigation Scheme in Kwazulu Natal is capable of benefitting more than one thousand small-scale farmers and create 2000 seasonal farm worker jobs when the scheme operate at optimal level; it shows that agriculture is a viable sector.

In addition, South African government in their New Path Plan believed that through agriculture, 1 million jobs will be created by year 2030. All these are evidences that agriculture has been identified as the best instrument to reduce rural poverty and economic empowerment.

The above findings confirmed the validity of the Schumpeter's entrepreneurial theory, that entrepreneurship is capable of moving the economy away from static equilibrium. The main priority of the theory is to ensure economic leadership, which the current study referred to as economic empowerment. Just like Schumpeter indicated, findings from this study have also shown that economic empowerment can be achieved through agricultural entrepreneurship.

Although, the theory depicts that the ability of an individual to carry out new combinations makes him an entrepreneur. As indicated by Schumpeter (1949) the theory shows that small-scale farmers who move in the direction of assuming risk and taking opportunity by introducing new approaches to their farming system, increase the size of their farmland or livestock with new combinations or increase their production level are referred to as entrepreneurs in agricultural business.



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Well, this argument is as good as applying it in the context of the developed world where every other combinations needed for promoting entrepreneurship are already in place and restrictions are minimal. In other words, the theory ignores the fact that there is innovation paucity among African entrepreneurs. Similarly, the theory ignores the social and environmental factors like 'cultural believes, poor weather condition, land issues and 'government legislation' that was mentioned in the sociological entrepreneurship theory. Although, the theory can partially be applied while the need for economy development is paramount. Even, in such occasion, if considerations and provision are not made against social and environmental factors that can be barriers to development, the ability of entrepreneurs alone cannot move the economy.

5.7 Objective five: The youth and agriculture

The research objective five addresses youth level of acceptance, attitude and knowledge towards agriculture entrepreneurship. Also, to examine whether there is relationship between youth level of acceptance, attitude knowledge and consideration for practicing agriculture. The findings revealed that majority of the study respondents agreed that agribusiness is a potential industry nowadays. This means that they admitted that there is prospect in agriculture.

Similarly, admitting that agribusiness has the ability to attract investors, that it encourages transfer of technology, it is profitable, and that it has good future is an indication that youth in the study area possesses full knowledge of the capabilities of agriculture. However, measuring the level of youths' agripreneurial acceptance, findings revealed that majority of the participants disagreed that agribusiness is a prestigious profession; disagreed that agribusiness has steady markets for the product, and also disagreed that agribusiness involves low risk.

On the level of youth attitudes towards becoming agricultural entrepreneur, the findings show poor level of youth attitudes towards agriculture entrepreneurship; participants disagreed on all the items measuring their attitudes towards agribusiness. There is no willingness to seeking entrepreneurship opportunities in agribusiness and are not willing to take opportunity to attend training on agribusiness. Findings also show that the respondents disagreed to willingness to seek further knowledge on agribusiness and are also not prepared to be involved in farming business; they also rejected the notion that agribusiness improves standard of living.

More so, a majority disagreed to being productive if they practice agribusiness; they disagreed becoming professional in agribusiness; also disagreed to being motivated to work when they are involved in agribusiness. Similarly, youth did not see their career objectives being achieved through agribusiness; majority did not see themselves practicing agriculture even if their other entrepreneurship brings less or no profits; and they disagreed to being comfortable in agribusiness.

On the level of the youth knowledge on agricultural entrepreneurship, the findings revealed that there is good level of knowledge concerning agriculture entrepreneurship. In figure 25, all the respondents agree to all the items that sought after to know their knowledge on agriculture; youth show indicated that agribusiness involved animal rearing, fisheries, farming and plantation, which means that they all have a full understanding of what agriculture entails. Therefore, there is substantial evidence from this study that the low level of youth turnout in agriculture is not because of their lack of knowledge or lack of acceptance of agriculture as a viable sector for reducing unemployment rate. For example, Figure 23 shows a good level of acceptance in youth while, figure 24, shows a poor level of willingness in taking up agriculture as a career; this also means that attitude of the youth towards agriculture

cannot be measured by their perceptions on agriculture. Simply put, attitude is a powerful factor that can either stimulate or deject intention towards agriculture (Ahmad 2014).

In addition, table 13 show that there is a statistically significant association between the youth level of acceptance of agriculture, attitude towards agriculture and knowledge of agriculture entrepreneurship and consideration of engaging in farming business. Though, there was a statistical association but the findings further showed that a majority of the study participants do not consider practicing farming business while, a few considered practicing farming business. This implies that the association between individual level of acceptance, attitude and knowledge may influence the choice of involvement or engagement in a particular action, but it is not a determinant of actual performance of such action. Similarly, Abdullah and Sulaiman (2013), shows in their findings on the factors influencing youth interest in agriculture shows that attitude, acceptance, and knowledge are the factors that influence youth to become agriculture entrepreneurs but does not determine participation.

Similarly, findings show that most youth are not interested in practicing agriculture because their parents who engage in agriculture are not growing beyond the home garden level. Therefore, the finding is consistent with other several studies in South Africa that examined youth participation in farming. For example, Myeni, Moeletsi, Thavhana, Randela and Mokoena (2019) as well as Cheteni (2016) found that youth in South Africa are less involved in farming even with the high unemployment rate among the rural and urban youths. Woolard (2013) observed that more youth from rural homeland in South Africa are now moving to urban city in search of jobs, because of their beliefs that farming is a low status job that has no career growth. So, such

action raised many questions about inequitable distribution of resource and the effects on the reduced number of those remaining in agriculture.

Therefore, findings from this study and related studies have exposed barriers that appear as threats to growth in agricultural sector. The present study accords Ngongi (2012) submission that the non-changing farming practices among small-scale farmers may be responsible for the non-involvement of many rural youths in agriculture. For instance, lack of strategic support to improve productivity as well as inspire innovation into the sector overtime has in many ways pushed youths away from agro entrepreneurial opportunities, in search of attractive white collar jobs in cities (Fanrpan (2013). This in essence shows that the public policies and programs at the national, regional or continental level have either partially or insufficiently been developed or translated into the initially stated goals and objectives. Moreover, this is an indication that little has been done to evaluate the efficacy of the existing agricultural policies.



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5.8 Objective six: Sustainable intervention for agricultural entrepreneurial initiatives

Research objectives six addressed interventions for building a climate in which agripreneurial initiatives can thrive and the findings was presented qualitatively in previous chapter. Some of the suggested interventions include: provisions of basic amenities such as water, solving land ownership matters and finance availability. In addition, capacity development interventions (human capital development), development of farmers network for dissemination of information as well as training and workshops. These components are unavoidable mechanisms for creating an enabling environment for agricultural entrepreneurship. The respondents also suggested diverse governmental strategies with aim of changing people's attitude and

orientation as well as youth perceptions towards choosing career in agriculture, especially now that young rural people aspirations are dominated by employment in the urban areas (Leavy and Hossain 2014).

Similarly, there is need for intense campaign to enlighten rural farmers and the public on agricultural benefits, government programs and government services; there is need for NGOs and government collaboration. Findings strongly show that there is need for training to impart knowledge and entrepreneurial skills, tools and equipment, machinery, technical support, and general business advice. Further, marketing support, farmers' networking, infrastructure, current information, counselling, transportation support, access to water and access to market information are needed to turn farm gardens to agripreneurship. Findings also suggested that small-scale farmer become part of decision making, when it comes to development programs, so that their voice can be heard; also there was suggestion for farmers' rights protection in term of tariff.



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5.9 Conclusion

This chapter extensively discussed the results presented in chapter four. The discussion shows that majority small-scale farmers are not educated and also lack adequate training on how to nurture their home garden to a sustainable entrepreneurship that can bring about economic empowerment. Also, factors like lack of finance, lack of access to land, poor market information, poor farmers networks, lack of farm machinery, lack of water and poor weather condition are still barrier to progress in agricultural entrepreneurship development among Small-scale farmers. Meanwhile, the development of entrepreneurial activities among small-scale farmers can be achieved if those components are accessible.

Similarly, youth prefer to seek career in other sector instead of agriculture not because of their lack of knowledge in agriculture; in fact, youth in the area of study are all aware that agriculture potentials are abundant, but due to lack of progress in their parents' farming business for many years. Although, building a climate in which agricultural entrepreneurship initiatives can thrive among South Africans could be challenging, but findings have shown that it is achievable, especially if government and other stakeholders in agricultural sector collaborate to assist farmers and youth. The subsequent chapter draws conclusion from the study and gives policy recommendations.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.0 Introduction

This study explored issues around agricultural entrepreneurship development among small-scale farmers in the Eastern Cape Province of South Africa. The research approach adopted for data collection and analyses was mixed method. Findings from the study have been presented and discussed in previous chapters. This chapter gives conclusion and recommendations of the phenomenon around this study. The study makes contribution by proposing a sustainable commercial agricultural entrepreneurship model.

6.1 Conclusion

Small-scale farming is failing to metamorphose to agricultural entrepreneurship among small-scale farmers in the Eastern Cape Province due the inadequate entrepreneurial skills and other factors. Most farmers lack the basic entrepreneurial skills that could

afford them growth and sustainability beyond home garden. This study agreed with other related studies that, the success of small-scale farmers to attain sustainable entrepreneurship in agriculture depends on being equipped with production skills, farm management skills among other entrepreneurial skills as well as other related factors; this means that enhancing several entrepreneurial skills in small-scale farming is paramount. Although, some farmers have been trained by agricultural service providers to some extent, yet, findings shows that, it is still a challenge for small-scale farmers to make a breakthrough. Thus, it may be concluded that a lot still needs to be done by agricultural service providers to assist farmers in minimising their challenges.

Other barriers include attitude of farmers themselves; most small-scale farmers in the study areas consumes more of their produce and have no intention for business; and those who produces for business purpose are very few. Meanwhile, even those who produce with business intention cannot access market; in most cases, the lack of market accessibility is due to lack of transportation and good roads, lack of market information, lack of infrastructure, among other barriers. Similarly, those who strived to ensure household food security with their farm produce have been affected by drought, pests and lack of land ownership to mention few. As a result, challenges of food insecurity continues to get worsen in rural households due to poor performance in rural farming which has been affected by poor weather conditions, poor rainfall and poor arable land for cultivation, leading to starvation and sicknesses among household members.

The issue of land ownership cannot be overlooked among other barriers to the development of agricultural entrepreneurship in Eastern Cape. Findings from the study show that majority of small-scale farmers cannot access enough land portion for practicing commercial farming. Land is one of the most important factors of production

which has now become huge barrier to agricultural development in South Africa for more than two decades. Unless there is accurate implementation of policies that could enable famers to gain access to land, small-scale famers may continue in stagnation.

Modern technology is also important as small-scale farmers aspire to progress to commercialisation. Small-scale farmers in Eastern Cape are yet to have access to modern machinery; this has also caused some setback in their operations. Meanwhile, it will also be difficult for them to operate such operate such modern machinery since majority of them are not educated; this means that small-scale farmers need to undergo rigorous training.

It is also a great challenge that youth shows poor interest and turnout in agriculture. The rate of unemployment continues to grow annually among youth, especially in the rural areas. Although, the South African government planned to create over one million jobs through agriculture by 2030, but the youth, who are the most unemployed group in the country, are reluctant to choose careers in agriculture. Although, findings revealed that youth have deep knowledge of what agriculture entails and they are also aware of the numerous prospects in the sector, but their attitudes towards participating in agriculture still remain poor.

To some extent, there is good level of youth knowledge as to what can be accomplished through agriculture, but since youth attitudes towards becoming agricultural entrepreneurs was very poor, their interests is equally affected. The rural young people aspirations are dominated by employment in the formal sector, modern urban lifestyles and reluctance to look at farming as a chosen career. Youth see agriculture as an out-dated profession, labour intensive and old-fashioned career

meant for old people; they therefore seek employment in urban areas and consequently increased unemployment rate and overcrowding in the urban centres.

6.2 Recommendation

This study revealed the unsatisfactory level of growth among small-scale farmers and a very low level of interest in the agriculture among the youth in the Eastern Cape Province. However, the research findings are valuable for policy makers as well as, other pertinent stakeholders in the agricultural sector. This study successfully came up with some recommendations for small-scale farmers, NGOs, Government, youths, private and public sectors who are directly and indirectly advocating for agricultural entrepreneurship development as a strategy for economic empowerment.

Investing in agricultural entrepreneurship among small-scale farmers in the Eastern Cape Province can increase production and reduce food insecurity in rural households and can also promote small-scale farmers to the level of agricultural entrepreneurs while creating economic empowerment. There is need to establish farm training centres across the Province at nearby locations for farmers because, among the reasons for growth deficiencies among small-scale farmers in the study areas are lack education and training, poor technological skills, and poor marketing skills. In order to address this issue, the following recommendations were made:

There is need for compatibility between reality and philosophy. This means that active policies that are meant to promote agricultural activities should be holistic in nature, covering all aspects of agricultural entrepreneurship development to tackle barriers to agricultural entrepreneurship development among small-scale farmers and youth across the country. Such policies should promote alliance among all relevant stakeholders – government, NGOs and other private institutions that provide

development assistance to small-scale farmers. Pursuing a common goal of promoting subsistence farming to commercial farming among the black race cannot be achieved in isolation. Such policy should be developmental oriented – sustainability of commercial farming should be the focus.

Although, there is evidence of existing policies and frameworks for agricultural development; majority of which were formulated to assist poor people to develop interest in agriculture and to become agricultural entrepreneurs. Yet, the poor development in the sector reflects the dark sides of those policies; small-scale farmers are yet to experience the effectiveness of the policies. There is need to review the existing policies to suit the current situation of the beneficiaries; engaging small-scale farmers at the genesis of policy formulation is also crucial. This will assist policy makers to understand the need of such people and design policies that are developmental oriented than imposing blueprints on them.



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Individual land ownership is a serious issue that requires government and policy makers' intervention. There are existing policies for land distribution, but such policies are yet to be properly implemented; this has left many prospective farmers vulnerable as they have no access to land portions. There is urgent need for working policies and efficient implementation to liberate farmers from the customary land tenure. Achieving this will enable small-scale farmers to expand their farm businesses at a desirable measure. The subsistence farmers in the rural areas will be able to use their land as collateral in order to access substantial financial aid in banks and from other accredited agencies. Subsequently, livelihood in rural households will improve; expanding from subsistence farming to agricultural entrepreneurship will also be at ease.

Although, agriculture is a famous sector that contributes immensely to most economies around the globe, more is still required of private and government sectors to promote agricultural entrepreneurship across rural areas in Eastern Cape Province. If small-scale farmers in the rural areas continue to struggle in accessing financial assistance without succeeding, none of them will be able to grow to becoming an entrepreneur. So, all concerned stakeholders should develop working strategies to abolish such hardship.

Cultural values and customs have restrictions upon women in some rural areas to venture into agriculture in spite of supportive laws for gender equality. This reflects one of the major arguments in the sociological entrepreneurship theory that individuals' sociological background may be a decisive push of becoming or rejecting being an entrepreneur. Meanwhile, in some rural households women have become the heads due to many factors like rural-urban migration of men, widowhood among other factors; such women have displayed evidence of being reliable to be entrusted with family responsibilities. Findings from this study shows a reasonable number of women participation in agriculture, which affirmed that woman can contribute immensely to agricultural entrepreneurship development. This therefore calls for more policies that abolishes old traditional restrictions but encourage and support women involvement in commercial farming.

Successful commercial farmers should also play their part to serve as mentors to emerging farm entrepreneurs. Successful famers will ease the burden on government officials if they willingly provide mentorship to other farmers and thereby promote strong networks. Their vast experience in the sector will have great impact on the struggling famers. Mentorship from successful commercial famers can be on market,

skills development, financial management, production, networking, and use the of farm machineries.

NGOs have tried to promote household resilience through improved food and water security that are meant to sustain and support small scale farmers. Thus, these initiatives are meant to promote food and water security, which play a significant role in the empowerment of small-scale farmers and food growers. Household agricultural activity have been developed through capacity development building interventions and through intensifying vegetable production and orchard establishment and increasing access to water for food production purposes in 60 selected households. It has become the priority of NGOs in the study area to focus on the development of the farmers' network such as the Women Farmers Network, one of the various projects implemented over the years by projects. Such networks are important for the dissemination of relevant information as well as for continuously learning from each other.



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Although, these NGOs have recorded some achievements, it is still a challenge for them to be able to change the mind-set of our people on their farming practices. For instance, many households preferred to keep their livestock and were not willing to sell even if such livestock are matured enough to be sold. As a result, most small-scale farmers do not really have the zeal for entrepreneurship meaning that it would be difficult for such farming activities to be entrepreneurship or grow into commercialisation; in view of such cases, government should be ready to substitute efforts of the NGOs.

Also, considering the fact that most youth understand the concepts of agricultural entrepreneurship and its prospects creates impression that their attitude can be

modified towards embracing agriculture. Findings from this study revealed that some youth are willing to take up career in agriculture if they can be convinced, equipped, financed and trained. This also aligned with the debate in 'sociological entrepreneurship theory', that individual thoughts can be changed in order to use their lives for something meaningful. Therefore, policy makers should build strategies for convincing youth and reshaping their ideas toward embracing agriculture.

In addition to giving small-scale farmers affordability and chance to own and manage land, the need for technological innovations with regard to access and availability of water resources is essential. Much of the water resources in the rural areas are groundwater much has not been done by the Government, water authorities and other private actors to sightsee and fully utilise these resources through technology. There are no facilities like machinery in the rural areas that can be used to access groundwater resources. This advocates for technological innovations to access water in rivers and dams for the rural communities to use for agricultural activities. This could lead to the establishments of irrigation amenities that can boost farming activities across rural areas.

It is also essential to improve the accessibility of credit facilities among small scale farmers in Eastern Cape Province. Government and financial institutions have to make provisions to provide credit to embattled small scale farmers. Several factors constrain small scale farmers from accessing loans or credit. Such factors include lack of collateral.

In addition to the above recommendations, this study proposed a sustainable commercial agricultural entrepreneurship model which may pioneer a process for

sustainable agricultural entrepreneurship development among small-scale farmers, particularly in Eastern Cape Province.

6.3 Sustainable commercial agricultural entrepreneurship model.

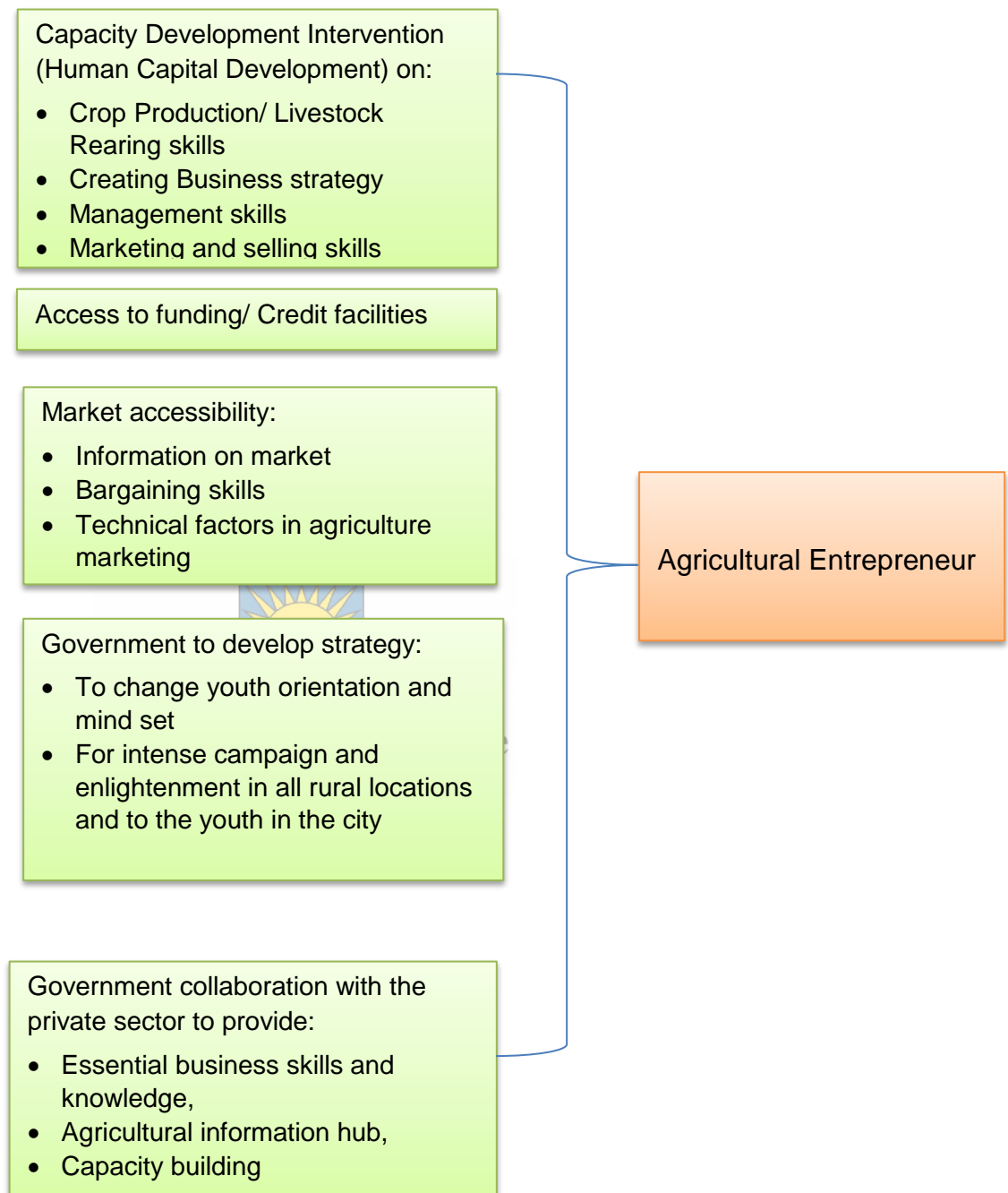
The sustainable agricultural entrepreneurship model emanated from the findings of this study. It is anticipated that this model will be a viable model to assist the small-scale farmers and stakeholders in agricultural sector across the country, to succeed in their endeavours to build a South African Climate for sustainable agricultural entrepreneurship.

The model might also form basis for subsequent study of this nature. The model presented in Figure 26 suggests that existing and prospective small-scale farmers' success depends wholly on combined elements such as farm management skills, financial ability, individual interests and aspirations, financial management, market and marketing knowledge, funding, farmers networking, individual interests and other components shown in figure 26.



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Figure 26: A sustainable commercial agricultural entrepreneurship model



6.4. Suggestions for further research

This study was based on exploring agricultural entrepreneurship as a strategy for economic empowerment in the Eastern Cape Province of South Africa. This was one of steps in understanding agricultural entrepreneurship development among small-sale farmers with the concept of economic empowerment. In view of the above recommendation, future study on agricultural entrepreneurship development could be directed toward the following areas:

- The was conducted one Province out of nine, it accuracy may not be generalised the country as a whole. A related study in other Province would assist policymakers to come up with all-inclusive framework for creating economic empowerment.
- A comparative study on agricultural entrepreneurship might also be conducted on South Africa and other country.
- Future researchers can also consider exploring the effects of farmers' socio-economic features on farmers' profitability



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Annexures



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UNIVERSITY OF FORT HARE
FACULTY OF MANAGEMENT AND COMMERCE
DEPARTMENT OF DEVELOPMENT STUDY

QUESTIONNAIRE FOR THE FARMERS

Dear Respondent,

This questionnaire has been designed to collect data for a PhD degree in Development Studies. The research topic is **Agricultural Entrepreneurship Development as Strategy for Economic Empowerment: The Case of Small-Scale Farmers in Eastern Cape Province of South Africa**. *“Agricultural entrepreneurship is the production of agricultural products such as crops and livestock for commercial (selling) purpose, ultimately to make profit”. “It is the combination of agriculture activities and business”*. The research seeks to identify the challenges facing agricultural entrepreneurship development among black farmers in Eastern Cape, and how those challenges can be solved. The study focuses on crop farming and animal farming.

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You are kindly requested to respond to **ALL** the statements in the following questionnaire. There is no right or wrong answer and you are encouraged to be honest and truthful in your expression of options. Please your name is not required. The information you provide will be treated anonymously and confidentially and will be used for academic purposes only. Your sincere responses would therefore be highly appreciated. Thanks for your anticipated cooperation.

Olusola M Akinwale (0635412986; 0611203496 201316067@ufh.ac.za)

SECTION A: training and productivity

Kindly supply the necessary information by putting a tick (✓) in the space that corresponds to your answer or writing your responses where necessary.

1. **Age group:** 21-25 26-30 31-35 36-40
 41-45 46- 50 51 - Above
2. **Gender:** (a) Male (b) Female
3. **Marital status:** (a) single (b) married (c) divorced

(d) widow/widower (e) separated

4. **Education level:** (a) No educational qualification
(b) Primary schooling completed
(c) High school completed
(d) Post grade 12 certificate
(e) Post grade 12 diploma
(f) University degree
(g) Others

5. Number of household members

6. Do you have another job apart from this farming?

7. Do you understand that agricultural entrepreneurship has to do with the production of farm products for business purpose?

Yes	No
-----	----

8. What is the purpose of your production? Please tick (✓) as appropriate

Consumption purpose	Business Purpose	Both
---------------------	------------------	------

9. What position do you hold in the farm?

Owner	Supervisor	Labour
-------	------------	--------

10. The farming business is a:

Self-owned	Family owned	Corporative
------------	--------------	-------------

11. What is your core farming nature? Please tick (✓) as appropriate

1.	Horticulture	
2.	Grains	
3.	Livestock	
4.	Fruits	
5.	Mixed farming system	
6.	Other (Please specify)	

12a. Have you been trained on agricultural production?

Yes	No
-----	----

12b. if **yes**, in what have you being trained? (Please choose below)

	Please tick (✓) as appropriate
Animal feeding	
Breeding`	
Ploughing	
Maintenance of farm lands	
Operation of equipment irrigation	
Harvesting	
Crop transplanting (crop relocation	
Crop production and protection	
Pest control	
Fertilizers usage	

Others, specify.....animal rearing.....

12c. who offered the training?

NGO	Government
------------	-------------------



12d. is the training helpful?

Yes	No
------------	-----------

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12e. if **yes**, how has the training helped you (please tick (✓))

Creating Business strategy	
General business management	
Production skills	
Financial management	
Interpersonal relations	
Marketing and selling	
Profit maximization	
Networking	

12f. If **the training is not helpful**, please mention what lacked in the training.

...the time is too shortthe trainer is not efficient enoughlocation of the training is not good.....

12g. **If you have not being trained**, where did you get your knowledge of farming?

...Family/father/mother.....Self initiative.....from friends

13a. Do you face challenges in your farming business because you have not received agricultural training?

Yes	No
-----	----

13b. If yes, mention those challenges

Drought, Market, Pest, Land management, Grazing /Seed problem, storage, Production Problem, Death rate (Animal &Crop), Animal health, Flood, Fertilizer, Theft, Predators

14a. Do you think you need more training?

Yes	No
-----	----

14b. If yes, in which aspect? (Please tick (✓))

Creating Business strategy	
General business management	
Production skills	
Financial management	
Interpersonal relations	
Marketing and selling	
How to maximize profits	
Networking	

15. Do you agree that followings can be achieved through farming business? Please tick (✓) **yes** or **no**

	Yes	No
Job independence (self-reliance)		
Increase in savings		
Empowerment of less-privileged people		
Job creation		
Increase in economic growth		
Increase in profits		
Dignity (self-respect)		
Increase in the role of family decision making		

Improvement of living standards		
Women and youth empowerment		

16. How many employees do you have? Please mention in number. **(Direct number)**

Please indicate by putting a tick (✓) either Yes or No, the following factors determines interest to venture into agriculture.

17. Why are you into agriculture?

		Yes	No
1	Agricultures is a potential industry nowadays		
2	Agriculture has the ability to attract investors compared to other entrepreneur business, it has so much to offer		
3	Agriculture encourages transfer of technology		
4	Agriculture is profitable		
5	I believe Agriculture has good future		
6	Agriculture is a respected profession		
7	Agriculture has a guaranteed market for the products that have been produced		
8	agricultural entrepreneurship involves low risks		
9	To provide food for myself and my family		

18. Would you ever stop farming business for another job, such as office work?

Yes	No
-----	----

SECTION B

B1 Personal attributes

Indicate which of the following best describe your personal attributes (Choose one or more)

1.	I am hardworking		
----	------------------	--	--

2.	I am an experience farmer		
3.	I like challenges		
4.	I am energetic		
5.	I am a goal setter		
6.	I learn from failure		
7.	I am self-motivated		
8.	I am multitasked		
9.	I am not easily discouraged (I am persistent)		

10. Other: (Please specify)

B2 Farming skills

Indicate by putting a tick (✓) in the appropriate box that describe your experience in terms of the following skills. Only respond to either crop production or livestock rearing, or both if applicable in your business.

A	Crop production skills	No experience	Inadequate	Adequate	Outstanding
1.	Mulching skill				
2.	Seed bed and care skill				
3.	Soil preparation skill				
4.	Tillage skill				
5.	Transplant skill				
6.	Irrigation skill				
7.	Pest control skill				
8.	Weed control skill				
9.	Knowledge of fertilizers				
10.	Harvesting planning skill				
11.	Packing skill				
12.	Grading skill				

B	Livestock rearing skills	No experience	Inadequate	Adequate	Outstanding
1.	Calf rearing skill				
2.	Weaning skill				
3.	Animal health skill				
4.	Animal hygiene				
5.	Livestock breeding skill				
6.	Artificial insemination skill				
7.	Animal nutrition skill				

B3 Challenges towards entrepreneurship

Indicate by putting a tick (✓) in the appropriate box that describes the degree to which the following factors are problems to entrepreneurship development drive in agriculture.

Strongly disagree= SD; Disagree= D; Neutral view/not= N; Agree= A; Strongly agree= SA

		SD	D	N	A	SA
--	--	----	---	---	---	----

1.	Lack of education and training (in general)					
2.	Difficult to obtain financing					
3.	lower access to land					
4.	Lack of self-confidence					
	husband's consent (as a woman)					
5.	great fear of failure					
6.	Cultural prohibition (women not allowed near cattle crop)					
7.	Lack of infrastructures (roads, telephone, computers etc.)					
8.	Lack of relevant information					
9.	Inability to cope with the task of entrepreneurship					
10.	No interest in producing for business purposes					
11.	Poor access to market information					
12.	Lack of storage and warehousing facilities					
13.	Lack of electricity					
14.	Poor access to farming equipment and inputs					
15.	Poor weather					
16.	Lack of advisory support from government officials					
17.	poor land fertility for arable farming					
18.	Lack technical skills (animal feeding skills, irrigation skills)					
18.	High rates of crime					

14. Others (please specify):

B4 Development needs of entrepreneurs

Indicate by putting a tick (✓) in the appropriate box that describes your ability in terms of the following skills: **Very weak=1; Weak=2; Not sure=3; Strong=4; Very strong=5**

A		1	2	3	4	5
1.	General business management skills					
2.	Cooperation and networking skills					
3.	Financial management skills					
4.	Marketing and selling skills					
5.	Interpersonal relations kills					
6.	Production skills					
7.	Utilizing opportunities					
8.	Creating business strategy					
9.	Decision making skills					
10.	Networking					

Other: (Please specify)

Kindly indicate your key developmental needs to grow and enhance your agricultural entrepreneurship operations. (Choose 1 or more.)

1.	Financial support (loans and advice/training to service the loan)	
2.	Training/knowledge/skills	
3.	Tools, equipment, machinery	
4.	Technical support (Advise on products usage)	
5.	General business advice	
6.	Marketing support	
7.	Networking with other business owners	
8.	Infrastructure (roads, telephone, electricity)	
9.	Information and counselling	
10.	Marketing	

Other: (Please specify)

.....

Thank you for your participation.



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UNIVERSITY OF FORT HARE
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF DEVELOPMENT STUDY

QUESTIONNAIRES FOR YOUTHS THAT ARE NOT INTO FARMING

Dear Respondent,

This questionnaire has been designed to collect data for a PhD degree in Development Studies. The research topic is **Agricultural Entrepreneurship Development as Strategy for Economic Empowerment: The Case of Small-Scale Farmers in Eastern Cape Province of South Africa**. *“Agricultural entrepreneurship is the production of agricultural products such as crops and livestock for commercial (selling) purpose, ultimately to make profit”. “It is the combination of agriculture activities and business”*. The research seeks to identify the challenges facing agricultural entrepreneurship development among black farmers in Eastern Cape, and how those challenges can be solved. The study focuses on crop farming and animal farming.

You are kindly requested to respond to **ALL** the statements in the following questionnaire. There is no right or wrong answer and you are encouraged to be honest and truthful in your expression of options. Please your name is not required. The information you provide will be treated anonymously and confidentially and will be used for academic purposes only. Your sincere responses would therefore be highly appreciated. Thanks for your anticipated cooperation.

Olusola M Akinwale (0635412986; 0611203496 201316067@ufh.ac.za)

SECTION A

Kindly supply the necessary information by putting a tick (✓) in the space that corresponds to your answer or writing your responses where necessary.

1. **Age:**
2. **Gender:** (a) Male (b) Female
3. **Marital status:** (a) single (b) married
4. **Education level:** (a) No formal education (b) Primary School only
(c) Secondary/High School (d) Tertiary Level (d) Others please specify**(5)**
5. **Occupation:** Employed, Unemployed
6. **Your Background**
 - (a) Have agriculture background
 - (b) Do not have agriculture background

7. Do you understand that agricultural entrepreneurship has to do with the production of farm products for business purpose?

Yes	No
-----	----

SECTION B

Indicate by putting a tick (✓) in the appropriate box that describes the degree to which the following factors determines your interest to venture into agricultural entrepreneurship.

Strongly disagree= SD; Disagree= D; Neutral view/not= N; Agree= A; Strongly agree= SA

B1 Acceptance towards venturing into farming

		SD	D	N	A	SA
	Agricultural entrepreneurship is a potential industry nowadays					
	Agricultural entrepreneurship has the ability to attract investors compared to other entrepreneur business, it has so much to offer					
	Agricultural entrepreneurship encourages transfer of technology					
	Agricultural entrepreneurship is profitable					
	I believe Agricultural entrepreneurship has good future					
	Agricultural entrepreneurship is a prestigious profession					
	Agricultural entrepreneurship has a guaranteed market for the products that have been produced					
	Agricultural entrepreneurship involves low risks					

B2 Attitude towards Agricultural entrepreneurship

		SD	D	N	A	SA
	willing to seek for more entrepreneurship opportunities regarding agricultural entrepreneurship					
	Willing to take the opportunity to attend training on agricultural entrepreneurship					

Willing to seek further knowledge on agricultural entrepreneurship					
More prepared to be involved in farming as a result of agricultural entrepreneurship					
Agricultural entrepreneurship improves standard of living					
I will feel more productive being involved in agricultural entrepreneurship					
I will feel more professional if I am involved in agricultural entrepreneurship					
I will be more motivated to work when I am involved in agricultural entrepreneurship					
Career objectives will be achieved if I involve in agricultural entrepreneurship					
Agricultural entrepreneurship is acceptable for me even if I do not get enough profit than other entrepreneur business					
Feel comfortable if I get involved in agricultural entrepreneurship					

B3 Knowledge on contract farming



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	SD	D	N	A	SA
Agricultural entrepreneurship involves animal rearing, fisheries, farming and plantation					
Agricultural entrepreneurship provides alternative markets for small market					
Agricultural entrepreneurship provides larger opportunities for local products to enter global market					
Agricultural entrepreneurship guarantees consistent supply to the markets					
The government offers agricultural entrepreneurship schemes through their agencies such as FAMA and DOA					
Agricultural entrepreneurship entrepreneurs provide opportunities for the general public to participate in agricultural entrepreneurship as investors					
Agricultural entrepreneurship can save middle man cost					
Agricultural entrepreneurship is not a network marketing scheme					
Opportunities for agricultural entrepreneurship are many especially in the field of health, production process, raw meat products, market and so on.					

Agricultural entrepreneurship involves animal rearing, fisheries, farming and plantation					
--	--	--	--	--	--

B4 Individual perception

1. Do you think farming can reduce unemployment rate among youths?

Yes No

2. Why are you not doing agriculture?

Please tick	(✓)
It requires labour	
It is old fashioned business	
It is mainly for old people	
It requires special training	
It requires large capital to start	
It is a time consuming job	
I prefer to work in office than on farm	
I don't want to stay in rural area	
I already had a better job	
I have good degree	
None of my family members practice agriculture	
Am not allowed to practice agriculture because I am a woman	
I don't have access to land	
I don't have capital to start	

3. Would you consider practicing farming business? Yes

No

Other comments

.....
.....
.....

.....Thank you for your participation



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**UNIVERSITY OF FORT HARE
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF DEVELOPMENT STUDY**

INTERVIEW QUESTIONS FOR GOVERNMENT OFFICIALS AND NGO OFFICIALS

Dear Respondent,

This interview has been designed to collect data for a PhD degree in Development Studies. The research topic is **Agricultural Entrepreneurship Development as Strategy for Economic Empowerment: The Case of Small-Scale Farmers in Eastern Cape Province of South Africa**. *“Agricultural entrepreneurship is the production of agricultural products such as crops and livestock for commercial (selling) purpose, ultimately to make profit”. “It is the combination of agriculture activities and business”*. The research seeks to identify the challenges facing agricultural entrepreneurship development among black farmers in Eastern Cape, and how those challenges can be solved.

You are kindly requested to respond to **ALL** the statements in the following questionnaire. There is no right or wrong answer and you are encouraged to be honest and truthful in your expression of options. Please your name is not required. The information you provide will be treated anonymously and confidentially and will be used for academic purposes only. Your sincere responses would therefore be highly appreciated. Thanks for your anticipated cooperation.

Olusola M Akinwale (0635412986; 0611203496 201316067@ufh.ac.za)

SECTION A

Kindly supply the necessary information by verbal response to these questions.

1. **Gender:** (a) Male () (b) Female ()
5. **Education level:** (a) No formal education () (b) Primary School only ()
(c) Secondary/High School () (d) Tertiary Level () (d) Others (please specify)
6. **Your Background**
 - (a) Have agriculture related background ()
 - (b) Do not have agriculture background ()

7. Type of Organisation:

NGO	Government organisation
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8. Post held:

9. Years of experience in rendering development services to farmers

SECTION B

1. How do you describe agricultural entrepreneurship within organisation?
2. What are some of the interventions/programmes from your organisation to support farmers in Eastern Cape
3. Do you think black South Africans can be self-reliant (economic empowerment) through farming business? Please explain
4. What group of farmers are your targets?

Youths farmers	Older farmers	Both
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5. Which group seems to be more interested in farming?
6. What is required (criteria) of a farmer to be a beneficiary of your services?
7. From your experience what are the main challenges facing faming development, particularly in Eastern Cape?
8. What have you done to address some of the challenges you mentioned above?
9. Which categories of farmers do you render your services to and why?

Individual farmers	Cooperative farmers	Both
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10. Do you render service to only farmers who seeks assistance from your organisation or you also search for farmers to assist?
11. Does your organisation experiences challenges in rendering services to farmers? If yes, please mention.

12. If any, what are some of the shortfalls, discovered in your support programmes?

13. What impact did some of your programmes have on the:

a. Subsistence farmers and agriculture entrepreneurs?

b. The community?

14. Are you convinced that your support programmes for these farmers are run appropriately?

If yes, please why do you say so?.....
.....

If No, please why do you say so?.....
.....



15. How do the beneficiaries of your services respond to the service they receive?

16. In what ways do you think your support programmes to farmers can be made more effective?

17. Do you think the support programmes from your organisation is enough to address all the barriers and gaps towards development of agriculture entrepreneurs?

If yes, please give reason.....

If no, what is lacking and how can it be address?.....

18. Do you do follow-up services after rendering your services to farmers for the first time?

If yes, how often?

If no, please give reasons.

19. What other types of interventions do you think can be beneficial in future?

20. What success stories have been recorded from of development programmes, and what impact does that have on you services?

Thank you for your participation.



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Ethical Clearance



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ETHICAL CLEARANCE CERTIFICATE REC-270710-028-RA Level 01

Certificate Reference Number: MON041SAKI01

Project title: **Agricultural entrepreneurship development as the key for economic empowerment among the Black South Africans.**

Nature of Project PHD in Developmental Studies

Principal Researcher: Olusola M. Akinwale

Supervisor: Dr B. P. Monyai

Co-supervisor: N/A

On behalf of the University of Fort Hare's Research Ethics Committee (UREC) I hereby give ethical approval in respect of the undertakings contained in the above-mentioned project and research instrument(s). Should any other instruments be used, these require separate authorization. The Researcher may therefore commence with the research as from the date of this certificate, using the reference number indicated above. This certificate is valid for a year from the date of approval; thereafter, the Principal investigator/s will be expected to apply for renewal.

Please note that the UREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the document;
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research.

The Principal Researcher must report to the UREC in the prescribed format, where applicable, annually, and at the end of the project, in respect of ethical compliance.

Special conditions: *Research that includes children as per the official regulations of the act must take the following into account:*


Note: The UREC is aware of the provisions of Department of Health Charter of Ethics in Health Research Principles, Processes and Structures; DOH 2015, signed by the Minister of Health in March 2015. This certificate is granted in terms of the provisions of the above-mentioned document.

The UREC retains the right to

- Withdraw or amend this Ethical Clearance Certificate if
 - Any unethical principal or practices are revealed or suspected;
 - Relevant information has been withheld or misrepresented;
 - Regulatory changes of whatsoever nature so require;
 - The conditions contained in the Certificate have not been adhered to.
- Request access to any information or data at any time during the course or after completion of the project.
- In addition to the need to comply with the highest level of ethical conduct principle investigators must report back annually as an evaluation and monitoring mechanism on the progress being made by the research. Such a report must be sent to the Dean of Research's office.

The Ethics Committee wished you well in your research.

Yours sincerely



22/11/2018

Professor Pumla Dineo Gqola
Dean of Research

12 November 2018

Field Exercise Displays













The researcher and research assistants on field: interview and focus group session















A picture showing home garden own by some of respondents in Mthatha