

**Challenges Faced by Emerging Farmers in Managing Projects Towards
Sustainable Agricultural Development in Capricorn District, Limpopo
Province, RSA**

by

Matlou Ntebatse Yvonne

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Supervisor: Mr N.B Njoko

Co-Supervisor: Dr K.S Milondzo

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DECLARATION

I declare that the mini-dissertation, Challenges faced by emerging farmers in managing projects towards sustainable agricultural development in Capricorn District, hereby submitted to the University of Limpopo, for the degree of Master of Development has not previously been submitted by me for a degree at this or any another university; that it is my work in design and in execution, and that all material contained herein has been duly acknowledged.

Matlou Yvonne

Date

DEDICATION

I dedicate this dissertation to my late mother Polokwane Matlou, my late grandmother, Mosale Matlou; my father Mpotle Matlou and to all the emerging farmers in South Africa.

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I would like to thank the community members of the Polokwane and Molemole Municipalities for making this study possible. I would also like to say thank you to the Limpopo Department of Rural Development and Land Reform for providing valuable information to make this study a success.

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I am grateful and give special thanks to my colleagues for making this study a success through their continued support.

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Last, but not least, I want to thank Almighty God for giving me the strength and courage to overcome the obstacles I encountered and to complete this research project. Thank you for your grace in my life.

ABSTRACT

The research investigated the challenges faced by emerging farmers in managing projects towards sustainable agricultural development in Capricorn District. The literature established the importance of project management in the context of sustainable agricultural development. In this regard, it was found that it is of extreme importance to support emerging farmers in managing agricultural projects where emerging farmers are engaged through a participatory approach in decision making processes for sustainable agricultural development.

Further, this research seeks to investigate the factors that hinder project management from influencing emerging farmers to manage and sustain the agricultural projects in the area of the study. Data was collected through semi-structured interviews and questionnaires were distributed to the selected sample within the target population. The purposive sampling method was used to select the 16 project officers for interviews while questionnaires were distributed randomly for 30 emerging farmers in the Molemole and Polokwane Municipalities.

The findings of the study suggest that most emerging farmers and project officers think that the lack of resources and training hamper the management and sustainability of agricultural projects.

To conclude, it is expected that the recommendations will highlight strategies and policies that could be put in place to accelerate the management of agricultural projects and their sustainability in the Capricorn District.

TABLE OF CONTENTS **PAGE**

Abstractv

Acknowledgements.....iv

Declarationii

Dedicationiii

List of figuresx

List of tablesxi

CHAPTER 1 – INTRODUCTION TO THE STUDY

1.1.Introduction1

1.2.Background of the study 1

1.3.Problem statement2

1.4.Motivation of the study2

1.5.Significance of the study3

1.6.Aim of the study3

1.7.Objectives of the study3

1.8.Research questions4

1.9.Ethical considerations4

1.10. Outline of the dissertation4

CHAPTER 2 -LITERATURE REVIEW

2.1. Introduction6

2.2. Agriculture in developing countries6

2.3. Agriculture in South Africa7

2.4. Emerging farmers8

2.5. Government policies and emerging farmers in South Africa9

2.6. Sustainable agricultural development	10
2.6.1. Promoting sustainable agriculture	11
2.6.2. Programmes employed by government to support farmers.....	12
2.6.3. Importance of sustainable agricultural development	14
2.6.4. Challenges to sustainable agriculture	15
2.7. The role of agriculture in economic development	17
2.8. Defining a Project	20
2.9. Project management	21
2.9.1. Functions of project management	22
2.10. Participatory project management	23
2.10.1. Participatory principles	23
2.11. Management of agricultural projects	25
2.12. Conclusion	26
 CHAPTER 3 - RESEARCH METHODOLOGY	
3.1. Introduction	27
3.2. Research design	27
3.3. Area of study	29
3.4. Population	30
3.5. Sampling method	30
3.6. Data collection method	31
3.7. Data analysis and interpretation	32
3.8. Ethical consideration	33
3.9. Limitations of the study	33

CHAPTER 4 – RESULTS AND INTERPRETATION

4.1. Introduction	35
-------------------------	----

SECTION A – EMERGING FARMERS

4.2. Demographics of emerging farmers	36
---	----

4.3. Project information: Income, Training and Expenditure.....	39
---	----

SECTION B – PROJECT OFFICERS

4.4. Responses from the project officers	48
--	----

4.4.1. Type of the funded projects	48
--	----

4.4.2. The impact funding had on the projects	49
---	----

4.4.3. Challenges faced by emerging farmers	52
---	----

4.4.4. Project value to the community	54
---	----

CHAPTER 5 – FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction	56
-------------------------	----

5.2. Reflection on key issues	56
-------------------------------------	----

5.2.1. Entrepreneurial skills	56
-------------------------------------	----

5.2.2. Institutional support	57
------------------------------------	----

5.2.3. Access to production capital	57
---	----

5.3. Conclusion	58
-----------------------	----

5.4. Recommendations	59
----------------------------	----

5.4. Recommendation for further research	59
--	----

REFERENCES	60
-------------------------	----

ANNEXURES

Annexure A – Approval letter from TREC

Annexure B – Approval from Limpopo Department of Rural Development and Land Reform

Annexure C – Letter from Editor

Annexure D – Consent form

Annexure E – Questionnaires

Annexure F – Semi-structured interviews

LIST OF FIGURES

Figure 4.2.1: Gender distribution of the farmers	36
Figure 4.2.2: Age distribution of the farmers	37
Figure 4.2.3: Education level of the farmers	38
Figure 4.3.1: Monthly income from the project	39
Figure 4.3.2: Experience in farming	40
Figure 4.3.3: Farmers' training.....	41
Figure 4.3.4: Type of training received	42
Figure 4.3.5: Project eradicate poverty in the area	43
Figure 4.3.6: Local people work in the projects	44
Figure 4.3.7: Monthly income from the project vs Years of farming experience.....	45
Figure 4.3.8: Education level vs Monthly income from the projects	46
Figure 4.3.9: Training received vs Monthly income from the projects	47

LIST OF TABLES

Table 4.2.1: Gender distribution of the farmers	36
Table 4.2.2: Age distribution of the farmers	37
Table 4.2.3: Education level of the farmers	38
Table 4.3.1: Monthly income from the projects	39
Table 4.3.2: Experience in farming	40
Table 4.3.3: Farmers' training.....	41
Table 4.3.4: Type of training received	43
Table 4.3.5: Projects eradicate poverty in the area	44
Table 4.3.6: Local people work in the projects	44

CHAPTER 1

INTRODUCTION TO THE STUDY

1.1. Introduction

This chapter provides a background to this study. The researcher outlines the statement of the problem, the aims and objectives of the study, the choice and rationale for the design and poses research questions.

1.2. Background of the Study

The protection of our resources is vital for the continued viability and productivity of agriculture in South Africa. This chapter explores sustainable agriculture in relation to emerging farmers and the challenges they face.

In this study, the researcher identifies the challenges faced by emerging farmers in managing projects for sustainable agricultural development in the Capricorn District. In many developing countries, agriculture is the backbone of the economy. Emerging farmers in South Africa come from the group of smallholder farmers; who previously did not have access to the mainstream of the economy (Masango, 2006).

Prior to 1994, white farmers enjoyed preferential access to agricultural credit. They were the major beneficiaries of state irrigation schemes, and also benefited from price controls, protectionism; and subsidisation (Masango, 2006). Many countries have tried to promote large-scale farming, believing that emerging farmers are inefficient, backward; and resistant to changes in agricultural development (Konare, 2001).

After 1994, the land reform programme transformed many emerging farmers by enabling them to obtain land to operate. However, many of them; did not have the necessary skills or experience to operate the farms (Department of Agriculture, 2004).

A major challenge for sustainable agricultural development in South Africa is the limited ability of previously disadvantaged farmers, to carry projects through to be sustainable (Senyolo *et al.*, 2009). The above statement suggests that emerging farmers need guidance and assistance in project management to overcome the challenges that they are faced with to improve sustainable agriculture in the Capricorn District; hence, the researcher recognised the need to conduct this study.

In 2009, 6 projects involving approximately 18 emerging farmers were started in the Capricorn District. The government assigned project officers to monitor and evaluate the progress and proceedings of the projects. The main aim of the projects was to create job opportunities; skills transfer and to alleviate food insecurity in the communities. Projects are meant to benefit the emerging farmers and the surrounding communities. There are currently 15 projects with 43 emerging farmers in the Capricorn District

1.3. Problem Statement

Agriculture does not only contribute to the Gross Domestic Product (GDP) of the country, but it is also an important earner of foreign exchange. It provides employment, and has some of the strongest forward and backward linkages in the economy (Mala, 1998). Numerous studies (Lotz *et al.*, 2000; Makhura, 2001; Masango, 2006, and others) have shown that many development efforts for emerging farmers have not been successful due to several reasons such as the lack of managerial skills, inadequate access to credit, untrained staff and farmers, insecure land rights, limited access to factors of production, lack of information, limited government support and a lack of relevant strategies to empower emerging farmers.

The above challenges and other constraints have been identified for this study as they have also impacted on the management of sustainable agricultural projects by emerging farmers in the Capricorn District. Furthermore, Oni *et al.*, (2008), attest that emerging farmers in South Africa are faced with challenges that need to be addressed urgently relating to a lack of adequate managerial skills and strategic information of the farmers. This is a major concern to the emerging farmers in the Capricorn District as new entrants and beneficiaries of land reform programmes taking advantage of opportunities to enter into agriculture although they do not have the necessary skills and training to manage the projects.

1.4. Motivation for the Study

The challenges faced by emerging famers in the Capricorn District have not been properly addressed for a long period of time. This study aims to bridge the gap between emerging farmers and the management of sustainable agricultural projects. It is also motivated by the number of projects which were not successfully operational because of the emerging farmers' lack of necessary skills. The study should assist the farmers in overcoming the challenges that (2006) elaborates that those emerging farmers who do have land, still lack equipment and skills to manage their projects.

1.5. Significance of the Study

The study of challenges faced by emerging farmers in managing projects for sustainable agricultural development in the Capricorn District will assist emerging farmers in the following ways:

- It will assist stakeholders in identifying challenges faced by the Capricorn District in managing sustainable agricultural projects,
- It will assist emerging farmers to identify factors that hamper the implementation of the projects which are meant for sustainable development in the province,
- It will also assist government managers to develop relevant strategies to empower emerging farmers nationally in project management.

1.6. Aim of the Study

The main aim of this study is to identify the challenges faced by emerging farmers in managing projects for sustainable agricultural development in the Capricorn District and also to explore the causes of these challenges. It is also aimed at assisting managers to develop strategies that will empower emerging farmers nationally in project management. To achieve this, the researcher has identified the following objectives.

1.7. Objectives of the Study

This study is aimed at achieving the following objectives:

- to identify the challenges that emerging farmers are facing in the Capricorn District in managing sustainable agricultural projects,
- to identify contributing factors to the challenges that emerging farmers face in implementing and managing projects in the District and
- to suggest strategies that could be employed by managers to empower emerging farmers in project management in the study area.

1.8. Research Questions

- What are the difficulties that emerging farmers face in the Capricorn district?
- What are the contributing factors to the challenges emerging farmers face in implementing and managing projects in the District?
- What strategies could be employed by managers to empower emerging farmers in project management in the study area?

1.9. Ethical Considerations

According to Paul (2010), ethical issues raised by the research process require that human beings should be treated with respect, should not be harmed in any way and should be fully informed about what is being done with them. According to Creswell (1998), the researcher has an obligation to respect the rights, needs, values and desires of the informants.

The researcher requested permission from the Limpopo Department of Rural Development and Land Reform for the Polokwane and Molemole Municipalities whose projects were funded by the Limpopo Department of Rural Development and Land Reform.

The researcher has ensured that information obtained from the participants has been treated confidentially. Informed consent was given and signed by respondents. The researcher ensured that there would be no harm to any respondent and that every participant would be treated with respect and that no one was forced to participate in the study. Plagiarism was also avoided in the study.

1.10. Outline of the Dissertation

The research report for this study consists of five chapters, organised as follows:

Chapter1: Introduction to the Study

This chapter introduces the topic and provides the general background, objectives and significance of the study

Chapter 2: Literature Review

This chapter discusses findings of other studies related to this one. It focuses on relevant literature on challenges faced by emerging farmers towards sustainable agricultural development globally and on any additional information relevant to the study.

Chapter 3: Research Methodology

This chapter is comprised of the study area, data collection and how data will be analysed. The study area explains where the study was conducted, while data collection explains how the data was collected, analysed and presented.

Chapter 4: Results and Discussion

Chapter 4 presents the results and analysis of the research. It provides information about the challenges faced by emerging farmers in managing projects for sustainable agricultural development in the study area in relation to the objectives of the study.

Chapter 5: Findings, Conclusion and Recommendations

The final chapter summarises the findings and conclusions resulting from them. It also addresses the objectives mentioned in chapter one and how data was collected and analysed. It focuses on the findings of the study, making recommendations and suggesting possible further research areas in managing projects for sustainable agricultural development.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

In South Africa, the agricultural system has always been dual in nature with two sectors existing along parallel lines, i.e. the emerging farming sector, on the one hand, and the commercial farming sector on the other. The nature of the emerging farming sector is small farms that use traditional production techniques that are labour intensive and lack institutional capacity and support. To the contrary, commercial agriculture is inclusive of farms that have relatively high turnovers and use modern production techniques that are capital intensive and have links with key input and output markets (Greenberg, 2010).

The government has taken a conscious decision to develop emerging farmers to a more sustainable level; hence, the South African government aims at creating agricultural policies for integrated agricultural economy (RSA, 2001).

2.2. Agriculture in Developing Countries

Agriculture remains an important economic sector in many developing countries. It is a source of economic growth and a potential source of investment opportunities for the private sector. According to FAO (2010), in agriculture-based economies, which include most of Sub-Saharan Africa, agriculture generates 29% of the GDP on average. In transforming countries, countries where agriculture is no longer a major source of economic growth, which include most of South and East Asia and the Middle East and North Africa, the contribution of agriculture to the GDP is much lower. (Mahul & Stutle, 2010).

Agriculture provides employment for 68% of the population in agriculture-based countries and 48% in transforming economies. About 94% of rural households live from their agricultural activities in agricultural-based countries (FAO, 2010). Many developing countries have seen major shifts in their agricultural policies toward the modernisation of the agricultural sector. The change in policy contributes to more sustainable growth of the sector, although growth has been slower than in non-agricultural sectors, except in agricultural-based countries (FAO, 2010). According to Mahul & Stutle (2010), agriculture can contribute to growth, reducing poverty and to a sustainable environment.

Many developing countries in Africa are faced with various constraints that negatively affect the agricultural sector and leave it underdeveloped. According to Mahul & Stutle (2010:19), these factors, include external risks such as natural disasters, temperature and diseases and have discouraged investors from investing in the agricultural sector, thereby affecting livelihoods, as many depend on this sector. Agriculture provides food, income, and jobs, and hence, can be an engine of growth in agriculture-based developing countries and an effective tool to reduce poverty in transforming countries (Mahul & Stutle, 2010:19).

2.3. Agriculture in South Africa

The trend of agricultural productivity in South Africa can be traced back to 1910. Various authors (Liebenberg; et al., 2010); Conradie et al., 2009); Nin et al., 2003); Schimmelpfenning et al., 2000 and Thirtle, et al., 1993) have had an interest in estimating agricultural productivity over the years. Estimates from all these studies show that the productivity of the agricultural sector has fluctuated over the years. In some years, it was stagnant whilst in others it increased or decreased (DAFF, 2011).

According to DAFF (2012), crops grown in South Africa include: deciduous fruit which is mainly grown in the Western Cape and in the Langkloof Valley of the Eastern Cape. Smaller production areas are found along the Orange River and in the Free State, Mpumalanga and Gauteng. In 2011, South Africa produced 1 644 825 tons of deciduous fruit. Pineapples are grown mainly in the Eastern Cape, and in northern KwaZulu-Natal, other subtropical crops such as avocados, mangoes, bananas, litchis, guavas, papayas, granadillas are grown. Macadamia and pecan nuts are mainly produced in Mpumalanga and Limpopo, in the subtropical coastal areas of KwaZulu-Natal and in the Eastern Cape. South Africa is regarded as the eighth largest wine producer in the world (DAFF, 2012).

Animal production contributes approximately 41% of the country's agricultural GDP. About 500 000 people are employed by the industry. Milk production in South Africa contributes approximately 0,5% of the world's milk production. South Africa has four major dairy breeds: Holstein, Jersey, Guernsey and Ayrshire. Mpumalanga commands the greatest share of beef production in South Africa, accounting for 23% in 2009, followed by the Free State and Gauteng, taking up 20% and 13% respectively. Commercial farmers own 60% of the 14,1 million cattle in South Africa. Altogether there are 27 popular beef breeds in South Africa.

These include Brahman, indigenous Afrikaner and Nguni, Tuli, Boron, Bonsmara, Drakensberger, Simbra, Beefmaster, Angus and Braford (DAFF, 2012).

The agriculture sector in South Africa faces considerable impact from climate change, which affects the livelihoods of the majority of people, especially those who are vulnerable to food insecurity. South Africa responds to international obligations regarding climate mainly through the Department of Environmental Affairs, but the Department of Agriculture, Forestry and Fisheries, as well as other departments, such as the departments of mineral resources, energy, science and technology, and water affairs are also involved (DAFF, 2012).

The Climate Change Programme, implemented by the Department of Agriculture Forestry and Fisheries, includes programmes for raising awareness, developing policy, sector mitigation and adaptation plans, conducting vulnerability assessments countrywide, and identifying and coordinating climate-related research projects (DAFF, 2012).

The importance of the agricultural sector in the South African economy is often stressed by farmers and agricultural industry organisations. The reality, however, is that the sector has constituted less than 3% of the economy since 2005 (DAS, 2012). Despite this, agriculture is critically significant to South Africa's economy and for the development of the Southern African region. Since 1994, the government has been working to develop emerging farming to boost job creation in the country (South African Business Guide Book, 2006). It is therefore important to successfully manage projects for sustainable agricultural development.

2.4. Emerging Farmers

The National Department of Agriculture (NDA) defines emerging farmers as farmers who are the beneficiaries of one of the government's land reform programmes, for example, Land Redistribution for Agricultural Development (LRAD) and Comprehensive Agricultural Support Programme (CASP). They are farmers who are mainly dependent on state and semi-state organisations for support and finance; they consume and sell some portion of their harvest (NDA, 2006).

According to Masango (2006), emerging farmers in South Africa come from the group of smallholder farmers who previously did not have access to the mainstream of the economy. This study defines emerging farmers as those farmers who are participating in the market and intend to produce and sell their produce.

According to Clifton (1970), emerging farmers are regarded as subsistence farmers in Sub-Saharan Africa. Nearly all the crops and livestock that they raise are to sustain their families. Although good weather occasionally allows the farmers to produce surplus, rarely do they have enough surplus to sell for cash or to store for later use. They may sell a portion of their produce, not because it is a surplus but because they are forced to meet family needs for necessities which they are unable to produce themselves. Because surpluses are rare, subsistence farming does not allow for the generation and accumulation of capital and thus the farmers are not endowed with the financial resources to buy inputs for increasing productivity and hiring labour (Waceke and Kimenhu, 2007).

2.5. Government Policies and Emerging Farmers in South Africa

After 1994, South African agricultural policy expanded its focus from the fully developed, modern, commercial farming sector to include the emerging farming group found in traditional tribal areas. Senyolo (2007) attests that government institutions like the Department of Agriculture, the Land Bank and the Agricultural Research Council hastened to revamp policies to cater for the needs of this needy group.

According to DBSA (2005), most agricultural development institutions are still learning how to deal with the special circumstances and needs of emerging farmers. The result is that the National Department of Agriculture has all but lost direct control over the instruments and institutions with which it could possibly influence the agricultural sector.

Access to land is essential if the poor are to enjoy the benefits of agricultural growth, and creating such access is expected to improve the production capacities of the marginalised. However, land ownership in South Africa is highly skewed due to past policies (DBSA, 2005). To correct this imbalance, the government launched its land reforms, comprising tenure reform, restitution and redistribution programmes in 1994.

Tenure reform aims to address insecure tenure; restitution involves giving back land or providing equivalent compensation to those who were expelled from their land through apartheid laws after 1913. Redistribution aims to rectify racial imbalances in land ownership (DBSA, 2005).

Emerging farmers' agricultural growth cannot be achieved without access to farmer support services. In the 1990s, the National Department of Agriculture initiated the Broadening Access

to Agriculture Thrust (BATAT) programme to provide such services, but it never got further than the planning stage. The Department then came up with the new CASP (National Department of Agriculture, 2004). However, this approach needs to be broadened to include the emerging farmers from the former homelands. Until that happens, the emerging farmers will not receive the services and support they need for sustainable agricultural development.

2.6. Sustainable Agricultural Development

Sustainable development has become a kind of conceptual touchstone, one of the defining ideas of contemporary society. Development is defined as the act or process of developing, growth and progress, while development that meets the needs of present generation without compromising the ability of future generations to meet their own needs is regarded as sustainable development (Strange & Baley, 2008)

Sustainable development is about integration: developing in a way that benefits the widest possible range of sectors, across borders and even between generations. In other words, our decisions should take into consideration the pillars of sustainable development which are society; environment and the economy (Strange & Baley, 2008).

The challenge for sustainable agricultural development is not only for farmers but also for society at large. What remains unclear is the question of how to adapt to sustainable agricultural development in a manner that takes into account local diversity. Agriculture and rural development should be treated as local concerns, starting with a definition of sustainable agriculture.

According to Francis (1990), sustainable agriculture is a philosophy based on human goals and understanding of the long-term impact of human activities on the environment and consequently, on other species. Dumanski (1997) claims that sustainability is a direction rather than a destination and there must be agreement as to what is to be sustained, for whom, and for how long. Sustainable agriculture is a system of farming that empowers farmers to work with natural processes in order to conserve resources, such as soil and water, while minimising waste and the environmental impact (Mason, 2003).

Dumanski (1997) further insists that the aim of sustainability is to leave future generations with more opportunities than we have ourselves. He further stresses that sustainable land management combines technologies, policies and activities aimed at integrating socioeconomic

principles with environmental concerns so as to simultaneously maintain or enhance production/services, reduce the level of production risk, protect the potential of natural resources and prevent degradation of soil and water quality. It should be economically and socially viable and acceptable.

The meaning of sustainability is further elucidated by Pearson (2003) who defines a sustainable system as one in which resources are kept in balance with their use through conservation, recycling and renewal; practices preserve agricultural resources and prevent environmental damage to farm and off-site land, and production, profit and incentives retain their importance, because not only agriculture needs to be sustained, but so do farmers and society.

These definitions of sustainability pose challenges to farmers and for the South African government, mostly to its agricultural extension policies, agencies and operations. These policies need to be translated into practical measures for agriculture. Farmers will need clear guidelines and support to build the capacity necessary to engage in sustainable agriculture.

Farmers' projects have become very popular in agriculturally related activities in both developed and developing countries. According to Stevens & Terblanché (2004), many factors motivate the formation of farmers' projects, including an efficient means for communicating, transmitting and sharing information. The mobilisation of farmers into effective projects is a process that will take time to develop to the point where they can be effective and efficient, as it will focus on local people and their needs, knowledge, skills, socio-cultural values and institutional structures.

2.6.1. Promoting Sustainable Agriculture

According to Krall (2015), education, knowledge and agricultural advice are essential for sustainable farming, especially by emerging farmers in developing countries. Access to resources, land and water is equally important. Modern information and communication technologies are playing an increasingly vital role in farming.

Krall (2015) further indicates that these practices will make emerging farmers think and act entrepreneurially. However, other agricultural stakeholders, such as individuals working for research institutes, training and advisory service providers, processing and marketing companies, and civil society as a whole, must also constantly generate new knowledge and

integrate existing insights. Sustainable farming requires a lot of knowledge; hence farmers must make optimal use of the available resources.

According to Awosola & Scalkwyk (2006), farmer mentorship programmes have been initiated in South Africa by concerned stakeholders and the government to improve the farming skills of the emerging farmers who find it difficult to cope with the evolving and challenging production and marketing environments.

2.6.2. Programmes Employed by Government to Support Famers

- **Farmer Support Programme**

The Farmer Support Programmes (FSP) of the Development Bank of Southern Africa (DBSA), implemented from the late 1980s, in an attempt to provide farmers in the former homelands with the support required for successful agricultural production, seem to have served as some kind of model for the programmes employed by government to support farmers.

- **Settlement Land Acquisition Grant (SLAG) programme**

Between 1994 and 1999, the Settlement Land Acquisition Grant (SLAG) programme was introduced. Through SLAG, qualifying farm workers and dwellers were granted the means to purchase and develop agricultural land. The programme's objective was to improve secure tenure and livelihoods by providing access to and productive resources for beneficiaries. Following various challenges with the SLAG programme, in 2001, the department introduced the Land Redistribution for Agricultural Development programme (LRAD) to replace SLAG (AgriSA, 2017).

- **Land Redistribution for Agricultural Development Programme**

LRAD aimed at improving nutrition and the incomes of rural communities, at stimulating growth from agriculture and empowering beneficiaries to improve their socio-economic well-being. In addition, LRAD aimed at transforming farmers to operate on a commercial scale. Some of the challenges which led to its failure include the lack of access to capital and markets, poor infrastructure, lack of mentorship and limited financial management skills. Further, LRAD was criticised for its slow pace in transferring land to previously disadvantaged persons. These and many other challenges led to the phasing out of this programme between 2007 and 2010 (AgriSA, 2017).

- **Reconstruction and Development Programme**

The Reconstruction and Development Programme (RDP) initiated in 1994, situated land reform as “*central to and a vital driving force of a process of rural reconstruction and development*”. It did, however, refer rather scantily to agricultural issues and did not highlight agricultural development per se, although the RDP clearly provided a sound strategic framework for agricultural development to accompany land reform initiatives by the state (Van Rooyen *et al.*, 1994).

- **Comprehensive Agricultural Support Programme**

The Comprehensive Agricultural Support Programme (CASP) was introduced to enhance the provision of support services to promote and facilitate agricultural development targeting beneficiaries of the Land Reform and Agrarian Reforms programmes (Minister, 2004). However, it was a disappointment because of the inability of the provinces to implement CASP, and the loss in expertise from the national department in the post-apartheid era.

- **One Household One Hectare**

The programmes that the government has implemented to assist the farmers all have similar objectives. LRAD may have been aimed at mainly commercial farmers, whilst the 1HH 1H programme is aimed at small scale household producers; however, both programmes have the objective to address poverty in rural areas, effective land use and job creation; and form part of the department’s land reform agenda. Of concern, however, particularly with regard to SLAG and LRAD, is that they have been phased out, not because they had reached their finality, but rather because they failed. Each lasted only five years (AgriSA, 2017).

In November 2015 the Department of Rural Development and Land Reform launched the One Household One Hectare. The main objectives of this programme are:

- a) to contribute to the reduction of poverty in rural areas,
- b) to revive a culture of highly productive, black smallholder farmers and food producers,
- c) to build security of tenure, access to land and to, increase the involvement of individual households in production activities,

- d) to create sustainable employment in rural households,
- e) to create viable rural small to medium agricultural enterprises,
- f) to build competencies and broaden the skills base of targeted households and communities,
- g) to restore the social capital and beauty of Ubuntu as the currency that creates social cohesion among rural households; and
- h) to rebuild the sanctity and dignity of family life as the most critical success factor in the rural socioeconomic transformation effort of the state.

2.6.3. Importance of Sustainable Agricultural Development

- **Ensuring agricultural production is economically viable**

According to Khwidzhili & Worth (2016), one of the challenges facing South African agriculture is the shift from food production for subsistence farming to commercial farming aimed at generating sustained income via profits attained through the marketing of agricultural products. For the farmers to be more productive, the income made from the production must at least equal or exceed its cost. However, such economic viability must be sustained without compromising the natural environment.

- **Ensuring agricultural production is socially acceptable and accountable**

Krall (2015) indicates that agricultural production and post-harvest activities must fit the society in which they take place. This covers substantial territory, from the choice of products themselves, to the raw (genetic) material used, to the inputs used, and to the production, processing and marketing methods used. All of these are subject to social acceptability and accountability.

- **The role of gender equality in sustainable agriculture**

Krall (2015) attests that agriculture is becoming increasingly feminised in the wake of disease, death from HIV/AIDS, and emigration by male family members. It has been observed that currently women are also taking on roles that were originally considered male roles or assuming sole responsibility for agricultural production and livestock farming. Nonetheless,

women in many countries are prevented from having access to and control over land for legal or traditional reasons.

The same is true for access to services, resources, agricultural advice, and innovation markets. Women are also almost entirely unrepresented in rural organisations and institutions in many regions, and generally have a lower level of education and less information than men. This prevents women from having an equal say in decision-making processes within rural projects and from influencing policies and strategies at the municipal level (Krall, 2015).

It is essential for emerging farmers to have access to a variety of development opportunities for agriculture to be economically and socially sustainable. This approach can assist rural farmers to reach their full economic potential. A major challenge for sustainable agricultural development in South Africa is the limited ability of previously disadvantaged farmers, such as emerging farmers, to sustain their projects. Emerging farmers in South Africa emanate from the group of smallholder farmers, who were previously excluded from the mainstream of the economy (Krall, 2015).

2.6.4. Challenges to Sustainable Agriculture

There are various studies that have been conducted indicating the challenges that emerging farmers are face. A study in Uganda has shows that the failure of formal banks to serve the poor is due to a combination of high risk, high costs and consequently low returns associated with such business (Okurut et al., 2004). Lack of access to start-up finance is still a major challenge for the emerging farmers. Masango (2006) attests that emerging farmers who have land, still lack the equipment and skills to manage their projects.

Spio (2002) points out that in South Africa, financial intermediaries have not been able to accommodate small-scale rural farmers because it is risky, costly and a difficult task associated with high transaction costs. Lack of information has prevented large formal lenders who have capacity to serve the small farmers and the poor. The methods and practice of most banks in Limpopo Province does not meet the needs of their clients (Spio, 2002).

According to the study by Lotz et al, (2000), emerging farmers have identified the need for training on all technical aspects of their farming projects, as well as the development of financial, farm management and marketing skills, as immediate priorities.

In South Africa, the present government is committed to redressing imbalances in the farming industry. However, a number of problems may hinder the sustainability of this economic reform. According to Awosola and Scalkwyk; (2006), since the mid-90s the South African government has expended huge amounts of money on the acquisition of land for previously disadvantaged people. However, not only are funds for providing land at the target rate limited, but also proper institutional arrangements have not been made to deliver support to land reform beneficiaries (DBSA, 1997).

Emerging farmers, on their own, cannot attain the objectives of the projects that they are involved in, hence they need support from various stakeholders. The effect of this support is at best marginal for emerging farmers, while established commercial farmers feel marginalised in a more liberal market (World Bank, 1994 & Makhura, 1994).

Many emerging farmers lack farm resources such as land, market access, credit and management abilities (Makhura, Goode & Coetzee, 1998). They operate below competitive levels, probably because they lack experience and were confined to subsistence operation for a long period. Their constraints include inadequate technology and lack of entrepreneurial skills, marketing infrastructure and information.

- **Extension services as a means to promote adoption**

The importance of project management and the urgent need to transform extension services is clearly stated in the Strategic Plan of the Department of Agriculture (2008/2009). . The study conducted by Magano & Terblanché (2014), attempts to address the training of extension officers in project management as it was seen as a priority for emerging famers.

Even if new and more productive technologies were available, farmers might lack information about their existence and knowledge about how to implement these techniques properly. Extension services have been used as a means to diffuse new technology in developing countries. Extension services mostly include education about new technologies as well as credit provision (Birkhaeuser et al., 1991).

However, most farmers lack the necessary technical training and field experience to deliver their services effectively. According to Dethier & Effenberger (2012), during the 1970's, a new approach, mainly driven by the World Bank and called the "training and visit" (T&V) approach, began to spread. In addition to teaching farmers about new technologies, it included

obtaining their feedback about the problems they encountered. The cost of the new system was unsustainable because its greater staffing requirement was very high.

Anderson & Feder (2007) suggest that the impact of extension services has been mixed, with some projects having high returns on investment and others only negligible success. A general problem with the T&V approach is that extension agents, who are civil servants, often lack accountability. In addition to increasing accountability and the quality of service provision, privatising extension services has reduced the financial burden on the public sector and made services more financially sustainable. (Dethier & Effenberger, 2012)

Magano & Terblanché (2014) attest that globally only 5 percent of extension services are provided by the private sector. Private extension services respond better to demands from commercial farmers but emerging farmers might be unaware of their own needs, unable to articulate them; and unable to afford services. Therefore, they might demand fewer services than they need.

In this situation, provision only by the private sector to different groups of farmers might not be the best solution. The better approach would be a private-public partnership to provide services as well as a publicly funded but privately managed system. This would increase the efficiency of the system and cater to all groups of farmers; (Dethier & Effenberger, 2012).

The environment in which farmers operate changes and requires new ways of providing extension services. A recent idea has been the introduction of Information and Communication Technologies (ICTs) into extension services and rural development projects in general. ICTs can deliver information that is important for the development of rural areas in the long term (such as education) and in the short run (such as market information) while, on the other hand, promoting agricultural development. Agriculture, for development strategies, needs to focus on emerging farmers by understanding the challenges they face and finding ways to make their projects more productive (World Bank, 2007).

2.7. The Role of Agriculture in Economic Development

According to De Villiers (2008), there is wide development regarding the key role of agriculture in the development of less developed countries (LDC's). Most of the LDC's depend on agriculture for economic growth. Agriculture can play a critical role by contributing to economic growth through product, market, and factor contributions.

- **Product contribution**

Product contribution comes from the production of food to meet the demand and for the society to be food secured. A country that has achieved full food security, at the national, regional, and household levels, will not be dependent on food imports. LDC's with inadequate food security are likely to import food at a heavy cost. The disparity between the supply and demand for food directly affects prices. Sharp increases in food prices has a more dramatic impact on low-income households than on high income households, due to the higher percentage of total income spent on food by low income households (Lele, 1995).

Thirtle et al. (2003) show that agricultural productivity growth has had a substantial impact on reducing poverty in Africa and Asia, whereas productivity growth in the industrial and services sectors has almost no impact on poverty levels.

The study conducted by De Villiers (2008) focuses on the externality effects or contribution of the agricultural sector to society. These effects include the impact of agriculture on poverty alleviation, household food security, the provision of environmental services, out-migration control and buffers in times of economic crisis and national cultural identity. The study concludes that the agricultural sector has significant positive externalities for the rest of the economy, which therefore warrant a significant investment of resources into the sector, despite its relatively low share in the economy

- **Factor contribution**

According to Lele (1995), the factor contribution of agriculture for economic development connects linkages between agriculture and other industries forwards and back. Agriculture produces a number of food and products used for further processing and value adding by the industrial sector. In addition, agriculture is an important end user of a number of industrial products as used in agricultural production such as fuel, fertilizer, insecticides, and herbicides. Hence, the commercial agricultural sector makes an important employment contribution to the economy.

The theory of agricultural linkages has been extended to include consumption linkages. Johnston & Mellor (1961) identify these consumption linkages as one of the roles of the agricultural sector in their seminal article. Mellor (1966) later expanded on these consumption linkages, arguing that increased rural production leads to increased rural income, which

stimulates industrialisation through increased demand for manufactured goods. Later theorists strongly agree with this conclusion by arguing that an agricultural demand-led development approach is superior to an export-led development approach (Kindleberger, 1962).

- **Market contribution**

The market contribution from agriculture to the economy comes from the export of surplus agricultural products, earning foreign exchange to fund imports. This contribution cannot be made by subsistence agricultural products without a market surplus.

Specific research on the role of agriculture in economic development has been illustrated by the study conducted by Simon Brand in 1969 for his doctorate, *The Contribution of Agriculture to the Economic Development of South Africa since 1910*. The aim of Brand's (1969) study was to provide a holistic view of the interactions between the agricultural sector and the rest of the economy, in order to provide a necessary perspective against which agricultural policy could be evaluated. A secondary goal of the study was to identify possible areas for further research where understanding is lacking.

Brand investigated the contribution of the agricultural sector according to three main themes: product, market, and factor contributions. Brand reaches the following conclusions regarding each:

The **product contribution** of the agricultural sector represents the role of the agricultural sector as a source of food. Brand reaches two conclusions regarding this contribution. The first is that an increase in agricultural output does not have a significant effect on overall value added because of the small share of the sector in the economy. The second is that the sector is able to meet the domestic demand for food and therefore, the sector maintains nearly constant terms of trade with the rest of the economy. The price of food therefore remains constant relative to the prices of non-food items.

Market contributions represent the role of the agricultural sector as an earner of foreign exchange, as well as the linkages between the agricultural sector and the rest of the economy. Brand concludes that agricultural exports do not play a growth-leading role because their expansion rate lags behind other sectors. The sector plays a balancing role, however, because it maintains a positive agricultural trade balance.

Brand analyses both the sector's consumption and production linkages. In terms of consumption linkages, he finds that the impact of the purchase of goods by the sector on the economy is insignificant because of the small share of the sector in the economy. His investigation of the production linkages between the agricultural sector and the rest of the economy shows that the strength of the production linkages increased but the importance thereof declined as the economy developed. In other words, the agricultural sector induces few activities in other sectors when the agricultural and related sectors represent a large share of the economy.

Factor contributions represent the transfer of production factors, such as capital and labour, between the agricultural and non-agricultural sectors. In terms of capital, Brand concludes that capital flows into the agricultural sector from the rest of the economy.

This reduces the demand for capital from the agricultural sector and also lowers the cost of capital in the economy. The second reason is that capital is provided to the agricultural sector at subsidised rates. Brand (1969) also investigated the dual nature of the South African agricultural sector which is split into modern and traditional sectors. The analysis from this perspective relies heavily on the work of Lewis (1954) and Liebenstein & Mellor (1966). Brand concludes that almost all the product and market contributions of the agricultural sector to the South African economy are provided by the commercial agricultural sector.

2.8. Defining a Project

According to Leser (2014), a project is a unique process, consisting of a set of co-ordinated and controlled activities with start and finish dates, undertaken to achieve objectives conforming to specific requirements and it includes time constraints, cost and resources. Further, the PMBOK defines a project as a temporary endeavour undertaken to create a unique product, service or result (Project management Institute, 2008). A project is a one-time activity with well-defined desired end results.

A project can be divided into sub-tasks that must be accomplished in order to achieve the project goals (Meredith & Mantel, 2012). It is also important to note that assembling the project team requires the right mix of individuals and composition of skills that will be able to accomplish the project goals successfully. Regardless of time, place or culture, the dominant characteristic of a project is that it has a goal that has to be met within certain constraints of

time, cost and scope. The goal is always to achieve beneficial change. This is seen with emerging farmers who need to improve their standards of living through the projects.

The project approach is, according to Ewang (2006), a powerful instrument that allows the business management model to be implemented in the extension system. All funded projects have to be registered with clearly defined objectives, action plans, timelines, deliverables, key performance indicators, resource assignments and executing responsibilities (Department of Agriculture, 2005). According to Düvel (1998), meaningful evaluation of projects or extension programmes is only possible if the objectives are clear, specific and measurable.

2.9. Project Management

Project management is the application of knowledge, skills, tools, and techniques to project activities to meet project requirements. Richman, (2006) defines project management as the involvement of acquisition and use of limited resources to meet technical and performance requirements. The planning, monitoring and control of all aspects of a project and the motivation of all those involved in it, are important to meet the project objectives within the agreed criteria of time, cost and performance.

According to Hart, Burgess & Hart (2004), the agricultural sector in Southern Africa implies that many agricultural development projects seem to be considered as linear journeys from point A to Z, with very little consideration given to timing, duration, cost and external influences. Similarly, in the past, limited attention was paid to the way intended goals were achieved and how this process unfolded (Hart, 2003). Today, this has changed and it is recognised that projects undergo a series of phases from their conception to completion. These phases are collectively termed the project management cycle.

Phases may overlap, run parallel and even loop forward or backwards depending on what transpires during each phase. Conyers & Hill, (1992) attest that the cycle offers a framework by which the project can be defined and put into operation in terms of its goals, objectives, activities, outputs and outcomes. It also serves as a management tool for plotting and tracking resources, costs and progress (developments) during each phase. Hart. et al. (2004) point out that the project management cycle can also be used for monitoring and evaluation purposes.

Agricultural development projects in Africa have predominantly followed the input-output development model; which assumes that a country's economic and social development can be externally induced (Donnelly-Roark, 1998), ignoring the roles and effects that the project actors, internal and external

influences, bring to bear on the project process. Projects based on these models identify beneficiaries who receive various externally derived, and often locally unavailable, inputs that are expected to bring about development. However, such models have not brought about sustainable development because once the externally derived inputs are stopped, due to any number of reasons; the associated development falters (Hart, Burgess and Hart, 2004).

2.9.1. Functions of Management

According to Richman (2006), management accomplishes work through the expenditure of resources and it is also the science of employing resources efficiently and effectively in order to achieve the goal of the project. The following are classic functions of management: Planning, Directing, Organising, and Co-ordinating (Richman, 2006)

- Planning

Planning is a process that begins with the understanding of the current situation and further establishes a desired future state. The gap between these two states causes the project manager to identify and course of action and then to synthesise that course of action into a viable plan.

Planning means defining goals for future organisational performance and deciding on the tasks and use of resources needed to attain them. Lack of planning or poor planning can result in negative performance; (Daft, 2009).

- Directing

Directing communicates the goals, purposes, procedures and means to those who will do the work. It is the process of communicating the plan either orally or in writing.

- Organising

Organising brings together all the resources needed to achieve the project's objectives. To organise is to manage the procurement life cycle. It begins with the need to define requirements for material, equipment, space and; supplies. It reflects how the organisation will try to accomplish the plan. It involves assigning tasks, grouping tasks into departments, delegating authority and allocating resources across the organisation. The ultimate

responsibility of managers is to achieve high performance, which is the attainment of organisational goals by using resources in an efficient and effective way (Daft, 2009).

- Co-ordinating

Co-ordinating is the act of synchronising activities to ensure that they are carried out in relation to the importance and with a minimum of conflict. When two or more entities compete for the same resources such as time, space, money, people etc., there is a need for co-ordination. The primary mechanism of co-ordination is prioritisation. With all of the above mentioned management functions, there are various people involved for the success of the project, hence, participation is essential for sustainable development.

2.10. Participatory Project Management

Sustainable development is considered to be achievable only if participation occurs and beneficiaries become participants and actors in their development (Burkey, 1998). While participation is only part of the answer to development and poverty alleviation, it is the one which we focus upon. To achieve participation, a common framework and platform is required upon which farmers, researchers and extension officers can interact.

According to Hart et al (2004), the participatory methods such as Rapid Rural Appraisal (RRA), Participatory Rural appraisal (PRA), Participatory Innovation Development (PID), etc. can provide the necessary platform. When these and participatory principles are combined with the project management cycle, it is possible that a suitable framework will emerge for managing participatory development projects.

2.10.1 Participatory Principles

There has been much international debate about levels and the types of participation utilised in rural development and research (Mikkelsen, 1995; Mouton, 2001; Pretty, 1996). These debates range from what is essentially considered non-participation or coercive participation (Hart, 1992), in which participation is by virtue of manipulated presence rather than voluntary action, to complete participation, whereby local actors identify, design and control the project.

The characteristics which Brown & Tandon (1983, as cited in Mouton, 2001) and Mouton (2001) attribute to participatory research projects identify the following seven principles of participation:

- Local identification - the problem or required intervention is identified in the community by the local residents;
- Local conceptualisation - local people are involved in setting the project agenda and goals and in the generation, recording and analysis of data;
- Local control - local people are involved in the management of the project and gradually assume control of the process and the use of the outcomes;
- Shared ownership - there is joint or shared ownership of the project and the outputs or products of this process by all parties directly involved;
- Equity - the terms researcher or development agent are applied equally to all participants, both those with and those without formal training as well as to insider and outsider;
- Empowerment – the process strengthens people’s awareness of their own abilities and resources while supporting their mobilisation and organisation.

Any agricultural development project assuming a participatory identity should at least reflect the agreed requirements and the involvement of the beneficiaries as well as requirements of other stakeholders, such as consultation, participatory ownership and responsibility. For a project to be truly participatory it must initiate an empowerment or learning strategy, enabling participants to “... define their own goals and objectives; assess the implications of options open to them; decide and assume responsibility for actions to achieve their agreed to objectives” (Donnelly-Roark, 1998).

Due to the diversity of the actors involved in the project, different participatory methods may be implemented in the different project phases in order to achieve the project objectives. These methods include Participatory Rural Appraisal (PRA), Participatory Learning in Action (PLA), Participatory Technology Development (PTD) or Participatory Innovation Development (PID), Participatory Impact Monitoring (PIM) and Participatory Monitoring and Evaluation (PME) (Scoones & Thompson, 1994; Van Veldhuizen et al., 1997, Waters-Bayer & Van Veldhuizen, 2004), each of which invoke various participatory tools and are available for ensuring participation and good communication during the different project phases. A detailed discussion of these methods goes beyond the focus of this study.

2.11. Management of Agricultural Projects

The management of agricultural development projects in South Africa is important to their success. The South African Society for Agricultural Extension (SASAE) held a conference during May 2001 where a number of obstacles were highlighted during the conference proceedings. Of these, two stand out: (1) the ineffective application of project management principles by managers and those tasked with project management/leadership, and (2) the lack of significant encouragement to participate shown towards those involved in projects.

According to Conyers & Hill (1992), the project cycle, irrespective of what name it goes by and the discipline that invokes it, offers a framework by which the project can be defined and put into operation in terms of its goals, objectives, activities, outputs and outcomes. It also serves as a management tool for identifying and plotting the resources, costs and progress during the phases.

Agricultural development projects in Africa have predominantly followed the input-output development model which assumes that a country's economic, and social development can be externally induced (Donnelly-Roark, 1998). Projects based on these models identify beneficiaries who receive various externally derived inputs that are expected to bring about development. However, such models have not achieved sustainable development which is now considered to be achievable only if participation occurs and beneficiaries become participants and actors in their development (Burkey, 1998).

To achieve participation, a common framework and platform is required upon which farmers, researchers and extension officers can interact. The participatory toolboxes such as Rapid Rural Appraisal (RRA), Participatory Rural Appraisal (PRA), etc. can provide the platform. When these toolboxes and participatory principles are combined with the PMC it is possible that a suitable framework will emerge for managing participatory development projects.

The following are the findings for the study conducted by Hart et al (2005) on the topic of *Reducing Pitfalls in Agricultural Development Projects: A Case for the Participatory Project Management cycle (PPMC)*:

- Only one project manager should be appointed for the duration of the project and this person should have the necessary skills to manage the project effectively and to ensure

that the project is implemented in an interdisciplinary manner. This ensures that activities and resources are integrated for the benefit of the project.

- Projects that are not tested for feasibility; or where feasibility studies indicate that they are unfeasible, should not enter the design and planning phase, let alone be implemented. If this happens poorly conceived projects could have a life of their own and continue indefinitely. Hart et al. discussed a project which was terminated when one of the successive managers decided to close it down. Resources had been used without ever being likely to achieve the intended goals and objectives.
- All parties collaborating on a project need to work together rather than for individual purposes or in opposition to one another. This is achieved by setting clear goals and objectives through clear communication done in a participatory manner amongst the representatives, ensuring that all the voices are heard. This allows for effective decisions to be made and implemented based on agreed and identified goals and objectives. The PPMC provides a framework that enhances communication between researchers, extension officers and local actors.

2.12. Conclusion

The government supports emerging farmers and is regarded as a key role player South Africa's overall development strategy. It is seen as the driving force for rural development. The goal is to create healthy and sustainable farming enterprises and local economies that provide jobs and opportunities and increase rural income. However, a lack of production skills, insufficient production inputs, lack of training, lack of funding and the lack of entrepreneurial skills are pivotal as they create stumbling blocks to the achievement the goals of the projects.

CHAPTER 3

RESEARCH METHODOLOGY

3.1. Introduction

This chapter introduces the research design and methodology used to respond to the research questions in the study. There is a brief discussion about the way the research design was derived from the research objectives and then an overview of the selected research design and its suitability for the study. Thereafter, the research design methodology is outlined and justified. The process of data collection is described together with the challenges experienced during the collection process.

Research methodology refers to the research process and the kinds of tools and procedures to be used (Mouton, 2001). For the purpose of this study, the mixed methods approach was employed to elucidate the respondents' individual and collective social actions, beliefs, thoughts and perceptions about the challenges faced by emerging farmers in managing projects for sustainable agricultural projects in the Capricorn District.

3.2. Research Design

Research design is defined as the plan according to which we obtain research respondents and collect information from them (Kruger, 2005). It can be thought of as the logic or master plan of a research study that throws light on how the study is to be conducted. There are two approaches to research design: qualitative and quantitative design. According to Creswell (2014:4), quantitative research is an approach for testing objective theories by examining the relationship among variables, where-as, qualitative research focuses on exploring and understanding the meaning individuals or groups ascribe to social or human problems.

The advantage of the qualitative approach is that it provides in-depth information that may be difficult to convey through quantitative methods. According to Huberman & Miles (1994), data gathered via the qualitative approach allows for detailed descriptions, and provides an explanation of processes occurring in a defined context. In this research, a detailed description of the situation of smallholder farmers in the Capricorn District was necessary in order to identify the challenges that emerging farmers face. Therefore, because this study requires an

outline of the situation faced by emerging farmers; the attributes of the qualitative approach were seen fitting.

The use of qualitative variables refers to a research design that uses data that is not suited for statistical inference (Jarbandhan, 2006). That means that it is not possible to quantify the data collected. Qualitative researchers are concerned with understanding the context in which behaviour occurs, not just the statistical extent to which it occurs (Babbie, 1992).

According to Mouton (2009), the research design has to be influenced by the kind of study or project that needs to be undertaken and the results that the researcher seeks. The purpose in using qualitative variables is to read between the lines in an effort to capture the human experiences underlying actions and behaviour that are not always possible to quantify. It is also used to get closer to the respondent. The type of research does not only determine the design, but also the measurement and analysis to be used (Patton, 2002).

According to Leech & Onwuegbuzie (2008), mixed methods research represents research that involves collecting, analysing, and interpreting quantitative and qualitative data in a single study or in a series of studies that investigate the same underlying phenomenon. Creswell & Clark, (2007) also attest that mixed methods research is a research design with philosophical assumptions as well as methods of inquiry that guide the direction of the collection and analysis of data, and the mixture of qualitative and quantitative data in a single study or series of studies.

The central premise of mixed methods research is that the use of quantitative and qualitative approaches in combination provides a better understanding of the research problems than either approach alone, hence, the use of triangulation, which is a process of verification that increases validity by incorporating several viewpoints and methods. It can be employed in both quantitative (validation) and qualitative (inquiry) studies.

According to Yeasmin & Rahman (2012), triangulated techniques are helpful for cross-checking and are used to provide confirmation and completeness, which brings 'balance' between two or more different types of research. The purpose is to increase the credibility and validity of the results. Often this purpose in specific contexts is to obtain confirmation of findings through the convergence of different perspectives.

However, although Patton (2002) acknowledges the importance of purpose he also concedes that there is no perfect research design and that trade-offs must be made because of real life limitations, such as the time available to conduct the study. In order to select a suitable research design, the researcher needed to take into consideration the following questions that she intended to answer:

- i) What are the difficulties that emerging farmers are face in Capricorn District?
- ii) What factors hamper emerging farmers in the implementation of projects in the study area?
- iii) What strategies could be used by managers to empower emerging farmers on project with regards to management in the study area?

3.3. Area of the Study

According to Kruger (2005), population is the full set of cases from which a research sample is taken. It encompasses the total collection of all units of analysis about which the researcher wishes to reach specific conclusions. The target population of this proposed study is 9 “plaas” projects funded by Department of Rural Development and Land Reform in the Capricorn District; there are 60 farmers on those plaas farms, including project officers. In the Polokwane Municipality there are 6 projects with 18 farmers and in Molemole there are 3 projects, with 12 farmers (LDRDLR RECAP, 2017).

Therefore, the sample for this study consists of 46 respondents from emerging farmers in the Polokwane and Molemole Local Municipalities made up of 30 emerging farmers and 16 project officers. The rationale for choosing these two municipalities is that most of the projects funded by the Department of Rural Development and Land Reform are in municipalities; hence, there are more emerging farmers which makes it easier for the researcher to collect data.

The Polokwane Municipality has a population of 628 999 with 178 001 households, the number of agricultural households is 41 867. The settlement type indicates that it is more urban than rural, while the Molemole Municipality has a population of 108 321 with 30 043 households, and only 8 003 of those households are agricultural (Stats SA). The diversity of these municipalities indicated by the above statistics also encouraged the researcher to compare them.

3.4. Population

According to Kruger (2005), defined population as the full set of cases from which the sample is taken. It encompasses the total collection of all units of analysis about which the researcher wishes to make specific conclusions. The target population of this proposed study is 9 plaas projects that were funded by Department of Rural Development and Land Reform in Capricorn District and there 60 farmers in those plaas farms with project officers. In Polokwane municipality there are 6 projects with 18 farmers and Molemole there are 3 projects also with 12 farmers (LDRDLR RECAP, 2017).

Therefore, the sample for this study will consist of 46 respondents from the emerging farmers in the Polokwane and Molemole Local Municipalities which consists of 30 emerging farmers and 16 project officers. The rationale for choosing these two municipalities is that most of the projects funded by the Department of Rural Development and Land Reform are from those municipalities, hence there are more emerging farmers which makes it easier for the researcher to collect data.

Polokwane municipality has a population size of 628 999 with 178 001 households, on contrary the number of agricultural households are 41 867. The settlement type indicates that it is more urban than rural, while Molemole municipality has the population size for the area is 108 321 with 30 043 number of households and there are only 8 003 agricultural households (Stats SA). The diversity of the municipalities as per the above statistics also encouraged the researcher to compare these two municipalities.

3.5. Sampling Method

According to Tayie (2005), a sample is a subset of the population that is taken to be representative of the entire population. Two types of sampling methods are probability and non-probability sampling. A probability sample is selected according to mathematical guidelines whereby the chance of selection of each unit is known; on the contrary, non-probability samples do not allow the guidelines of mathematical probability (Tayie, 2005).

This type of sampling is conducted to provide accurate estimates of what is true for a population from a smaller group of subjects (sample). That is, what is described in a sample

will also be true, with some degree of error, for the total population. When probability sampling is done correctly, a very small percentage of the population can be selected. This saves time and money without sacrificing accuracy.

The researcher has used non-probability sampling. This includes purposive sampling, which is defined as the inquirer selecting individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon in the study (Creswell 2007).

3.6. Data Collection Method

Data collection methods basically refer to the tools to be used in collecting information from the respondents (Bless & Smith, 2004). Semi-structured interviews enable the researcher to get a better response from the participants. This tool was used also to enable the researcher to get reliable and valid information from respondents during the conversations and also to provide in-depth knowledge and understanding of the challenges faced by emerging farmers within the study area.

Due to the nature of this study, mixed methods, the researcher used questionnaires and semi-structured interviews to collect data from the 46 participants in the Polokwane and Molemole Local Municipalities. The questionnaires were distributed to all 30 emerging farmers to increase the response rate and validity and to maintain the validity and reliability of the study. The researcher called the participants to one place where she monitored the completing of the questionnaires.

The semi-structured interviews were completed with 16 project officers from the Limpopo Department of Rural Development and Land Reform through purposive sampling. Each interview was carried out one-on-one to ensure confidentiality, permission having been granted through consent forms.

Semi-structured interviews enabled the researcher to obtain a better response from the participants. This tool also enabled the researcher to elicit reliable and valid information from respondents during the conversations which provided in-depth knowledge and understanding of the challenges faced by emerging farmers within the study area.

In relation to questionnaires, administration is comparatively inexpensive and easy when gathering data from large numbers of people spread over wide geographic area. The researcher also conducted the interviews with the participants in Sepedi (the local language) and then translated their answers into English for the writing up. This was done to ensure that there was no communication barrier between the farmers and the researcher.

3.7. Data Analysis and Interpretation

Data analysis refers to analysing the data collected from the participants. In qualitative data, analysis is mostly done with words which can be assembled, sub-clustered or broken into segments (Miles, Huberman & Saldana, 2014). The segments can be organised to permit the researcher to compare, contrast, analyse and construct patterns out of them. Qualitative data analysis is primarily an inductive process of organising the data into categories and identifying patterns (relationships) among the categories.

Data analysis is the process of bringing order, structure and meaning to the mass of collected data (De Vos et al., 2004). After a researcher has completed the task of gathering information, the next step is data analysis. According to Henning (2004), working with qualitative data provides a researcher with many options as to how to convert the raw data into final patterns of meaning.

For the purpose of this study, data was captured manually by categorising it into themes, through coding and classification in order to bring meaning to words for the researcher to interpret them. The researcher identified various challenges that emerging farmers face and the magnitude of each challenge. Data was divided into small units of meaning which were then be systematically named and coded according to what each unit of meaning signified for the researcher. Coding is therefore the process of dividing data into parts through a classification system

The researcher used Microsoft Excel for the data collected through questionnaires, to interpret numerical data to give the actual meaning. The data was also used to analyse the relationship between the variables. Data was analysed using the thematic theme and demographics.

This study used inferential statistics to try to understand the sample data and to make judgements about the probability that differences between the two Municipalities are dependent on each other.

3.8. Ethical Considerations

According to Paul (2010), the kinds of ethical issues raised by research processes involving human beings, require that individuals should be treated with respect, should not be harmed in any way and should be fully informed about what is being done with them. According to Creswell (1998), the researcher has an obligation to respect the rights, needs, values and desires of the respondents. The following ethical issues were considered:

- The researcher asked for permission from authorities in the areas that the study was conducted;
- The researcher also ensured that the information obtained from the participants was kept confidential. This was done to assure participants that their contribution to the study would be confidential and that their contributions would be anonymous so that they would feel free to speak;
- Informed consent was obtained from participants;
- The researcher also ensured that there was no harm to any participant;
- Every participant was treated with respect and no one was forced to participate in the study;
- Plagiarism was avoided

3.9. Limitations of the Study

All methods of data collection have limitations; however, the use of multiple methods can neutralise some of the disadvantages (Creswell, Plano Clark, Gutmann, Hanson, 2003). According to Bowen & Wiersema (1999), a limitation of a study design or instrument may be a systematic bias that the researcher did not or could not control and which could inappropriately affect the results.

The limitations of this study are likely to be caused by the following:

- Time factor. The unavailability of the respondents due to their commitments to their work duties. In this case, the researcher made arrangements for schedules that meant would will be free to contribute to the study;
- Financial constraints in covering a large area;

- The wrong perception of the participants in providing the information. Some of the respondents were reluctant to provide the information and
- A lack of cooperation by some of the respondents in the area of the study.

The findings of this study will be limited to the Molemole and Polokwane Municipality areas and cannot be generalised. This is the case because findings based on a sample can be taken as representing only the aggregation of the elements that compose the sample frame.

CHAPTER 4

FINDINGS AND DISCUSSION

4.1. Introduction

The basis of the study was to ensure that the findings respond to the research objectives and questions. The instruments used to collect data were relevant for the study because they managed to capture both the research objectives and the research questions. The results are based on face-to-face interviews and questionnaires and purposive sampling was followed for the interviews. The questionnaires were given to 30 emerging farmers and interviews were conducted with 16 project officers. These figures 65.2% and 34.8% of participants respectively.

The data collected from the respondents was interpreted using Microsoft Excel for quantitative and for qualitative data was analysed manually through categorizing it into themes, coding and classification. The results are based on challenges faced by emerging farmers in managing projects towards sustainable agricultural development in Capricorn District.

SECTION A- Emerging Farmers

4.2. Demographics of Emerging Farmers

4.2.1. Gender distribution of the farmers

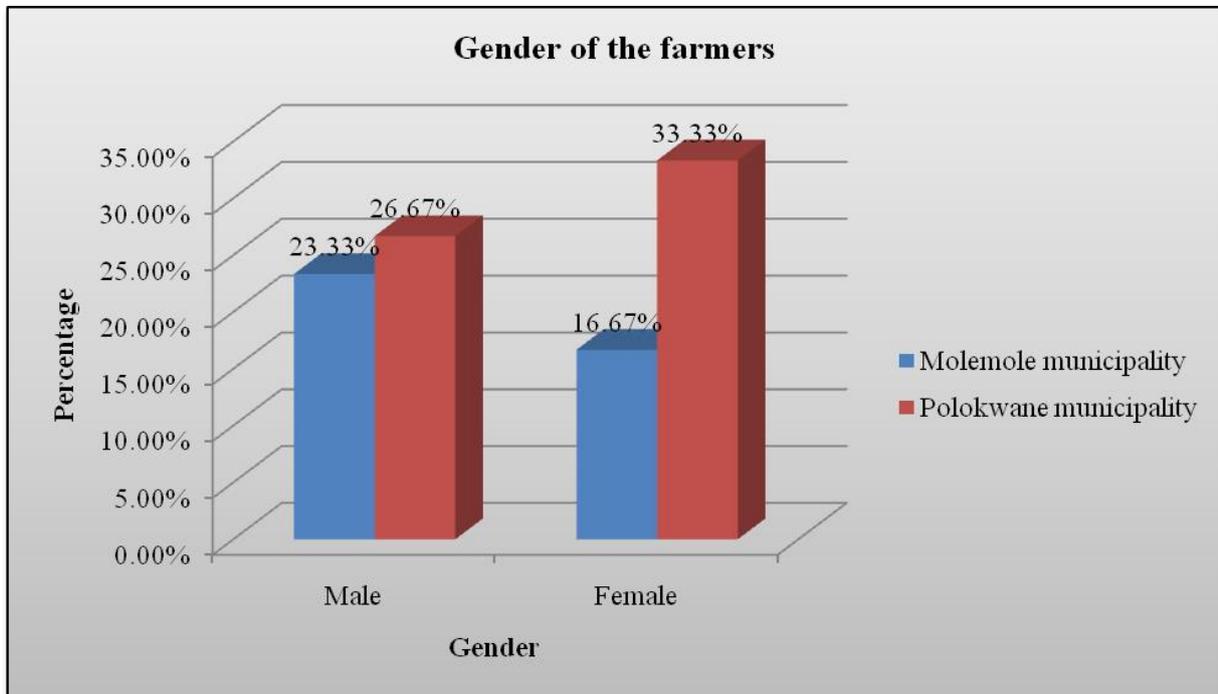


Figure 4.2.1 Gender distribution of emerging farmers

Figure 4.2.1 above; indicates that for the Molemole Municipality there are 23.33% male and 16.67% female emerging farmers, while for the Polokwane Municipality there are 26.67% male and 33.33% female emerging farmers. Most of the female farmers (33.33%) are in the Polokwane Municipality. There is lower participation for females in the Molemole Municipality than to the Polokwane Municipality. This suggests that it has been historically, women are still not recognised. However, women in the cities are more empowered than women in the rural areas.

Gender	Molemole Municipality	Polokwane Municipality
Male	7	8
Female	5	10

Table 4.2.1 Gender distribution of emerging farmers

4.2.2. Age distribution of the farmers

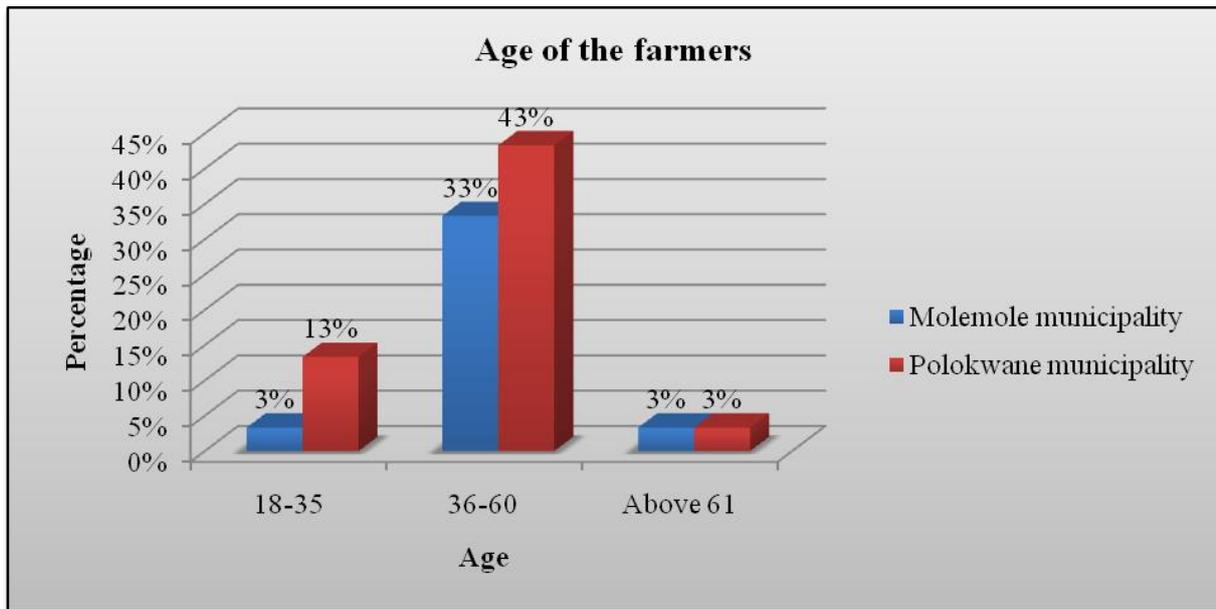


Figure 4.2.2 Age distribution of the farmers

From the above Figure 4.2.2, it can be seen that only 3% of the farmers are between the ages of 18 and 35, 33% lie between the ages of 36 and 60 and 3% are over the age of 61 in the Molemole Municipality and 13%, 43% and 3% respectively for the Polokwane Municipality. From the above results, it can be observed that there is low youth participation for both the municipalities, the highest being in the Polokwane Municipality at only 13%. There is less youth participation in the agricultural sector for both the municipalities represented by the ages of 18 to 35.

This is supported by the study by Malope & Molapisane (2006) which confirms poor participation by youth in the Babirwa District where only 9% youth registered against 91% of adult participation. The study conducted by Buys (2012) also indicates low participation of youth in agricultural projects at only 30%. The results are represented in the table below:

Age distribution of the Farmer	Molemole Municipality	Polokwane Municipality
18-35	1	4
36-60	10	13
Above 61	1	1

Table 4.2.2 Age distribution of the farmers

4.2.3. Education level of the farmers

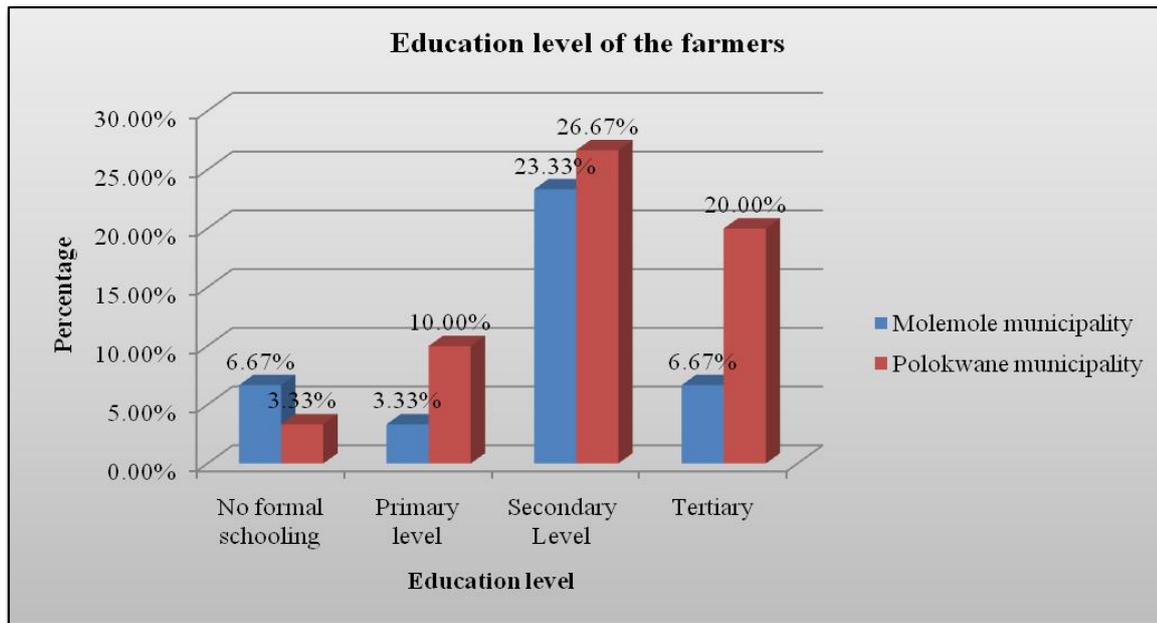


Figure 4.2.3 Education level of the farmers

From Figure 4.3.3 above, it can be seen that, 6.67% of the participants had “no formal schooling”, 3.33% primary level, 23.33% secondary level and 3.33% (1) tertiary level education in the Molemole Municipality and in the Polokwane Municipality is 3.33%, 10%, 26.67% and 20% respectively. Most of the people are not educated but in the Polokwane Municipality, 20% of the emerging farmers have tertiary education. The results indicate that Polokwane emerging farmers are more educated than those in the Molemole Municipality.

The results above indicate that, there is a huge difference in the levels of education. This is one of the factors which hamper emerging farmers in the effective management of the projects. In both municipalities most of the farmers have secondary level education. This serves as a wake-up call that the farmers need more formal education. Only 20% of the emerging farmers have tertiary level education in the Polokwane Municipality because of spatial differences between the two municipalities. Below the results are represented in a table:

Education level	Molemole Municipality	Polokwane Municipality
No formal Schooling	2	1
Primary level	1	3
Secondary Level	7	8
Tertiary	2	6

Table 4.2.3 Education level of the farmers

4.3. Project Information: Income, Training and Expenditure

4.3.1. Monthly income from the projects

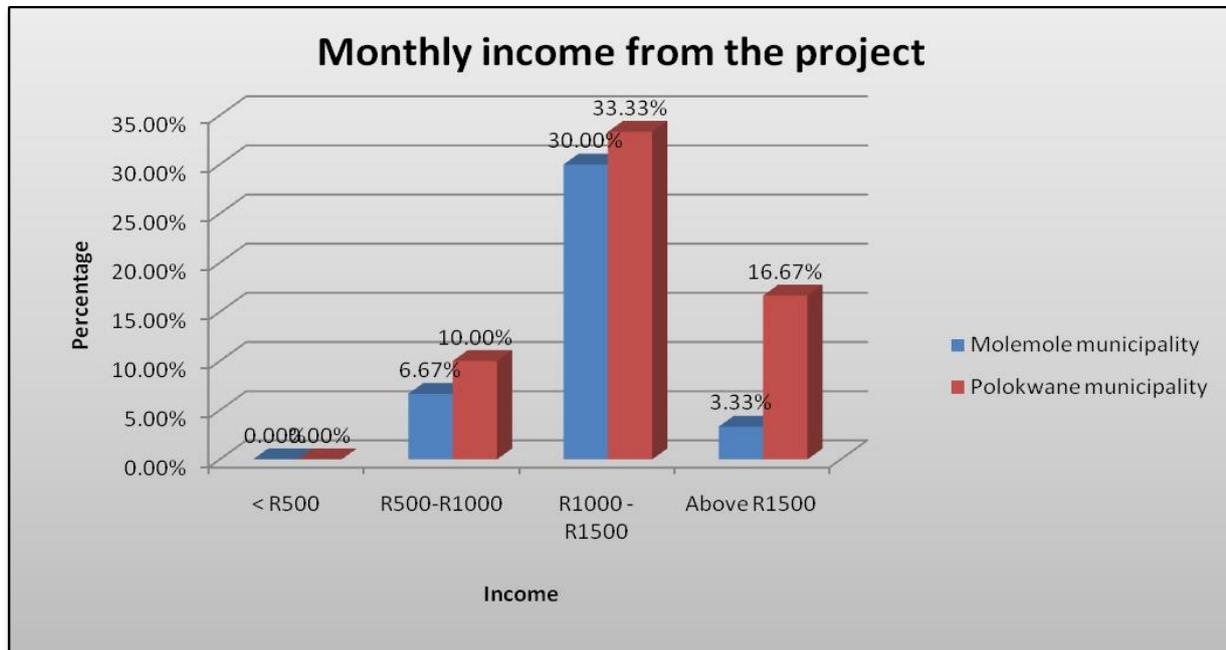


Figure 4.3.1 Monthly income from the projects

From Figure 4.3.2 above it can be seen; that there is no farmer with a monthly income of < R500 in either Municipality. 6.67% of the participants earn between R500 and R1000, between “R5000 and R1000”, 30% between “R1000 and R1500” and 3.3% “above R1500” in the Molemole Municipality. On the other hand, in the Polokwane Municipality it was found that 10% earn between R500 and R1000, 33.33% between R1000 and R1500 and 16.67% earn above R1500.

Most of the farmers earn an income of between R1000 –R1500 in both the municipalities, with the highest being Polokwane at 33.33% with no one with an income below R500. Most of the farmers have an income of between R1000-R1500 monthly due to the kind vegetables that they sell and the years of experience they have in the farming sector. Those who earn above R1500 also have livestock. The results are also represented in the table below:

Monthly income from the projects	Molemole Municipality	Polokwane Municipality
< R500	0	0
R500-R1000	2	3
R1000 - R1500	9	10
Above R1500	1	5

Table 4.3.1 Monthly income from the projects

4.3.2. Experience in farming

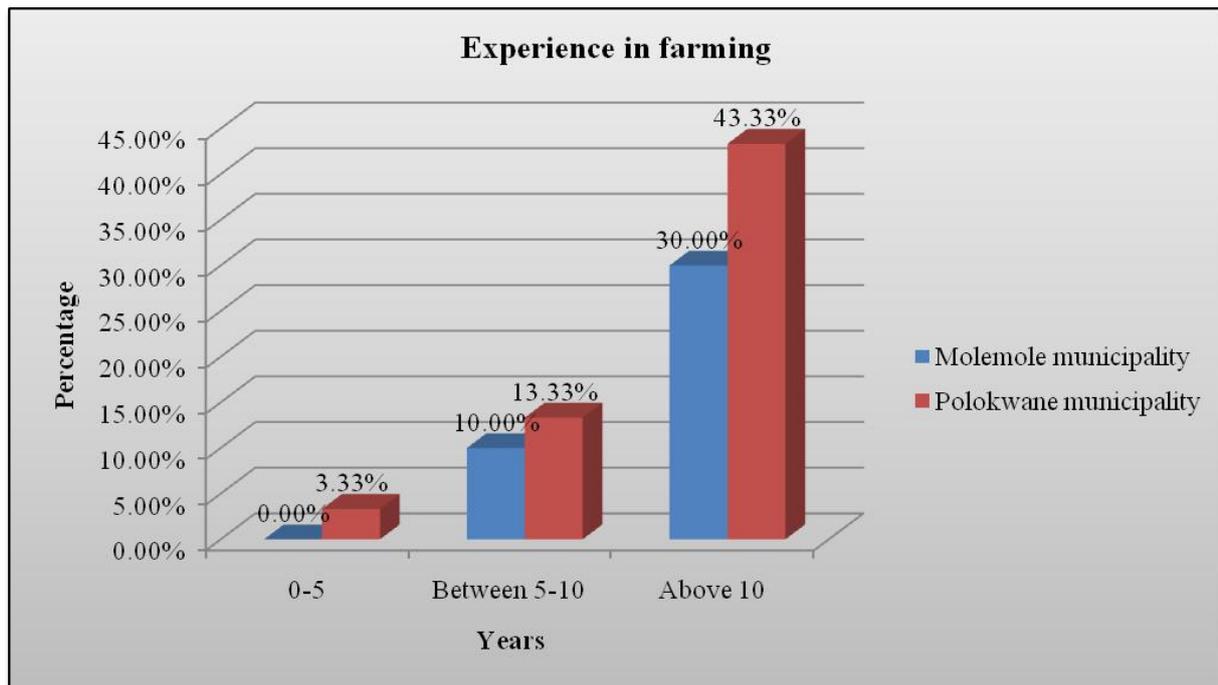


Figure 4.3.2 Experience in farming

Figure 4.3.2 above indicates that; none of the Molemole Municipality farmers have less than 5 years' experience, 10% between 5 and 10 years and 30% above 10 years. For the Polokwane Municipality; 3.33% have less than 5 years experience, 13.33% between 5 and 10 years and 43.33% more than 10 years' experience. Most of the farmers acknowledge that the more experience they have the more income they can earn. In both the Municipalities, most emerging famers have more than 10 years farming experience. The results are presented in the table below:

Experience in farming	Molemole Municipality	Polokwane Municipality
0-5 years	0	1
Between 5-10 years	3	4
Above 10 years	9	13

Table 4.3.2 Experience in farming

4.3.3. Farmers' Training

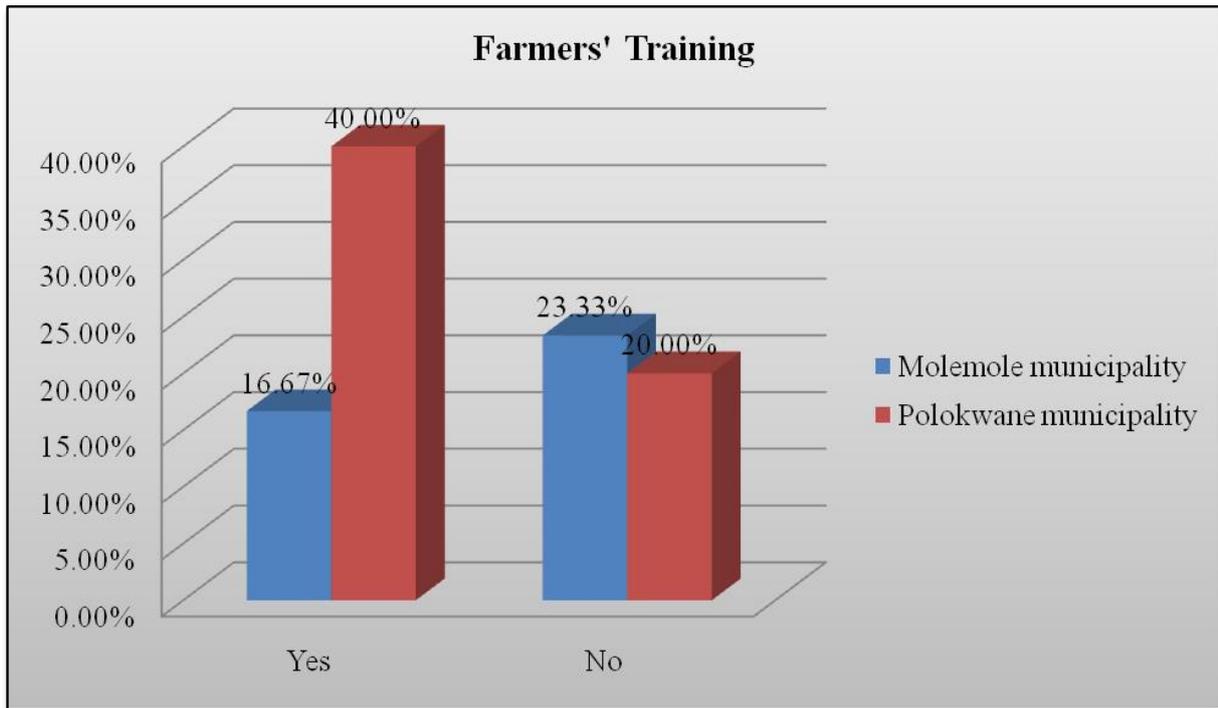


Figure 4.3.3 Farmers' Training

As it can be seen from figure 4.3.3 above, only 16.67% of the farmers from the Molemole Municipality had received training while 20% had not. In the Polokwane Municipality, 40% had received training; while only 16.67% had not. Table 6 below also represents the results. The results indicate that most of the farmers in the Polokwane Municipality have received training; this is also one of the reasons that explains why the Polokwane Municipality emerging farmers are more productive than the farmers in the Molemole Municipality.

Farmers' Training	Molemole municipality	Polokwane Municipality
Yes	5	12
No	7	6

Table 4.3.3 Farmers Training

4.3.4. Type of Training Received

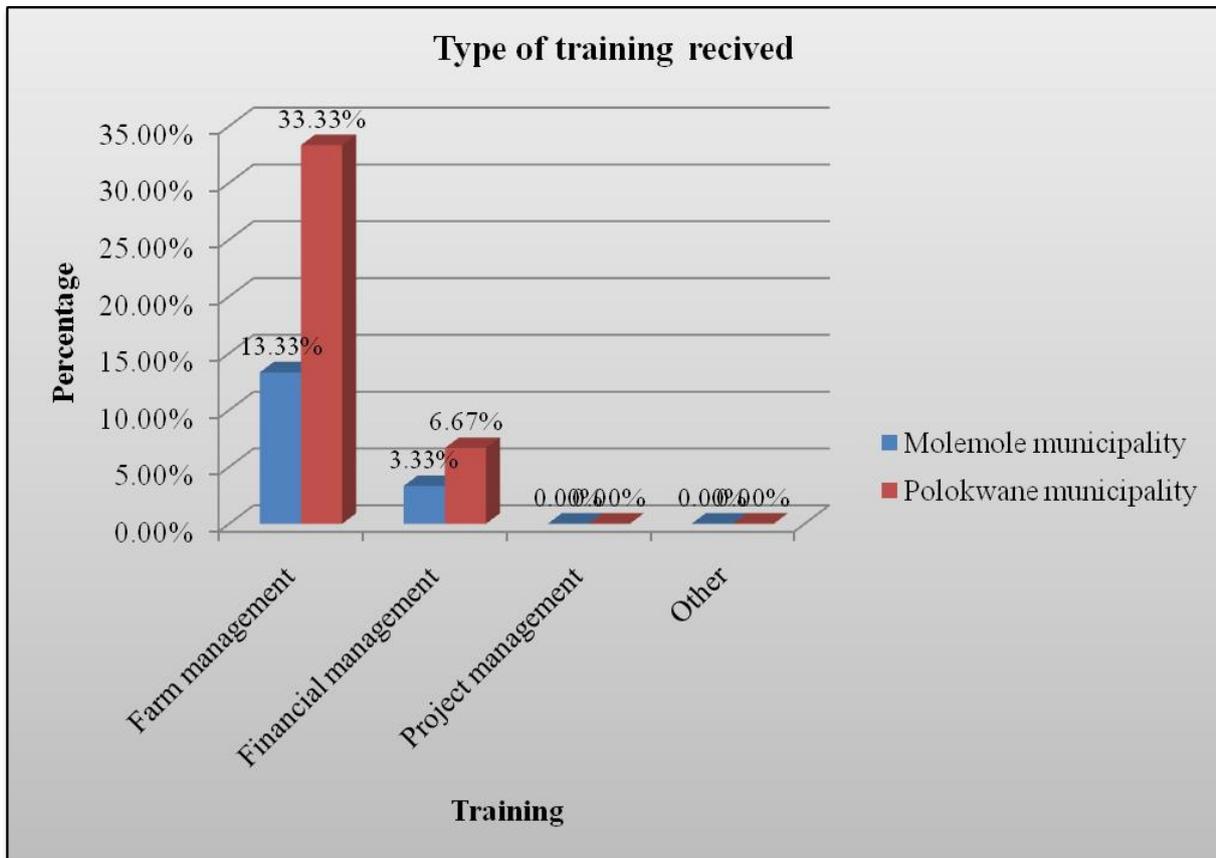


Figure 4.3.4 Type of Training Received

From figure 4.3.4 above it can be seen that; 13.33% had received training in farm management and 3.33% had received training in financial management in the Molemole Municipality. In the Polokwane Municipality 33.33% had received training in farm management and 6.67% in financial management. No one in either municipality had received training in project management or in any other area.

The results indicate the fact that none of the farmers having received project management training is a contributory reason for the projects not being sustainable for development. As far as financial management training goes, the Polokwane Municipality leads with only 6.67%; which is still low. It shows that there is still a gap to be closed in order to empower the farmers with the knowledge that they need in order to implement the projects effectively. This is also supported by the study conducted by Conyers & Hill (1992) which concludes that training serves as a management tool for plotting and tracking the resources, costs and progress (developments) during each phase of the project. The table below represents the results:

Type of training received	Molemole municipality	Polokwane Municipality
Farm management	4	10
Financial management	1	2
Project management	0	0
Other	0	0

Table 4.3.4 Type of Training Received

4.3.5 Projects Eradicate Poverty in the Area

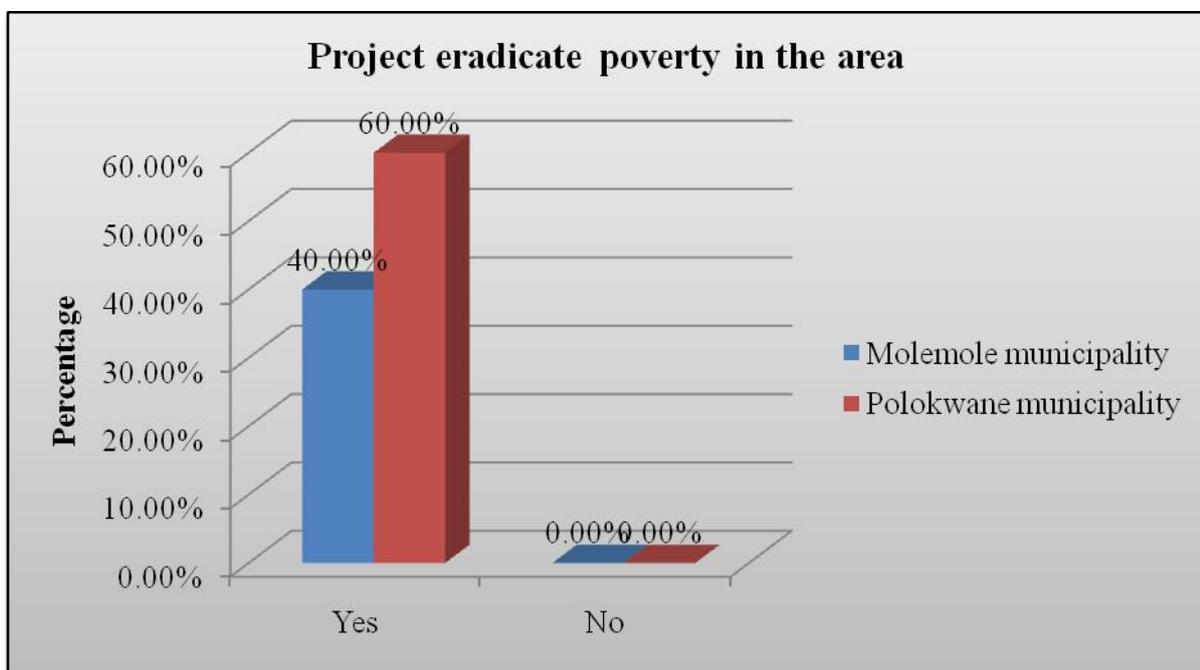


Figure 4.3.5 Projects Eradicate Poverty in the Area

All of the farmers agree that the projects eradicate poverty in their areas. This is shown in the Molemole Municipality at 40% and Polokwane Municipality at 60%. They both confirmed that they had received no training. This is an indication that the projects positively contribute to food security in the communities both the Municipalities. This is supported by the study conducted by Simon Brands (1969) under the topic, *The Contribution of Agriculture to the Economic Development of South Africa since 1910*. The table below also represents the results:

Projects eradicate poverty in your area	Molemole municipality	Polokwane municipality
Yes	12	18
No	0	0

Table 4.3.5 Projects Eradicate Poverty in the Area

4.3.6. Local People Work in the Projects

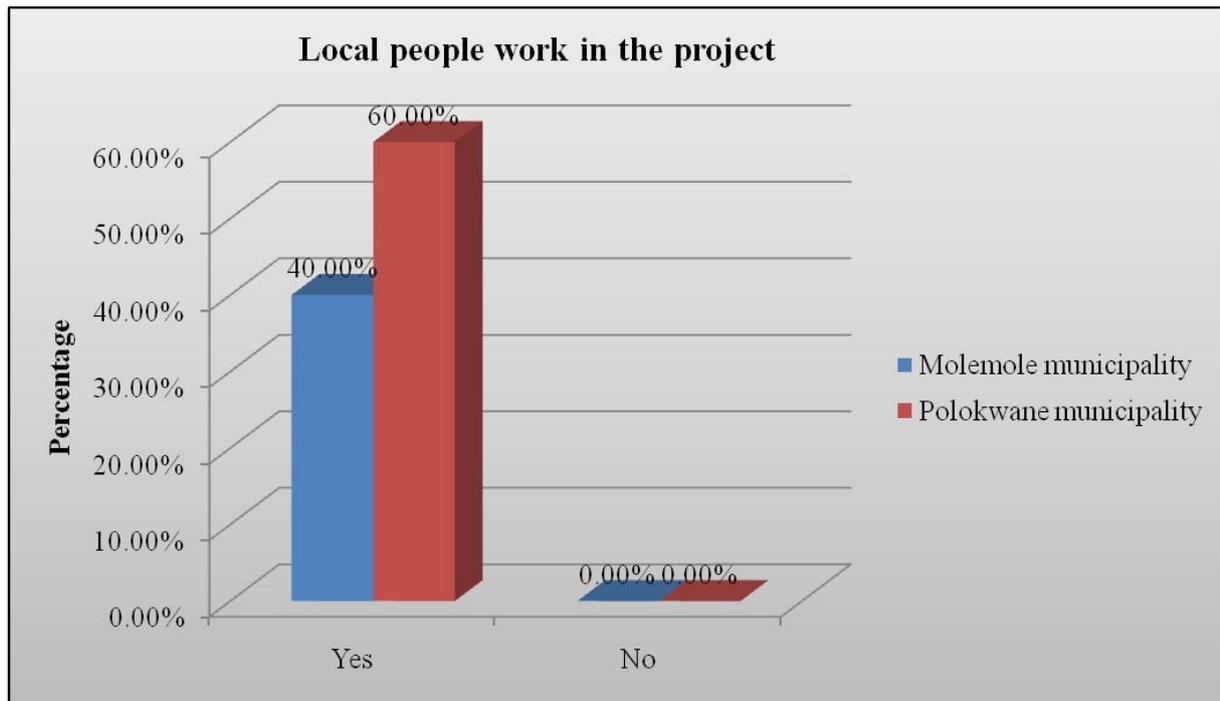


Figure 4.3.6 Local People Work in the Projects

All of the farmers agree that local people work on the projects. This is represented by Molemole Municipality at 40% and Polokwane Municipality at 60%. They both confirmed that local people work on the projects. The results indicate that the projects assist the Municipalities through job creation thus benefiting the both communities. Below the results are represented in tabular form:

Local people work in the projects	Molemole municipality	Polokwane municipality
Yes	12	18
No	0	0

Table 4.3.6 Local people work in the projects

4.3.7. Monthly Income from Projects vs Farming Experience

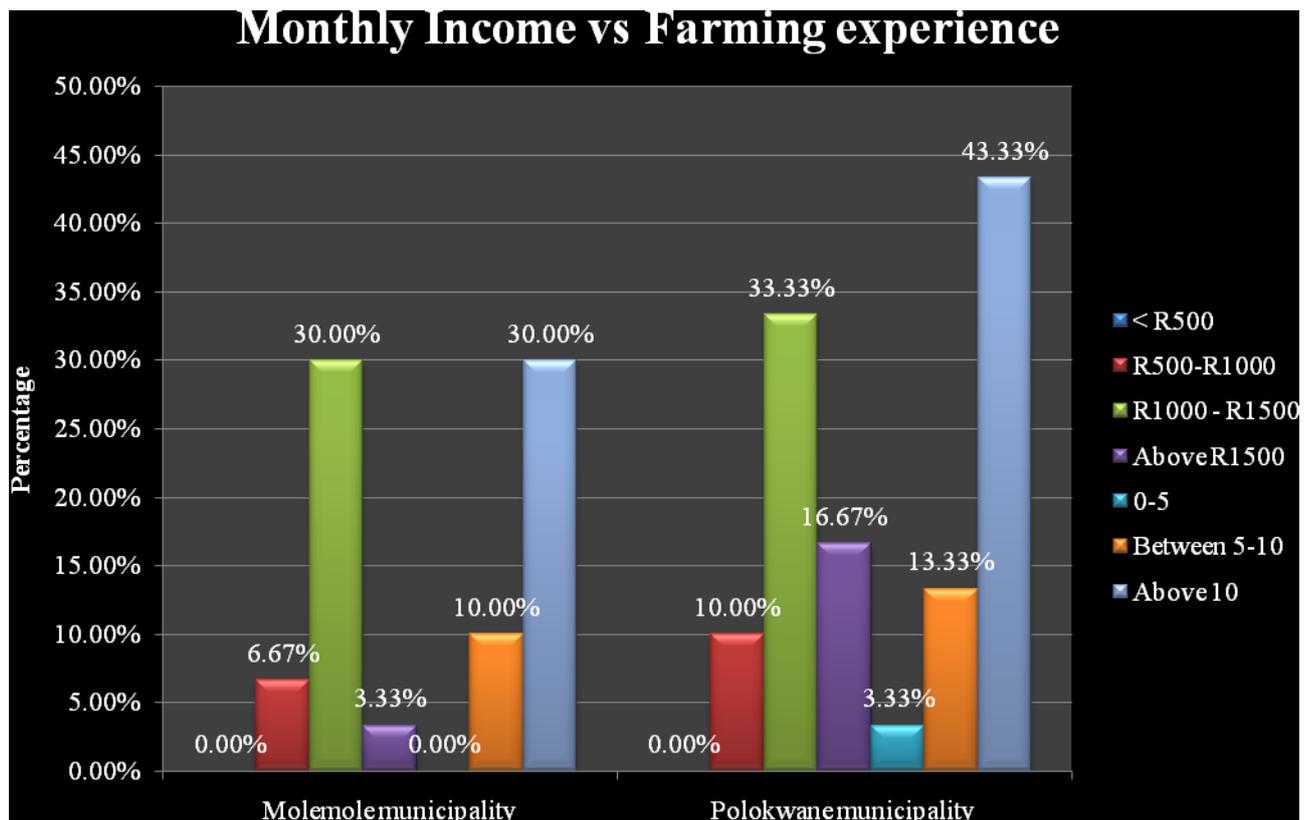


Figure 4.3.7 Monthly Income from Projects vs Farming Experience

Figure 4.3.7 above, represents the comparison of monthly income from the projects and years of farming experience by the emerging farmers. On both municipalities, most of the emerging farmers are experienced above ten years with Polokwane at 43.33%. For Polokwane municipality it indicates that there is more income earned per month relative to the experience the farmer has. The study conducted by Buys (2012) also indicated that farmers who have more experience are likely to have high returns of income.

For Molemole municipality, even though 30% of the farmers are experienced more than 10 years, their level of is still relatively low. Similarly, there is a difference of only 3.33% on the income level of R1000-R1500; this cannot be related to the years of experience but rather the type of commodity that the emerging farmers are involved with.

4.3.8. Education Level vs Monthly Income from the Projects

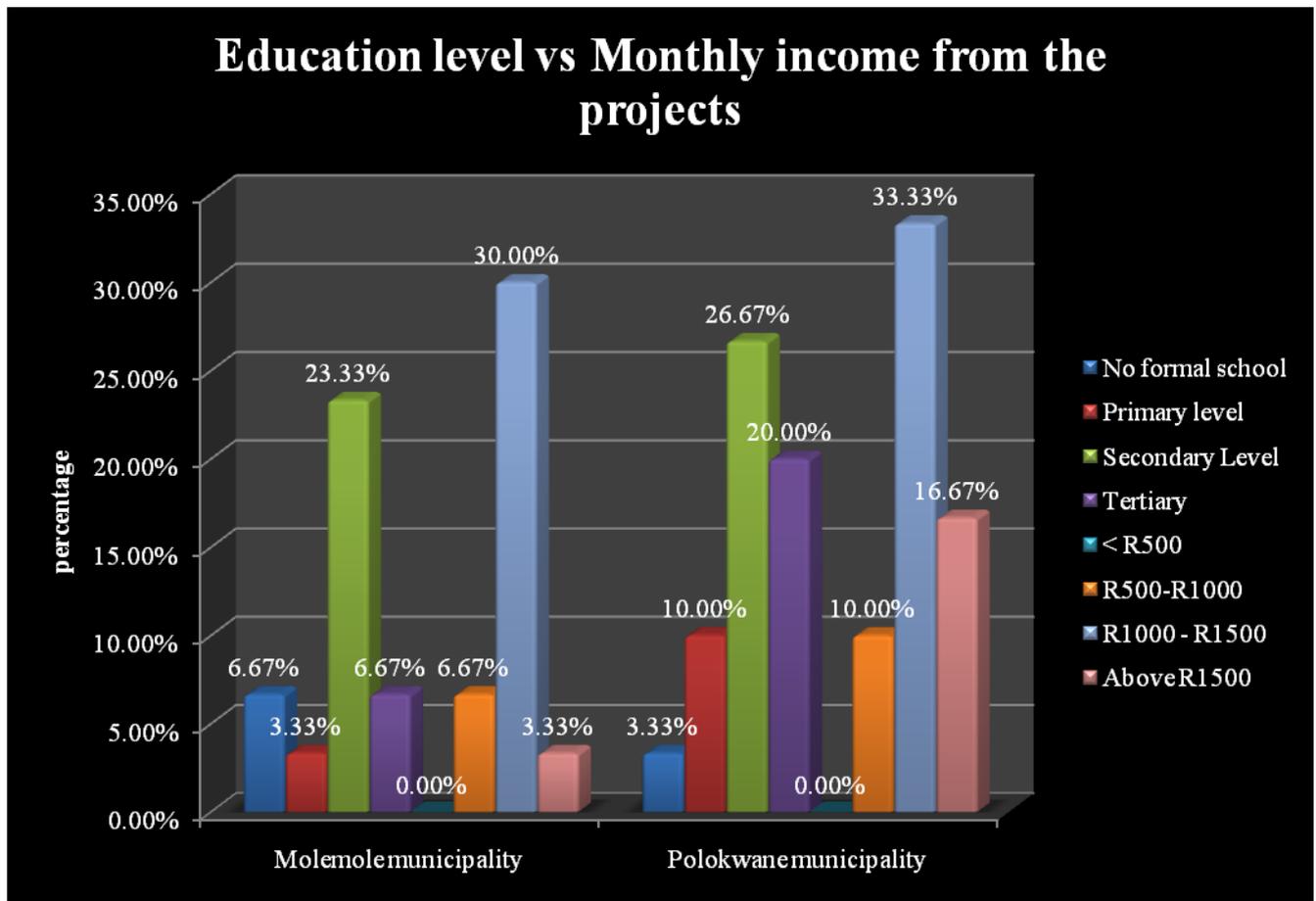


Figure 4.3.8 Education Level vs Monthly Income from the Projects

Figure 4.3.8 above shows that most farmers who have formal education are from the Polokwane Municipality rather than Molemole. The results also indicate that most of the emerging farmers in the Polokwane Municipality earn more than those from the Molemole Municipality. There is a positive relationship between the education level and monthly income from the projects. The results of this study are consistent with the study conducted by Senyolo (2007). Both have found that emerging farmers who have more years of education are likely to have high incomes than those farmers who have fewer years of education.

4.3.9. Training Received vs Monthly Income from the Projects

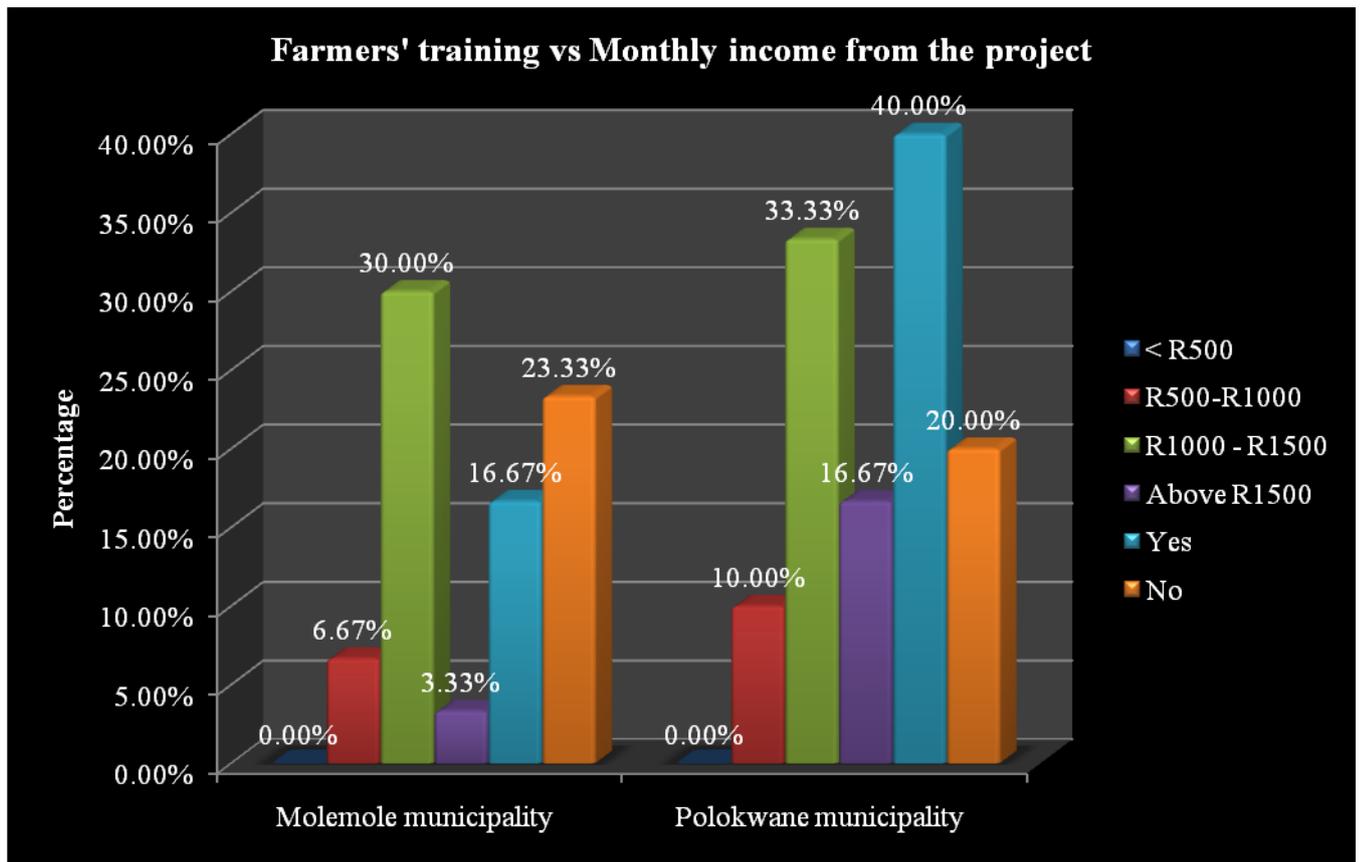


Figure 4.3.9 Training Received vs Monthly Income from the Projects

From the above figure 4.3.9, it can be seen that the Polokwane Municipality is doing well with 40% of emerging farmers having received training and it also has a higher average income than the Molemole municipality. This clearly indicates that if the emerging farmers receive training, their income will also improve. This is further supported by the study conducted by Buys (2012) which found that it was essential for emerging farmers to be trained as training positively contributes to higher incomes.

SECTION B: Project Officers

4.4. Responses from the Project Officers

Below are the responses obtained from the project officers from the Limpopo Department of Rural Development and Land Reform regarding the challenges that emerging farmers face in managing projects for sustainable agricultural development. The results are discussed and are also linked to the results obtained from the quantitative findings.

4.4.1. Types of Funded Projects

A project has to be registered with clearly defined objectives, action plans, timelines, deliverables, key performance indicators, resource assignments and executing responsibilities. This will assist the participants to implement and meet the deadlines and finish the project on time. However, this was the view from the participants regarding the projects that the Department has funded:

Participant 1 mentioned that *“The department has various means to identify the need to fund the project as they look at the business plan and distressed projects. We have different programmes in the Department and among those programmes we identify the projects which are struggling in terms of production inputs, implements, and budget. The project should have a positive impact to contribute to food security. Majority of the types of the projects funded include livestock, poultry, crop and vegetables.”*

Participant 2 also agrees that *“the department takes into the consideration on which production inputs does the project have a difficulty with and then fund it from that angle. The business plan is also required for the Department to take informed decision on what kind of project are the emerging farmers involved with”*

The majority of the respondents also agreed that although there are different programmes in the Department to identify projects which need to be funded, they take into consideration the struggling of the project in terms of production inputs which vary from project to project. It seems that the business plan plays a critical role for the funding of projects as it elaborates what kind of project the farmers are involved in and how they plan to spent their funds. This information is elaborated in the financial section of the business plan.

Most agricultural projects struggle with agricultural inputs, which then make it difficult for the farmers to deliver sufficient output to the nearby communities. The element of funding criteria

is crucial for the government officials and farmers in understanding the type of project and commodities the farmer is involved with.

4.4.2. The Impact of Funding on the Projects

- **Projects before and after the funding**

Emerging farmers on their own cannot attain the objectives of the projects that they are involved in. Hence, they need support from various stakeholders to be able to implement the projects as per the business plan. It is therefore essential that the farmers implement the projects according to the business plan and not to deviate from the plan and also to ensure that the objectives of the projects are met. This will ensure that the projects bring about better standards of living, not for the farmers alone but also for the community at large. Participant 3 had the following view:

“Most of the projects before the funding were unproductive as they did not have the required resources to implement the projects’ objectives and some of them were in a state of collapsing. But after the funding they start to be more productive as the inputs are provided to them.”

Participants 2 and 5 also had similar views: *“before the funding the projects were not productive as some of the farmers had frustrations on what to do with their projects. Some of the projects were in a state of collapsing as the farmers did not have inputs for their production. The improvement on the projects depends on the type of the project that the farmer is involved with as some of the projects takes time to improve especially with the livestock farming”*

Participant 7 had a different perspective and said, *“Some of the projects before and after the funding are still the same state as after the projects has been funded there are lots of conflicts among the farmers which then makes it difficult to achieve the objectives of the projects.”*

The main objective of the funding is to assist farmers to improve their production and standard of living. This also serves as part of up-skilling the farmers and reducing the level of food insecurity within the communities.

- **Project officers' visits**

Project visits are important for both the emerging farmers and the project officers in order to track the progress of the projects and to help farmers where there is a need. These visits are also important for the project officers to be able to monitor the implementation of the projects and to ensure that the funds are used appropriately. Extension services are used as a means of diffusing new education technology to the farmers. Participant 12 stressed that:

“They visit the farmers twice a month but they do not have schedules to visit the farmers, this is done to monitor the implementation and verify the assets purchased with the funding provided to the emerging farmers. The project officer needs to produce the reports and confirm what is in the farm for the funding provided to the farmers.”

In the same vein, Participant 15 emphasised that: *“There is no schedule for farm visits. Only projects that are planned to be funded will be visited often for the purposes of complying with funding requirements. During implementation, projects are visited at least once a month for monitoring purposes or more than once depending on the challenges a project maybe facing at that specific point.”*

The respondents confirmed that their visits to farmers make a difference as they are able to guide the farmers as to what to do when they are struggling with the implementation phase. The study conducted by Anderson & Feder (2007) suggests that the impact of extension services has been mixed with some projects having high returns on investment and others only negligible success.

The respondents also mentioned that each project officer is entitled to a specific project. The project officers are also experienced and have relevant qualifications to enable them to assist the farmers in carrying out the projects. Participants 11 and 16 agree that:

“With the relevant qualifications they have, they are able to assist the farmers with the implementation of the projects. The visits also assist us as the project officers to be aware of the activities that are taking place at the farms and how best we can solution the farmer and it is also much easier as each project officer”

The above statement is supported by the study conducted by Hart et. al (2005) which found that only one project manager should be appointed for the duration of the project and that this

person should have the necessary skills to manage the project effectively and to ensure that the project is implemented in an interdisciplinary manner. This ensures that activities and resources are integrated for the benefit of the project.

Participants also mentioned that their visits to emerging farmers play a critical role as they are able to help improve the farmers' skills in managing the farms. Awosola & Scalkwyk (2006) elaborate that farmer mentorship programmes have been initiated in South Africa by both concerned stakeholders and the government to improve farming the skills of the emerging farmers who find it difficult to cope with the evolving and challenging production and marketing environments.

Participant 8 said that: *"Sometimes it is challenging to work with the emerging farmers as some of them they do not co-operate and implement things accordingly"*

From the above information, it is evident that project officers have an important role to play in the implementation of the projects and in helping also on emerging farmers. Their assistance is of a great value, but they also need the farmers to be committed to their projects.

- **Resources to Implement the Projects**

The implementation phase involves putting the project/business plan into action by carrying out the activities described in the business plan. This will bring tangible change and improvements. Hence, there is a need to have the proper resources to implement the projects.

"Before the funding the farmers did not have enough resources to implement the projects. But on contrary, the resources depend on the type of project that the farmer is involved in based on the business plan provided. After the funding the projects became more productive and viable"

Participant 13

However, Participant 6 had a different view: *"Although the projects are funded, some of them still stay the same as they do not implement what is elaborated on the business plan. Their priorities and focus deviate from what they have submitted to the Department"*.

The study conducted by De Villiers (2008) concludes that the agricultural sector has positive externalities that are significant for the rest of the economy. These, warrant a significant investment of resources into the sector, despite its relatively low share in the economy. This is also supported by the study conducted by Makhura, et al, (1998) found that many emerging

farmers lack the farm resources, such as land, market access, credit and management abilities, necessary to manage their projects effectively.

The above information indicates that one of the challenges that emerging farmers face, is to implement the projects as per the business plan provided during the application for funding. Farmers need various resources to implement the projects, depending on the type of project they are involved with. It is therefore essential for the project officers to conduct feasibility studies and appropriate engagements with the farmers before the funding can be issued to the farmers.

It is also clear that financial resources are essential for farmers to implement the agricultural projects. This is further supported by the study conducted by Mahlokwane (2012) which also found that farmers need finance to implement projects and purchase farming inputs.

4.4.3. Challenges Faced by Emerging Farmers

There are various challenges that emerging farmers face in the projects that they are involved with. The Department has delegated the project officers the task of assisting farmers to implement the projects through extension services to help them find better solutions to the challenges that they face in order to accomplish the objectives of the projects.

“Most of the farmers are bankrupt and when they receive the funds from the Department, they do not use it for the funded purpose but rather they deviate from the implementation / business plan. It therefore serves as an indication that they are unable to prioritize their plans.”

Participant 10

The above was also supported by participant 9 who emphasized that: *“When the farmers receive the funds they do not use them as stipulated in the business plan. This is one of the reasons which make the projects not to be effective. The farmers deviate from the business plan due to lack of knowledge on how best they manage their funds appropriately and this cause conflict amongst the farmers”*

From the information above, it is evident that farmers need appropriate skills to manage the funds for the projects to be more productive and efficient. There is also an indication that farmers are not focused as they easily deviate from the business plan which should provide a guideline on how best to prioritise their plans. This is further supported by figure 4.3.4 which illustrates that most farmers received training for farm management and only 6.67%, which is

higher in the Polokwane Municipality, received training in financial management. This is a challenge for the farmers.

Another challenge is that conflict among the farmer is aggravated by the family members of the beneficiaries of the projects. Some of the conflicts arise from personal matters which then affect the way projects are implemented and funds are used and may lead to the mismanagement of funds. The study conducted by Hart et al. (2005) found that collaborators on a project need to work together towards a common goal rather than for individual purposes or in opposition to one another.

Agriculture remains an important economic sector in many developing countries. It forms source of economic growth and a potential source of investment opportunities. The sector has various commodities which differ according to the level of expenses to undertake them. Agricultural inputs also differ from one project to the other. Participant 12 mentioned the following:

“Although the emerging farmers are funded, the funds are not enough to cover every request that is mentioned their business plan. This makes farmers to invest in quantity rather than quality of their products from the project as they do not have sufficient funds to carry out the project hence they prioritize other activities.”

From the above comment, it can be deduced that farmers need proper intervention during the drawing up of the business plan when they first apply to the Department for funding as this is also one of the requirements to get the funding. This is supported by point 4.3.1 which indicates that it is a requirement. Farmers need to be able to prioritise the projects’ needs and not only focus on quantity but also on quality as most agricultural products are perishable in nature.

Participant 13 indicated that, *“Emerging farmers’ lack of different skills such as record keeping, financial management, human resource management and general farm management in order to be able to run the projects accordingly.”*

Participant 14 agrees that, *“Farmers need training on record keeping, financial management and project management for them to be more productive and equipped with knowledge for the implementation of the projects.”*

It is evident that farmers need proper training as lack of training is one of the factors contributing to the collapse of the projects. This is supported by Figures 4.3.4 and 4.3.5. The study conducted by Masango (2006) also found that emerging farmers who have land, still lack the equipment and skills to manage their projects.

Furthermore, Lotz et al.; (2000) also found that emerging farmers identified the need for training on all technical aspects of their farming projects and on, the development of financial, farm management and marketing skills as immediate priorities to enable them to manage their projects. Most of the farmers lacked the necessary technical training and field experience to effectively deliver the services (Dethier & Effenberger, 2012). The project officers also highlighted the fact need training on the utilisation of funds.

One of the respondents further elaborated that: *“There is a lack of sustainability on the funded projects which is caused by dependency syndrome by the emerging farmers. They operate below competitive levels, probably because they lack experience and were confined to subsistence operation for a long period. The farmers expect the Department to do everything for them, of which it is not possible”*

The above comments are supported by the study conducted by Magano & Terblanché (2014), which attempts to address the issue of training of extension officers in project management as it was seen as a priority for emerging famers. Figures 4.3.3 and 4.3.4 above; indicate that there is a need for farmers to be trained as only a few had any training. The above also clearly indicates that farmers cannot carry out the projects alone without the involvement of other stakeholders. Extension officers play a critical part in assisting farmers to achieve the objectives of the projects.

4.4.4. Projects’ Value to the Community

The projects were initiated to improve the standard of living of the members of the community as they are the beneficiaries of the projects. The projects will also benefit them through job creation in the surrounding communities.

Participant 3 elaborated that: *“The projects add value to the communities through job creation, skills transfer, support to local markets and they also help in the alleviation of food insecurity within the communities. The emerging farmers are able to make to a living through these projects”*

Participant 4 had a similar view and mentioned that, *“The projects help the emerging farmers as they create jobs on the surrounding communities and they also assist with various transfer of skills among the emerging farmers. The farmers are able to sell their produce to the nearby markets thus generating income from the commodities that they are farming”*

From the above comments, it can be extrapolated that that farmers are able to generate income from the projects that the department has funded. The projects assist them in improving their standards of living. This is further supported by the results shown in Figure 4.3.5 which indicates that in both the Municipalities the emerging farmers agree that the projects have helped to eradicate poverty in their areas.

Moreover, Figure 4.3.6 also indicates that the projects provide job opportunities for the local people who work in those projects. The emerging farmers of both the Municipalities agree that the projects create jobs in their areas. The study conducted by Brand (1969) further indicates that the agricultural sector provides linkages to other sectors and other contributions are through factor contributions in the form of labour. The agricultural sector provides labour to other sectors and also within the sector through job creation.

However, Participant 15 has a different view and expressed that, *“Only 10% of the projects add value to the communities; since they are not next to the commercial markets, most of the projects are situated far from the community and therefore not adding value to the community.”*

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

This chapter presents the conclusion and recommendations of the researcher, based on the research findings. The study looked at the challenges faced by emerging farmers in managing projects towards sustainable agricultural development in the Capricorn District. The study focused on 9 projects of which 6 are from the Polokwane Municipality and 3 are from the Molemole Municipality. Employees of the Limpopo Department of Rural Development and Land Reform were also interviewed as the Department was responsible for the provision of funding to the projects and also for providing technical assistance to the projects through project officers.

Access to land is an important step in redressing the injustices of apartheid in South Africa. However, if land is to contribute to improving people's lives, especially those of the very poor, complementary support services are critical. Such services are widely expected to come from the State because the majority of emerging farmers are poor and poorly educated, as has been demonstrated by this study.

Agricultural production has, over the years, shifted from primitive approaches to more sophisticated approaches with science and technology as factors determining the successes of the sector. In general, the emerging farmers do not have formal schooling and are battling with new technologies in agricultural production. Mechanisation plays a major role in the quality and quantity of commercial agricultural produce. However, mechanisation is generally lacking amongst the emerging farmers' projects studied, as they need financial assistance from the government to mechanise the projects.

5.2. Reflection of Key Issues

5.2.1. Entrepreneurial Skills

Entrepreneurial skills are a key factor that determines the sustainability of any business venture. The main emphasis is the importance of skills, knowledge and experience within the emerging farmers' community. In the projects studied in this dissertation, most of the emerging farmers demonstrated positive elements of entrepreneurial capabilities. However, these

entrepreneurial capabilities are unfortunately lacking in most of the projects, which make it difficult for them to compete in a highly competitive field.

Government, the agricultural sector and other stakeholders must put more focus on knowledge and skills' transfer to empower the farmers if they are to compete successfully in the commercial agricultural farming sector and be able to sustain the projects. Development or improvement of their technical and business skills could put them on the same level of competition with other commercial farmers in their localities.

5.2.2. Institutional Support

Institutional support refers to the roles and responsibilities of stakeholders across all the key stages outlined above. Adequate support for emerging farmers requires an integrated approach from all the stakeholders simply because of diverse competencies in those institutions, as well as their different mandates. The Limpopo Department of Rural Development and Land Reform might experience challenges in providing funds to all the emerging farmers as it does not have adequate resources to provide such comprehensive support as may be expected for the sustainability of these farming projects.

The study shows that the support from LDRLR for the land reform projects in the Polokwane and Molemole Municipalities is inadequate. To be successful, projects require the support of various Government departments, with local municipalities and the agricultural sector playing a key role. In most cases municipalities are brought into the process at the end of the planning cycle and are only then asked to provide a budget to support the project. As a result, none of these projects appear in the IDP or LED plans of the local municipalities.

5.2.3. Access to Production Capital

The evidence obtained from participants in this study corresponds with Kinsey & Binswanger (1993) who argue that smallholder agricultural growth cannot be achieved without access to farmer support services such as grant funding and credit and finance. International experiences have shown that with adequate support services, smallholder farmers can significantly increase agricultural productivity and sustain their projects. If the emerging farmers have land but lack support services it is unlikely that they will make a significant difference to their livelihoods and the sustaining of the projects.

5.3. Conclusion

The purpose of this study has been to investigate the challenges faced by emerging farmers in managing projects towards sustainable agricultural development in the Capricorn District, specifically with the focus on the Molemole and Polokwane Municipalities. Factors that hamper the efficient management of projects are discussed and appraised in chapter 4. The study also argues that there is a need to support emerging farmers as it is critical to improve their livelihoods.

The results of this study indicate that challenges faced by emerging farmers in managing the projects include a lack of training, highlighted in Figure 4.3.4 shows that none of the farmers received project management training in either of the municipalities. Only 33.3% and 13% for Polokwane and Molemole respectively farmers received farm management training. This is an indication that there is a need for farmers to be provided with the relevant training for them to manage their projects. It is also a challenge for farmers to manage the projects as they do not have sufficient resources to implement the projects as highlighted in point 4.4.2.

In addition, there are various factors which contribute to the challenges that emerging farmers are face. The results in point 4.4.3 indicate that farmers deviate from their business plans making difficult for them to implement the projects once they receive the funds from the Department. It was also found that there is conflict when the farmers receive the funds from the Department about how they should spend the money, and this is where they deviate from the business plans. Furthermore, farmers display symptoms of dependency on various stakeholders, including the government. The research questions and objectives for this study have been addressed and answered.

Suggestions and recommendations for the problem stated in chapter 1 have been briefly outlined in this chapter. It is now the responsibility of emerging farmers, policy makers, project officers and other stakeholders in the Capricorn District to look into the researcher's ideas and recommendations for possible ways to achieve sustainable agricultural development in the District.

Failure to provide support to emerging farmers undermines the development of sustainable agricultural projects. Therefore, this dissertation argues that providing funding to the emerging farmers should be complemented with the building of sound institutions at the local level with

the capacity to enable the farmers to use their land and other resources efficiently and effectively. Moreover, the provision of support services such as regular extension advice, access to credit, provision of relevant training and access to affordable inputs is also required. This would enable farmers to increase their productivity and sustain their projects.

To conclude the dissertation, the researcher emphasises the point that even if emerging farmers are funded for their projects for sustainable agricultural development, new ways must be found to provide necessary support services and to guide the farmers on how best to implement their projects and not deviate from the business plan.

5.4. Recommendations

- Taylor-made training programmes could be developed for specific types of emerging farmers' projects. The result of such programmes would be that the farms would become more productive and farmers, in turn, would be able to stand on their own. By furthering their education and skills development, they would be able to become more self-sustained, self-reliant, competent and successful in their own private farming operations. Agricultural colleges should also be sustained.
- There should be proper consultations with farmers, researchers and advisors on how best to assist emerging in farmers formulating policies. This would also assist the stakeholders not to work in isolation from each other.
- Government departments, NGO's, communities and farmers should merge together in addressing food security, skills' transfer of farmers and; funding models. Farmers need mentorship for sustainable commercial agriculture.

5.5. Recommendations for Further Research

All research studies suggest further research because there is no research that is complete on its own. The following topics are suggested for further research:

- The impact of training models on sustainable agricultural projects
- The perception of emerging farmers about agricultural managing projects

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ANNEXURE A - Approval Letter from TREC



University of Limpopo
Department of Research Administration and Development
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 2212, Fax: (015) 268 2306, Email:noko.monene@ul.ac.za

TURFLOOP RESEARCH ETHICS COMMITTEE CLEARANCE CERTIFICATE

MEETING: 31 August 2017

PROJECT NUMBER: TREC/234/2017: PG

PROJECT:

Title: Challenges faced by emerging farmers in managing projects towards sustainable agricultural development in Capricorn District

Researcher: NY Matlou
Supervisor: Mr NB Njoko
Co-Supervisor: Dr KS Milondzo
School: Turfloop Graduate School of Leadership
Degree: Masters in Development Studies


PROF. TAB MASHEGO

CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE

The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: REC-0310111-031

Note:

- i) Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee.
- ii) The budget for the research will be considered separately from the protocol.
PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.

ANNEXURE B – Approval Letter from Limpopo Department of Rural Development and Land Reform



LIMPOPO PROVINCIAL SHARED SERVICES CENTRE

Private Bag X9312, Polokwane, 0700; Tel: 015 284 6300; Fax: 015 230 5000

Limpopo department of Rural Development and Land Reform

70 Hans Van Rensburg Street

Absa Building

Polokwane

0699

Dear Ms. Yvonne Matlou

SUBJECT: PERMISSION TO CONDUCT RESEARCH

1. The above matter bears reference
2. Your application to conduct research on agricultural projects in Capricorn District has been granted on your topic: **Challenges faced by emerging farmers on managing projects towards sustainable agricultural development in Capricorn District**
3. Please note that the permission is granted on condition that your research does not disturb the day to day running of the projects.
4. Wishing you a successful academic year.

Regards,

MAMODIANE MABOJA

DEPUTY DIRECTOR CAPRICORN DISTRICT: LPSSC

DATE 05/04/2017

ANNEXURE C – Letter from Editor

Sue Matthis
B A (Hons)
1 Oden Place
Douglasdale, 2191

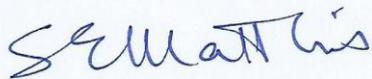
Cell: 0837817646
e-mail:suematthis@gmail.com

TO WHOM IT MAY CONCERN

This serves as confirmation that I have proofread and language edited the dissertation:

Challenges faced by emerging farmers in managing projects for sustainable agricultural development in the Capricorn District,

submitted towards to degree of Master in Development by Matlou Ntebatse.



S E Matthis
25 January 2018

ANNEXURE D – Consent Form



Title of Research: Challenges faced by emerging farmers in managing projects towards sustainable agricultural development in Capricorn District

I, the undersigned, confirm that (please tick box as appropriate):

1.	I have understood the information about the project. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	<input type="checkbox"/>
2.	I voluntarily agree to participate in the project.	<input type="checkbox"/>
4.	I understand I can withdraw at any time without giving reasons and that I will not be penalised for withdrawing nor will I be questioned on why I have withdrawn.	<input type="checkbox"/>
5.	The procedures regarding confidentiality have been clearly explained (e.g. use of names, data, etc.) to me.	<input type="checkbox"/>
6.	The use of the data in research, publications, sharing and archiving has been explained to me.	<input type="checkbox"/>
7.	I understand that other researchers will have access to this data only if they agree to preserve the confidentiality of the data and if they agree to the terms I have specified in this form.	<input type="checkbox"/>
8.	Select only one of the following: <ul style="list-style-type: none"> • I would like my name used and understand what I have said or written as part of this study will be used in reports, and research outputs so that anything I have contributed to this project can be recognised. • I do not want my name used in this project. 	<input type="checkbox"/>
		<input type="checkbox"/>
9.	I, along with the Researcher, agree to sign and date this informed consent form.	<input type="checkbox"/>

Participant:

Name of Participant

Signature

Date

Researcher:

Name of Researcher

Signature

Date

ANNEXURE E – Questionnaire



Topic: Challenges faced by emerging farmers in managing projects towards sustainable agricultural development in Capricorn District

Questionnaire No: _____

1.1. Gender

1) Female

2) Male

1.2. Age of the farmer

1) Below 20 years

2) 20 - 40

3) 41 - 60

4) Above 61

1.3. Educational level

1) Never attended school

2) Primary level

3) Secondary level

4) Matric certificate

5) Diploma

6) Degree

1.4. What is your monthly income?

1) 0 – R500

2) R500 – R1000

3) R1000 – R1500

4) Above R1500

1.5. How many years of experience do you have in farming?

1) 0-5

2) 6 - 10

3) Above 10

1.6. Have you ever received training?

1) Yes

2) No

1.7. If yes, what kind of training?

1) Farm management

2) Financial Management

3) Project management

4) Other

ANNEXURE F – Semi-Structured Interviews



Topic: Challenges faced by emerging farmers in managing projects towards sustainable agricultural development in Capricorn District

1. Tell me about the project that the Department has funded

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

2. How were the projects before and after you got the funding?

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

3. In your opinion, what is most disturbing about the project and why?

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

4. Generally, are you satisfied with the funding for the projects?

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

5. If not, what is the main problem that you have witnessed?

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

6. How often do extension officers visit you?

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

7. What are the challenges that you have observed and what have you done to resolve them?

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

8. What are the best social learning models to bring together farmers, researchers, advisors and policy makers to develop sustainable and innovative agriculture?

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

9. How is the government implementing the existing programmes towards the development of the projects?

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