AN ASSESSMENT OF THE SUSTAINABILITY OF AGRICULTURAL FLAGSHIP PROJECTS FOR FARMERS IN SEKHUKHUNE DISTRICT, LIMPOPO

BY

SELINA TSHEPHISO SHILAJOE

(11523114)

A dissertation submitted in fulfillment of the requirements of the Masters in Rural Development (MRDV) Degree

Institute for Rural Development

School of Agriculture

University of Venda

Supervisor: Prof. L.L Maliwichi

Co-Supervisor: Prof. A. Musyoki

August 2016

DECLARATION

I, **Selina Tshephiso Shilajoe**, hereby declare that this dissertation for Masters in Rural Development (MRDV) submitted to the Institute for Rural Development (IRD) at the University of Venda has not been submitted previously for any degree at this or another university. It is original in design and in execution, and all reference material contained herein have been duly acknowledged.

Signature .... **Date** 02/09/2016

Shilajoe S.T.

Main Supervisor .... **Date** 2.9.16

Prof. L.L. Maliwichi

Co-Supervisor .... **Date** 02/09/2016

Prof. A. Musyoki

DEDICATION

This work is dedicated to my lovely daughters Bokang and Tshepang for whom I am thankful to God Almighty. You are my strength and joy; you keep me going no matter how hard life can at times be and you are so deeply loved every day.

ACKNOWLEDGEMENTS

I would like to acknowledge God Almighty for the strength, knowledge, understanding and wisdom throughout this study. To Him let the praises go up and His glory come down.

Foremost, I would like to take this opportunity to thank my supervisor Prof. L.L Maliwichi for guiding and advising me during my studies. I earnestly acknowledge her dedication and the time she spent on my studies to ensure its success. This achievement will go a long way in my life and may the Lord God Almighty bless her.

I further would like to express my deepest appreciation and thanks to my co-supervisor Prof. A Musyoki for her continuous guidance, suggestions, support and feedback throughout my research.

I would like to thank the Land Bank for the financial support throughout my studies.

Sincere gratitude goes to the Limpopo Department of Agriculture and Sekhukhune District officials for giving me the opportunity to access information from selected projects.

It is also very important to acknowledge the role played by Ms. E. Mantwa, Ms. N.A Rakoma and Ms. M. Nemurunzini for assisting with the distribution and completion of questionnaires as well as Sekhukhune District officials for providing the opportunity to work with projects.

I acknowledge the role played by project leaders, representatives and beneficiaries who provided the research information. It is hoped that this dissertation will generate relevant interest among stakeholders and turn the situation around for the better.

To my friends Ms. N. Manari, Ms. L. Tshitahe and Mr. P.T Agboola, thank you for being friends by showing your support in different ways all times.

Lastly to my family thank you for being there, I could not have asked for any other family, all of you are the best and important in my life.

ABSTRACT

The aim of the study was to assess the sustainability of agricultural flagship projects of farmers in Sekhukhune District. Agricultural flagship projects are those projects that the Limpopo Department implemented so that farmers can have a source of income and also to reduce unemployment in the province. These projects are under CASP, LRAD and SLAG sub-programs. The objectives of the study were to identify managerial and farming skills farmers' lack, to identify problems experienced by farmers and to determine ways of improving agricultural flagship projects in Sekhukhune. The Department of Agriculture initiated agricultural flagship projects to alleviate poverty in the rural areas of Sekhukhune and most of these projects have not been successful due to poor management, lack of business and farming management skills, adequate financial injection, poor communication between government and farmers, poor co-ordination across departments, insufficient agricultural inputs and market accessibility. To address the mentioned problems, a list of all active or operating agricultural flagship projects in the district was drawn up. The random sampling procedure was used to select farmers to be surveyed. From each project, the chairperson and three active committee members namely, the treasurer, secretary and one additional member were interviewed. The total population of twenty extension officers in the district were interviewed. The basic objective in using a questionnaire was to obtain facts and opinions about an assessment of the sustainability of agricultural flagship projects for farmers.

The key findings of the study revealed that most farmers are more vulnerable in sustaining their projects, which then affects their livelihoods. For instance, in accessing market for their agricultural produce they sell them at the gate to generate profit. Requisite skills for the farming business will help them undertake income generating activities to access market with less competition as cooperatives will be formed to sell their agricultural products in bulk. It is recommended therefore that farmers have a timely and reliable information about markets, making the provision of information on prices, a whole range of business-related information is essential, such as who the buyers are and what their terms and conditions for doing business are. Therefore, the small-scale farmers are encouraged to acquire skill and experience in negotiating fair contracts to ensure that they protect their interests and are not taken advantage of or caught unawares about long-term implications of using credit. For the agricultural projects to be sustainable in production and income generation depend on access to finance for production start-up inputs like seed and fertilizer, and for fixed capital improvements. Young people also need to be encouraged to be involved in the farming business as the findings revealed that most of the farmers were elderly. There was poor communication and coordination and insufficient information available on relevant issues to the projects.

Key words: flagship projects, agriculture projects, sustainability, smallholder farmers, livelihood.

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LIST OF ABBREVIATIONS AND ACRONYMS

ABET	Adult Basic Education and Training
AGRISA	Agriculture South Africa
AGRIBEE	Agricultural Black Economic Empowerment
AES	Agricultural Economic Services
CASP	Comprehensive Agricultural Support Program
CDWs	Community Development Workers
CPFSP	Community Project Fund for Support Program
DBSA	Development Bank of South Africa
ERP	Extension Recovery Program
GDP	Gross Domestic Product
HRD	Human Resource Development
IDP	Integrated Development Programme
LARP	Land and Agrarian Reform Project
LADR	Land and Agricultural Development Research
LDA	Limpopo Department of Agriculture
LRAD	Land Redistribution for Agricultural Development
LED	Local Economic Development
MAFISA	Micro Agricultural Finance Institute of South Africa
MTSF	Medium Term Strategic Framework
NDA	National Department of Agriculture
NAFU	National African Farmers Union
NAMC	National Agricultural Marketing Council
NASS	National Agriculture Sector Strategy

NSDP	National Spatial Development Perspective
NSF	National Skills Fund
PGDS	Provincial Growth and Development Strategy
TA	Traditional Authority
SEZ	Special Economic Zones
SL	Sustainable Livelihood
SLAG	Settlement Land Acquisition Grant
CPFSP	Community Project Fund for Support Program
SAFEX	South African Futures Exchange
SAQA	South African Qualification Authority
SMMEs	Small Micro Medium Enterprises

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CHAPTER 1 INTRODUCTION

1.1 Background and rationale

The Greater Sekhukhune District was established and incorporated into the Limpopo Province in December 2000. It consists of five local municipalities namely Fetakgomo Municipality, Makhuduthamaga Municipality, Greater Tubatse Municipality, Ephraim Mogale and Elias Motswaledi Municipality. The Greater Sekhukhune District is mainly rural, with 94.7% of the total population residing in the rural areas and 5.3% in the urban areas. Most economically active people migrate to cities and this makes the majority of the population youth aged above 19 years, making 56% of the population of Sekhukhune, 38% is the economically active group. These are individuals between 20 and 59 years while 6% are older than 60 years. Women constitute the majority of the population at 55%. Agriculture is deemed to be the main contributor to employment and poverty alleviation. The highest development potential within Sekhukhune agricultural sector is along the southern parts of the district. It is estimated that the agricultural sector can be divided into the following components: 70% subsistence farming activities and 30% commercial farming (Integrated Development Plan, 2007/08)

As a District Municipality, Sekhukhune saw it was important to allow local municipalities to prioritize the projects in order for them to submit applications for funding. As a result, the District does not have a standard or specific model that it uses to prioritize projects. Local municipalities develop questionnaires for their communities, a process that is facilitated by Ward Committees and Community Development Workers (CDWs). Once the community needs as expressed through these questionnaires are consolidated, local municipalities determine their respective priority issues which subsequently guide the choice of projects (Integrated Development Plan, 2007/2008).

The future of agriculture in Sekhukhune has been, however, impeded by a number of factors. These included water scarcity, distorted land ownership patterns, a growing number of land claims, limited support services and inadequate infrastructure and services. In addition, the huge disparities between the commercial and subsistence farming worlds also eventually caused some social tension. The other area of potential tension lies in conflicting social and economic demands for water, an increasingly scarce resource in the District. It is a tension that will need to be mediated through future IDP processes (Integrated Development Plan, 2007/08).

The desire for sustainable development in the municipality requires resources to happen, which among them are land and finances, and this resources have to be addressed strategically. Sekhukhune Municipal area has its own dynamics related to land as most of the land for development is under land restitution claims. It is thus critical that concerted efforts be embarked upon by the municipality to facilitate access to land for sustainable development as well as usage. The District has programmes such as spatial planning to guide sustainable development; support programmes for beneficiaries of land restitution claims; and trainings and consultation sessions with various stakeholders on land use management practices and sustainability. This programmes ought to be communicated to communities so as they can measure the performance of government and hold it accountable. The municipality wishes to engage in a contract with its communities in addressing the challenge of poverty, unemployment, and service delivery. In this case the municipality will ensure that proper structures are put in where government will plan with the communities and monitor implementation. Government programmes cannot be realized if they are not backed by financial resources. The Sekhukhune District is faced with mammoth development challenges amidst limited resources. It is therefore paramount that the existing resources are well managed whilst striving for the mobilization of extra resources. In order to do so the municipality will specifically focus on development of a financial management plan and credit control mechanism (Integrated Development Plan, 2015/16).

The overall aim of the study is to assess the sustainability of agricultural flagship projects targeting small holder farmers in identifying factors that are critical to the success of these projects in the Sekhukhune District. In addition, strategies to improve performance of the projects will be suggested. The study will assist in identifying factors that hinder projects from attaining the poverty alleviation goal and ways in which performance of agricultural flagship projects can be improved in the Sekhukhune District.

1.2 Statement of the Research Problem

Farming is a traditional livelihood strategy and therefore a natural choice for most people residing in rural areas. There are few other opportunities for income generation and so agriculture still represents a possible option. This, however, could make farmers vulnerable to problems such as lack of market accessibility, lack of funding and insufficient resources in sustaining their agriculture projects which would have serious implications to their livelihoods. Farmers in flagship projects receive initial support from government through the provision of boreholes, trainings, fencings, funding and seedlings. Some of the flagship projects collapse because of lack of management, business and farming skills, skills training on how to start up and manage the projects (e.g. how to apply for bank accounts, loans, etc.). Farmers lack skills to undertake income generating activities or to engage in employment opportunities (Integrated Development Plan, 2007/08).

Secure access to land and its productive resources is widely seen as one of the ways in which the rural poor can improve their livelihood and alleviate poverty. The South African Government's programme of land reform can therefore play a critical role in ensuring access to land by poor people who would not otherwise have it. The success of land reform in impacting positively on the livelihood of the poor is dependent on effective and productive use of the available land and resources. Various studies undertaken in South Africa have indicated problems arising during the post-land transfer stage of the project implementation (Deininger and May, 2000).

Under the Land Reform programme in South Africa, various agricultural flagship sub-programs were developed to safeguard and promote the aforesaid benefits. Such products were the Settlement and Land Acquisition Grant (SLAG), Land Redistribution for Agricultural Development (LRAD), Comprehensive Agricultural Support Programme (CASP), and many others. These sub-programs were designed to alleviate poverty especially in rural areas and to reverse the low productivity confronting South Africa's black farmers. These programs seek to encourage and promote rural areas to produce more and have a firm local economy. One of the key aims of the South African government during the democratic era has been supporting the historically disadvantaged small-scale farmers in order to improve their efficiency and productivity (Vink et al., 2002).

Poor coordination across different government levels and departments in helping the farmers on the project's vision and mission, priorities and expectations, eventually cause poor service delivery. Skills, financial support, and infrastructure are important requisites for sustainable farming (small, micro, medium enterprises). Extension support and sustainable production were found to be crucial for farming success in the emerging farming sector (Integrated Rural and Regional Development, 2003). Lack of understanding of the importance of formal markets; benefit of training and extension support may be the main contributors to the unsustainable nature of the emerging farming sector in South Africa. Therefore, this sector requires a better understanding of the importance and access to formal markets, extension support services and training in order to be profitable (Groenewald, 2008).

There are agricultural inputs such as seedlings, gardening tools, fencing, machinery and boreholes given to support projects in the early stages, at times at the start of establishment of the project. It is expected of the farmers to make the projects self-sustaining. Insufficient agricultural inputs for farmers such as seedlings, machinery or gardening tools can delay production which might also cause problems in food production shortfalls in consumption and incomes. Some of these projects succeed but many fail due to the lack of continued support, both financial and otherwise (Integrated Development Plan, 2007/08).

There is also lack of market access and low level of agricultural production and productivity which are very critical and important for household food security. The products are often of low quality, limiting their value and demand. Market access is poor and thus limits agricultural development. Similarly, garden projects have been supported yet these are often constrained by market access. The need for more value added activities are essential as this would increase employment opportunities at the same time bringing more money to the district. This will be an idea behind supporting growth points as key economic drivers that grow markets (Montshwe, 2006).

It appears that the sustainability of agriculture practice is also linked to the level of inputs used.

This study is based on conducting the sustainability of agricultural flagship projects, to document what smallholder farmers are doing to promote agriculture (sustainable agriculture). Asset Research, (2015), South Africa is a vast and outstretched country covering many ecotypes and climatic zones, and it includes numerous and variable rainfall areas, soil types, farming systems and different types of farmers (i.e. small scale, commercial, emerging commercial). Because of these vast differences, it is impossible to reflect or even to attempt to state what sustainable agriculture is in the South African context. Therefore, beneficiaries of flagship projects were selected and they will represent other South African farmers.

The report is structured as follows: The research method is discussed, followed by a discussion of the data. A synthesis of the results is then provided and the report is concluded with a discussion of the results.

1.3 Objectives of the Study

1.3.1 Main Objective

The main objective of the study is to assess the sustainability of agricultural flagship projects of farmers in Sekhukhune District.

1.3.2 Specific Objectives

- To assess managerial and farming skills which farmers lack.
- To explore challenges experienced by farmers.
- To investigate the best practices to improve agricultural flagship projects in Sekhukhune.

1.3.3 Research questions

- What are the managerial and farming skills which farmers in Sekhukhune lack?
- What are the problems experienced by farmers when accessing the markets and in general in their farming businesses?
- How can agricultural flagship projects be improved?

1.4 Study Assumptions

- There is insufficient agricultural inputs and poor service delivery from government for farmers in Sekhukhune.
- Farmers' production of poor quality agricultural products which are not value-added goods, are limiting the demand for these products and farmers' access to the markets.
- There is poor communication and coordination between stakeholders, and insufficient information available on issues relevant to the projects.
- There is poor linkage of coordination among agricultural researchers, extension officials and farmers.
- There is inadequate business, management, leadership, and farming skills in projects.

1.5 Operational Definitions of Key Terms and Concepts

Sustainable Livelihood can be defined as a livelihood that comprises the capabilities, assets (including both material and social resources) and activities required for a means of living, therefore meeting the needs of the present generation without compromising the ability of future generations to meet their own needs (Nelworth, 2009).

Value Addition is the enhancement added to a product or service by a company before the product is offered to customers, the segregation of an agricultural commodity or product in a manner that results in the enhancement of the value of that commodity or product such as an identity preserved marketing system (Boland, 2006).

Food Security Programs are programs which ensure that all people, at all times, have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life throughout the year and from year to year (D'Hease and Kirsten, 2003).

Flagship Projects are those projects that government and other stakeholders assist farmers with agricultural inputs such as land, infrastructure, funds and others, for small scale farmers and co-operatives (DLA: 1997).

Rural Area is a sparsely populated area outside of the limits of a city or town or a designated commercial, industrial or residential center. Rural areas are characterized by farms, vegetation and open spaces (education.nationalgeographic.org/encyclopedia/ rural-area, 2015).

Agro-Processing is the transformation of raw ingredients, by physical or chemical means into food or of food into other forms. It combines raw food ingredients to produce marketable food products that can be easily prepared and served by the consumer. It typically involves activities such as mincing and macerating, liquefaction, emulsification, and cooking (such as boiling, broiling, frying, or grilling); pickling, pasteurization, and many other kinds of preservation; and canning or other packaging (Alexandratos, 1996).

Sustainable agriculture – This is a system that utilizes an understanding of natural processes along with the latest scientific advances to create integrated, resource-conserving farming systems. These systems will reduce environmental degradation, are economically viable, maintain a stable rural community, and provide a productive agriculture in both the short and long term (Francis, 1990).

1.6 Organization of the Research Proposal

Chapter 1 – This chapter is the introduction in which the background to the study area, statement of the research problem, research objectives and research hypotheses are discussed.

Chapter 2 – This chapter deals with relevant literature related to the assessment of the sustainability of agricultural flagship projects for farmers.

Chapter 3 – The chapter outlines the research methodologies utilized during the study. It includes the description of the study, research design, population and sampling procedures, data collection as well as data analysis methods and techniques and ethical statement.

Chapter 4 – This chapter focuses on the research findings and interpretation of the results in detail. Chapter four contains the presentation and discussion of research findings of the study. It includes the data from questionnaires, interviews and observations made.

Chapter 5 – The chapter summarizes all the findings of the study with conclusions and recommendations.

CHAPTER 2 REVIEW OF LITERATURE

2.1 Introduction

This chapter discusses relevant literature on sustainable agriculture. The chapter further outlines the historical development relevant to the concept of sustainable agriculture, sources of loan capital available to South African farmers and the history of sustainable agriculture and traditional farming. It also focuses on how projects need to be self-sufficient and sustainable, contributions towards alleviating poverty and unemployment, the role of sufficient agricultural inputs and products in the marketing system and quality produce as well as agricultural skills development addressing agricultural needs.

South African agriculture can be best described as a dual system where the well-developed and capital intensive commercial agriculture contributes significantly to national food security. The second type of agriculture is the less developed and less resourced agriculture occupied by smallholder farmers and subsistence farmers. Despite the decline in agricultural activities by most rural people in South Africa brought on by urbanization, a large number of rural households in South Africa are still engaging in agricultural activities (Statistics South Africa, 2012).

A report from Statistics South Africa (2012) indicate the sheer number of people participating in smallholder farming as well as how these are among the poorest population in South Africa, characterized by weak livelihood assets and vulnerability to household food insecurity. Despite this fact, the smallholder (which include subsistence) farmers who are largely located in former homelands have not experienced effective support from policy makers. The high number of people participating in smallholder farming activities warrants attention in understanding their farming contexts, and this might inform the appropriate strategies required to support the smallholder farmers' livelihoods more effectively and sustainably.

2.2 The context of smallholder farmers in South Africa

Smallholder farmers in South Africa are mostly poor socio-economically, less educated and reside in rural communities with less developed infrastructure which locates them in the so-called second economy (Jacobs, 2008). Many of these communities are usually governed by male traditional chiefs, while up to 80% of the active producers are females (FAO, 2002). In South African rural areas, almost all the land is communally owned and administered by a Traditional Authority (TA), and is mainly for subsistence purposes. The communal ownership of land in these areas tends to diminish its commercial value, especially within a neo-liberal orientation that underlies commercial farming in South Africa, which promotes competition and individuality.

Smallholder farmers are farm households with access to means of livelihoods in land relying primarily on family labour for farm production to produce for self-subsistence and often for market sale. The concept of small-scale farmers in South Africa is laden with subjectivity and has been associated with non-productive and non-commercially viable agriculture that is found in many parts of the rural areas. The definition of small-scale farmers has different meaning to different people. It is much more difficult to determine who are meant when reference is made to small-scale farmers and subsistence farmers in the former homelands, or emerging farmers, black farmers, small-scale white farmers, previously disadvantaged farmers, farmers owning small pieces of land or farmers with a small turnover (Pote, 2008).

According to Vorley et al. (2012), the value of smallholder agriculture is being recognized in developing countries hence where land is transferred to smallholders in those countries, governments ensure that programs in agricultural development lead to the empowerment of these farmers. The conditions that smallholders face have changed. Farmers face a series of unprecedented, intersecting challenges, often originating at global levels: increasing competition for land and water, increased influence of and changing markets, rising fuel and fertilizer prices, and climate change. This changing context poses difficult challenges for smallholders, who are more directly dependent on ecosystem services and have less capacity to adapt to changing contexts, compared with larger, more resource-endowed farmers. Until recently, international investments in agricultural development and policy had been lagging behind other sectors. Smallholders have often been neglected in debates on the future of agriculture, and left out of policymaking at numerous levels.

The economic sector that covers the largest surface area in the world, agriculture must take its place at the heart of economic growth, poverty reduction and environmental protection. For agriculture to realize this potential, it will have to change dramatically, and smallholder farmers need to be critical agents in this transformation. Renewed focus on the development support and investment needs of smallholder farmers is critical.

The value of smallholder agriculture is being recognized in developing countries hence where land is transferred to smallholders in those countries, governments ensure that programs in agricultural development lead to the empowerment of these farmers. The efficiency of smallholders in agriculture contributes to increase in incomes and promotes equitable distribution of income, creates backward and forward linkages necessary for economic growth. In this way, it is not only the agricultural sector that benefits from agricultural projects of smallholder farmers but the economy at large (Dorward & Kydd, 2006).

Although according to Kirsten & Van Zyl, (1998), claim that small scale agriculture is less efficient in output as compared to commercial agriculture, it is ecologically friendly in that less land is cleared for cultivation, there are less emissions due to less use of fuel-driven machinery and the market is usually local implying less carbon miles. On the other hand permaculturalists and others claim that per unit of area small scale agriculture is far more productive than commercial agriculture in terms of total output from the piece of land. Economically, small scale agriculture enhances local economic development as it is a source of employment and keeps most of the income local as the market is predominantly localized. Socially, especially on traditional lands, the produce is first meant to feed the household thereby contributing to food security. (Bonti, 2001).

2.3 Market access for smallholder farmers in South Africa

Markets continue to be seen as the means for ensuring that smallholder producers of agricultural products are effectively integrated into the mainstream of national economies, especially in developing countries. Markets provide the opportunity for farm production to contribute to poverty reduction through the cash income realized from sales of farm produce. In turn, markets drive production as farmers strive to meet the demands of consumers and end-users in terms of quantity and quality. But their very existence, or how effectively they function, cannot be guaranteed in many developing countries. In South Africa, there is a certain urgency to address the real concern that, in spite of considerable investments into restructuring the sector since 1994 and directly tackle agrarian and land reform, poverty is still rife and there is a clear indication that much of this arises from farmers not being able to sell produce at a profit. Unlocking markets for this group of farmers is therefore considered a crucial developmental necessity (Nelworth, 2009).

Smallholder farmers' fulfillment benefits are economic and subsistence goals. However, for smallholder farmers, the environment for economic growth is constrained by challenges of production, infrastructure and lack of access to the markets. The need to tackle these constraints stems from the fact that despite the advent of the democratic dispensation, poverty remains deep rooted and smallholder farmers bear the brunt of this as they remain restrained from market access. Although market access and its constraints for small producers in the world over is not a new phenomenon, the deep poverty and inequality in South Africa makes this an urgent matter that requires immediate attention. There are points which attempt to isolate key market access issues of a non-market nature yet have serious contribution to the market access blockages. They include constraints of a technical, institutional and socio-cultural nature which affect the communal way of life where most rural smallholder farmers in South Africa reside. Van Scalkwyk et al. (2012) have noted constraints relating to poor infrastructure, high transaction costs, price uncertainty, and high risk in agricultural production wherein new products and risks are associated with new methods of production, such as certified organic production. Institutional constraints are also very problematic in smallholder farming disabling the impact groups of farmers could have in the market place.

There are many factors in South Africa that influence agricultural market access both at domestic and international level respectively. One of the factors is that farmers must produce products that conform to certain standards regarding quality, packaging and labeling among other aspects (Department of Agriculture and Land Affairs, 2007). Another factor is that if farmers are to be in better bargaining position, output must be high enough to cater for economies of scale (Groenewald *et al.*, 2003). In order for marketing information to be accessible, there has to be necessary market infrastructure that facilitates communication and physical infrastructure such as roads to reach different markets. There are many other factors which directly or indirectly influence market access namely: asset ownership, good agricultural practices, extension, credit, labour and skills other factors (Makhura *et al*., 2001).

2.4 Agricultural production in farming

Agriculture is one of the main components of the sustainability of human civilization. With today's advanced technology, the production of agriculture is slowly shifting its focus to creating goods that are safe for society and the environment. Agricultural productivity measures the performance and provides a guide to the efficiency of the sector (Atkinson and Buscher 2006). Even the United States Department of Agriculture stated that agricultural productivity statistics are important to identify the source of economic growth, justify the appropriation of agricultural research funds, serve as an indicator of technical changes and justify price changes. Although United States government involvement was limited to creating policy instruments that improved productivity within the sector, its involvement on researching about the productivity was limited.

The concepts of sustainable livelihood (SL) which is of contemporary development discourse and poverty alleviation, allow beneficiaries to secure a livelihood from the land they have acquired, as it will be complimented by skills and other resources to assist in agricultural production. A definition of livelihood by Chambers and Conway, emphasizes that a livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living, and it is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (Chamber and Conway, 1992). The concept of sustainable livelihood extends beyond just production activities access to land and provision of other assets, for example, all the five capitals/assets (Human, Social, Financial, Natural and Physical assets). This concept clarifies the context within which poor people live and how they sustain themselves through available resources (Nelworth, 2009).

2.4.1 Capital as a factor of production

It is evident that agricultural flagship projects in the district remain a major factor for sustainability for farmers, furthermore, access to market and funding which is likely to increase the productivity of the smallholder farmers. Managerial traits such as, better skills, better education, are likely to influence farmers to participate in the markets and also their decision to use funds. It is also assumed that financial institutions distance themselves with serving small-scale farmers due to risk and costs implications associated with serving this category of farmers. Farmers with lack of collateral in terms of land and other assets normally access credit through informal lender who charges higher interest rates. Farmers at times choose informal financial services because of easy access, variable loan size, flexible repayment schedule, personal guarantees, convenience and very short period needed to obtain loan approval. (Van Scalkwyk et al. 2012)

Small-scale farmers in communal areas of South Africa have limited access to factors of production including credit and information. Markets are often constrained by inadequate property rights and high transaction costs. Despite these problems, some small-scale farmers have managed to produce food for own consumption and for the market (Ortmann & King, 2007).

Coetzee (2007) points out that a preferable approach in ensuring the availability of efficient rural finance services (including saving) rather than extending credit to finance exclusively agricultural production is a preferred approach when rural development is pursued. Kimemia (2004) argues that the establishment of efficient forms of rural financing is a vital aspect of rural development. Commercial banks tend to largely steer clear from micro financing- especially in rural areas –as a way of hedging against the risk.

2.4.2 Labour as a factor of production

Labour can be in terms of hours or number of labourers needed to get the farm work carried out. How many labourers are available is very important in determining the type of activities possible and how intensively the land can be worked, that is, the more intensive, the more labour is needed. The number of labourers available can determine whether peak activities can be done, and on time. For example, late preparation, sowing, weeding or harvesting can have an adverse effect on yield. The management of labour, the farm equipment available, as well as the use of draught animals and mechanization, greatly affects farm activities and the quality and quantity of production. In small scale farms, it is often seen as an advantage to have family members working on the farm because they do not need so much supervision, and are prepared to work long hours in a way that hired hands are not. However, whether family members can work on the farm depends on how productive it is, as well as whether better opportunities for off-farm employment exist or not (Andretsch et al 2008).

There is sufficient debate amongst scholars on the relationship between farm size and agricultural productivity (Van Der Meer et al, 2006). As noted by Collier and Dercon (2009), there are those who argue about smallholder farmers being in a weak position to compete in modern markets due to their limitations in acquiring the necessary technology, finance and farm management capability to obtain the required high yields and efficiently deliver in increasingly standardized and commoditized food markets. Accordingly, farm size would rise with economic development in the long term: past experience has shown how the small farms particularly present in early development stages of national economies tend to feed a process of land holding consolidation in favor of larger and market-oriented farming operations.

2.4.3 Land as a factor of production

Most smallholder farmers in South Africa have limited access to land and capital and have received inadequate or inappropriate research and extension support resulting in chronically low standards of living. In the rural areas agricultural production is carried within increasing pressure of scarce land resources managed under insecure customary land ownership and communal grazing land. These insecure tenure systems such as communal land tenure system constrain the farmers from producing to their highest potential. Farmers can only invest and make sustainable improvements on land in order to increase productivity if they perceive their tenure as secure. In instances where there is limited access to land, land reform policies play a role in finding solutions for problems associated with lack of access to land (NDA, 2005).

The identification of an appropriate market niche for smallholders in the sustainable agriculture equation requires the resolution of the land tenure reform which has proven to be a complex matter. Title on land in many regions is held by national governments, and locally based farmers and communities tend to enjoy rights over state owned land, but formal land property titles in the hands of either individual farmers or collective farmer institutions are reported to be a rare case (Cotula et al. 2009). Farmers always feel discouraged to commit to investments on market-oriented agricultural systems where there are weak land tenure regimes.

Where uncertainties exist on land rights they negatively affect a long term use perspective by farmers, thus inducing smallholders to both a) refrain from farming investments (labour and physical infrastructure) and b) contribute significantly to the overexploitation of the land and its natural resources (IFAD, 2010).

The demand on agriculture to feed a larger and more urbanized population through global markets over the next 40 years will continue to grow, placing additional pressure on available land and other natural resources. Current practices are undermining the ecological foundation of the global food system through overuse and the effects of agricultural pollution, thereby enhancing degradation, reducing ecosystem capacity to generate sustainable yields and threatening to negatively impact food security and poverty reduction. Sustainable agricultural intensification can be the answer to enhanced food security, environmental protection and poverty reduction. On the other hand, smallholders often have limited control over land and natural resources. Many live on land over which they have customary rights that do not always adequately protect them from land and resource dispossession by more powerful stakeholders such as the government (Vorley et al 2012). Weak tenure rights can limit smallholders' access to credit and their ability to invest in longer-term, sustainable practices. Small farmers are seen as inadequate in the face of globalization, because they lack economies of scale, capacity to invest and technical know-how, and will likely decline in number over time (Collier 2008).

Land-use practices and their impacts need to be considered at multiple scales, from a local 'farms cape' to the wider landscape. Unsustainable practices at the landscape level, which may occur independently of smallholder agriculture, can still have an impact on the ecosystem services available at the farm level. Equally, activities at the farm level can influence the ecosystem services available in the wider landscape, and in other spatially distinct agro ecosystems. Decisions by individuals affecting diverse landscape elements, such as forest fragments and water courses, will have consequences for other farmers in the wider landscape. Focusing too narrowly on the farm will not necessarily secure the delivery of the ecosystem services on which smallholders themselves depend. Landscape-level interventions or management are needed, e.g. suitable habitat for beneficial organisms may arise from an aggregation of smaller farms. For successful management of multiple services, more information is needed on how land use and other environmental factors affect the distribution, abundance and community composition of organisms that contribute to crop production. Intermediate services are being produced by a wide range of contrasting organism groups and are generated at varying spatial and temporal scales. To be able to promote synergies and avoid trade-offs, one needs to know which service-providing communities should be managed at what spatial scale and by what form of management, and how interventions aimed at enhancing one target service affect the stock and flow of the others (Benton 2012).

2.4.4 Low external input technology

Low external input technology (LEIT) is a prominent feature of many discussions about the role of agricultural technology in rural poverty reduction. There is a widespread conviction the LEIT is more accessible to resource-poor households and can be the basis for human and social capital formation. Farmers require hands-on experience before they are motivated to utilize many of these techniques. In some cases the techniques are quite visible to neighboring farmers, who are capable of copying the ideas with a minimum of experience. In other cases farmers need a period to learn and experiment with the technique and the experience is more difficult to communicate (Tripp, 2006).

The examination of low external input agriculture must acknowledge that the issues at stake go well beyond the use of particular production resources. The concerns include the capacities of farmers and their communities and the nature of agricultural development. Arguments are often based on interpretations or aspirations that reflect a range of values and beliefs. Agriculture which relies upon low external inputs does not necessarily address environmental concerns, promote farm level adaptation or promote community organization (Vink and Kirsten, 2002).

Ortmann *et al* (2006) points out that the small-scale farmers in communal areas of South Africa have limited access to factors of production, credit and information, and markets are often constrained by inadequate property rights and high transaction costs. Despite these problems, some small-scale farmers have managed to produce food for own consumption and for the market.

Farm margins continue to decrease due to high input costs such as energy (fuel and electricity), fertilizers, farm machinery and labour. Sectorial determination on farm wages is becoming a crucial factor affecting the productivity of farms as it has an exponential effect on the farm costs. If not well managed it will force farmers to look for alternative options in the form of high technology and mechanization. In support of smallholder development the Department will promote the use of efficient technologies and facilitate farmer cluster development through institutional structures such as cooperatives (DoA 2014).

2.4.5 Lack of extension services, education and training

Rural women, in particular, are subject to social and cultural dictates and are also overburdened with their almost exclusive role of taking care of the needs of the children and men in the family. Formal education of women is almost absent from society's agenda. Research and extension services, which have acted as a vehicle for improvement in crop production practices, crop productivity and efficiency, have generally been male-oriented. They have generally ignored the needs and priorities of women. Cultural and social biases have also prevented women from making use of such services and training programs. In addition to all these overt handicaps, rural women suffer from many covert prejudices and denial of any significant role in decision making related even to their own private lives and interests, let alone the use of resources or other matters of family interest. This type of gender discrimination is a threat to sustainable agriculture, the conservation of natural resources, household food security, and the health of a vulnerable segment of human society. Given a level playing field women could contribute so much more to rural prosperity (Tauger, 2011).

Terblanche (2013) highlighted that agricultural development is an initiative aimed at helping people to help themselves - i.e. helping people to change to their individual and/or group advantages (financially and/or otherwise). We know that people are inclined to become the victims of their own environments thus becoming pre-destined to endure hardships while sound and responsible development initiatives could hopefully alleviate or possibly remove such hardships. The (behavioral) change process begins with a state of awareness and (ideally) culminates with full adoption. Perceptions and knowledge play an important role in moving people forward once they have chosen to aspire towards the "new" objective. Perceptions, knowledge and aspirations are considered the primary intermediaries towards change. Unlearning (discarding) present (and often proven) practices and/or ideas could prove to be more difficult (for individuals) than learning new ones (Habtemariam & Düvel, 2003). Letting go of the old in favour of the new feels risky (insecure) resulting in many preferring not to change. One is at times faced with institutional or other changes that require personal adaptations (for which there are no perceived alternatives). For an extension officer this could be an easier (more acceptable) route to follow i.e. to change an economic / social / political or other environment and allowing people to respond / adapt to such changes. Financial support systems, social grants, subsidies, performance awards, some form of legislation (such as compulsory registration) etc. fall into the "changed environment" grouping to which people respond voluntarily (or at times less voluntarily).

The Extension and Advisory services' mandate is to provide farming communities with technical support services for animal and crop production to improve food security. To implement this, LDA will ensure that staff is properly equipped with appropriate knowledge and skills in order to render quality services to farmers. Through the Extension Recovery Programme (ERP), Agricultural Advisors will be exposed to technical skills programmes and to upgrade qualifications. Relevant short courses on facilitation skills and group dynamics will be facilitated in collaboration with training institutions to improve knowledge (DoA 2014).

2.5 Historical developments relevant to the concept of sustainable agriculture

In thinking about the current and future needs and characteristics of truly sustainable agriculture, it may be instructive to review briefly some of these issues in a historical perspective. How sustainable has agriculture been over the centuries, and how has this picture changed? Has agriculture ever been truly sustainable? What has been the impact of technology, and how have we arrived at the current needs and the rapidly expanding human population. It should, however, be acknowledged that sustainable agriculture is a relatively recent phenomenon. Throughout much of human history, there was adequate land to produce the needed food. Sustainability of agricultural production is dependent on a large number of biological, climatic, economic, and social factors. There is increasing awareness of how these factors interrelate. There is growing appreciation of the numerous biological interactions that are active in crop and animal production and how certain integration efficiencies can be used to advantage (Francis, 1990)

According to Tripp (2006), agriculture is unique among humankind's enterprises with respect to the emotions that it evokes. Agricultural practices are inextricably woven into broader traditions, customs and wisdom. A particularly effective argument for more attention to agricultural sustainability is based on comparisons with traditional farming practices. On the one hand, many agricultural systems have taken millennia to evolve, and their intensification because of population growth and the availability of external inputs may upset environmental balances that will be difficult to restore. Land shortages have destroyed many traditional fallowing practices and have cut farmers off from other common property resources. Economic pressures and opportunities have made farmers look for additional ways to reduce their labour commitments on the farm. External inputs are often cheap and convenient, and their distribution may benefit from various direct and indirect subsidies (Tripp, 2006).

Farmers use technology to make advances in producing more food for a growing world. Through the use of technology, each farmer is able to feed 155 people today, compared to 1940, when one farmer could feed only 19 people. Farmers use technologies such as motorized equipment, modified housing for animals and biotechnology, which allow for improvement in agriculture. Better technology has allowed farmers to feed more people and requires fewer people to work on farms to feed their families. Changes in equipment have made a large impact on the way farmers are able to farm and grow food. In the past, farmers would have to do field work by hand or with horse-drawn equipment. This work would take a long time to complete, which meant that farms were smaller because farmers could only work so much land. Horses were not very fast, and they would tire out so farmers would have to let the horses rest. Today, most farmers use tractors and other motorized equipment to help with field work. Tractors are larger and move faster than horses, so farmers are able to work on more land and grow more food. Tractors still need to be taken care of because they can break down just like a car. But they can run for longer periods of time and work when the farmer needs them (Prax, 2010).

Emerging farmers experience post-harvest losses due to unavailability of adequate market infrastructure and formal markets such as fresh produce markets and processing facilities. As part of unlocking upstream value chain opportunities, government has identified value addition and agro-processing to reduce post-harvest losses and to increase income generating opportunities. Farmers will be supported to expand production to supply existing local processing facilities. In collaboration with industry stakeholders we will continue to identify and evaluate agro-processing opportunities for further developments (including agro-logistics). In 2012 an Agro-processing Strategy was developed as part of a framework to guide the province's contribution to SIP 11 objectives. With their immense collective experience and intimate knowledge of local conditions, smallholders hold many of the practical solutions that can help place agriculture on a more sustainable and equitable footing. To do this, they need help to overcome market failures and other disincentives for sustainable land use, including insecure land tenure, high transaction costs and weak institutional support. A major challenge will be to address the discrepancies of scale between decisions made at the farm level and impacts at larger ecosystem scales. (DoA 2014).

2.6 Profit and sustainability

The relationship between agricultural sustainability and economic conditions is a double-edged sword. The sustainability of agriculture is strongly influenced by powerful monetary and institutional forces that determine the profitability of conventional commodity markets, availability and prices of inputs such as petroleum and phosphates, and provisions of governmental regulations and price support programs. In the long term, the sustainability of agriculture can also have a major impact on local, national, and world economic conditions, as related to food costs, depletion of essential resources, and possibly climatic changes such as the greenhouse effect or global warming effect. Farmers decide whether or not to adopt various farming methods on the basis of their personal values and the information at hand. Clearly, farmers are concerned about environmental and human impacts of farming methods. However, their willingness to switch from chemical-intensive to sustainable methods may be strongly influenced by the expectation of profits or losses in the current growing season, as well as in the future decades and generations. Obviously, a farmer must remain financially solvent in the short term to have a sustainable business (Nelworth, 2009).

The fact that agriculture is considered an area of competitive advantage for Limpopo Province does not prevent it from facing a range of considerable challenges in the form of recurring droughts, floods, complicated land tenure patterns and access to infrastructure. Despite these challenges, agriculture is a national priority sector in terms of the micro-economic reform strategy of the country. This is spelt out in the National Agriculture Sector Strategy (NASS), which informs strategic planning in the Department. National priorities, which consider sustainability in agriculture are particularly relevant to Limpopo which focuses on high-value and export orientated commodities, agro-processing, promoting competitive supply chains and providing support programs for black farmers (IRRD, 2003).

2.7 Sustainable agriculture and traditional farming

Agriculture is unique among humankind's enterprises with respect to the emotions that it evokes. Agricultural practices are inextricably woven into broader traditions, customs and wisdom. A particularly effective argument for more attention to agricultural sustainability is based on comparisons with traditional farming practices.

According to Baiphethi and Jacobs (2009), subsistence production has proven important for household food security, but the productivity of smallholder agriculture remains quite low and, in some cases, is given as the reason for the abandonment of agricultural production by both urban and rural households and their subsequent reliance on off-farm sources of income. According to a report by the International

Water Management Institute (IWMI, 2003), farmers who work plots smaller than one hectare must, in the African smallholder context, depend on a variety of sources to earn a livelihood. The inability to depend upon irrigated farming for all or a substantial proportion of the family income means that the male members of the household are often forced to leave home to seek employment in urban areas, while the women remain behind to cultivate the family plot. Off-farm income substantially complements the limited income derived from agricultural production. Off-farm income is also important because it can be used for investment purposes and to purchase farm inputs, thus improving food security (Baiphethi & Jacobs, 2009).

Despite the increasing industrialization of agriculture, millions of farmers fill rural landscapes with small-scale, diversified agricultural systems. Most traditional agriculture is place-specific, evolving in time in a particular habitat and culture, and this is both where and why it tends to be successful. The transfer of specific technologies to other places may fail if soils, tools, or social organization differ. This is why agro ecologists do not focus on specific technologies, but look at the underlying principles used by traditional farmers to meet the environmental requirements of their localities. Rural knowledge is based not only on observation, but also on experimental learning. This approach is apparent in the selection of local seed varieties, and in the testing of new cultivation methods to overcome particular biological constraints. Most farmers have an intimate knowledge of their surroundings, especially within a small geographical and cultural radius. This local expertise cannot be matched by the generalized knowledge of the ecologist, yet the ecologist's sophisticated training cannot be matched by the experiential knowledge of local farmers (Miguel, 2004).

2.8 Policy discrimination against sustainable agriculture and farmers' learning

The policy measures used to support agriculture currently act as powerful disincentives against sustainability. In the short term, this means that farmers switching from high-input to resource-conserving technologies can rarely do so without incurring some transition costs. In the long term, it means that sustainable agriculture will not spread widely beyond existing localized successes. The principal problem is that policies simply do not reflect the long-term social and environmental costs of resource use. The external costs of modern farming, such as soil erosion, health damage or polluted ecosystems, are not incorporated into individual decision-making by farmers. In this way, resource-degrading farmers bear neither the costs of damage to the environment or economy, nor those incurred in controlling the polluting or damaging activity. Policy reform in agriculture is under way in many countries, with some new initiatives supportive of a more sustainable agriculture. Most of these have focused on input reduction strategies, driven by concerns over foreign exchange expenditure or environmental damage. Only a few as yet represent coherent plans and processes that clearly demonstrate the value of embracing integrated production and environment policy goals. There is much that governments can do within existing resources to encourage and nurture the transition from modernized systems towards more sustainable alternatives such as, encouraging the formation of local groups, foster rural partnership, permit groups to have access to credit and support information systems to link research, extension and farmers (Roling and Wagemakers, 1998).

Participation of smallholder farmers in the sector and the value chain at large has not reached the desired level due to structural challenges. Access to markets and agricultural finances remain the main hurdles for the historically excluded farmer's meaningful participation in the sector. The Limpopo Department of Agriculture (LDA) support through its various support packages, such as farm infrastructure development, provision of production inputs, capacity building programmes and technical and economic advice, are all aimed at assisting smallholder farmers to overcome these challenges. With respect to job creation, in terms of the National Development Plan (NDP) the agriculture sector is expected to create 1 million jobs by 2030. This is to be achieved by a move from primary focus of production to emphasis on value chain production, through the implementation of Limpopo agro-processing strategy and in line with the Special Economic Zones (SEZ) development model. It is expected that the sector employment would rise as government continues to implement the NDP. The drive to create more jobs in the secondary value chain through agro-processing development, will also stimulate and sustain the primary production of high value agricultural commodities. Equally, food security remains a key focus area for government. As part of NDP implementation, National Cabinet has approved the national policy on Food and Nutrition Security. This policy outlines roles and contribution of government Departments in addressing food insecurity in South Africa. It calls for integrated programmes and improved coordination of resources to increase the impact of government programmes on food security (DoA 2014).

2.9 Economic viability of sustainable agriculture

The economic dimension of agricultural sustainability is quite complex. Economic viability in the case of a farm, the lowest level in the economic hierarchy of agricultural systems, can best be quantified as profits for the farmer. The monetary value of all the inputs required for production, such as chemical inputs, machinery, labor, and cost of land conservation, assist farmers to afford a fairly comfortable lifestyle typical of local socioeconomic levels. Although, prima facie, economic viability is directly linked to productivity, it is neither static nor stable as demand for farm products varies with the dynamics and specific needs of a human population and with the agricultural and nonagricultural policies of local, state, and national governments. Even at the farm level, how economic viability/profitability works for the farmer is a complex and highly contextual factor. It is guided directly by government policies in terms of the input subsidy toward the cost of seed, fertilizer, pesticides, water, and electricity, and in terms of procurement prices, crop insurance, credit policies, and so on. It is also dependent on factors such as technology, market facilities, infrastructure, including roads and storage facilities, market demand and consumer preferences, and cooperative group farming or corporate farming facilities. The availability and prices of commodities in international markets and governments policy on the import and export of agricultural products, including import tariffs, export incentives, international trade policies, and the balance of payments, influence economic viability at the national level. Often governments are forced to export even below their national prices or production prices to maintain favorable trade balances and foreign exchange reserves. Economic viability is also influenced by certain political and social factors such as the supply of agricultural commodities to economically and socially challenged groups of people at preferential rates. (Vink and Kirsten, 2002).

Coetzee (2007) points out that the specialized farm credit institutions and the mechanisms of the conventional supply-led approach to rural credit, are poorly adopted to address the difficulties associated with rural finance. They typically do not diversify their client base and portfolio inside the rural areas. They usually are not integrated into larger institutions with urban operations and have limited urban diversification and risk pooling opportunities. With time however, more diverse approach to rural financial intermediation in rural areas became apparent and acknowledges the context and range of institutional options in different contexts. In some, setting a co-operatives or member-based institutions seem to be more appropriate, in others, setting credit programmes combining individuals and group technology seems appropriate (Coetzee, 2007).

The Department will also continue to facilitate access to Agricultural Black Economic Empowerment (AgriBEE) funds to encourage equity shareholding in existing agro-processing businesses. Access to agricultural finance has been cited as one of the limiting factors for smallholder participation in farming business. Government grants to farmers have over time contributed to the dependency syndrome by farmers and loss of appetite to access agricultural credit. The Department will encourage equity contribution by farmers in their own development as a strategy to empower them to become independent entrepreneurs. The Department has identified a lack of entrepreneurial and technical skills by emerging / smallholder farmers also as cause of their inability to access credit and formal markets. To promote competiveness of farmers, the Department will strengthen provision of agribusiness development services such as record keeping, business management skills and coordinated and production planning (DoA 2014).

2.10 Theoretical or Conceptual Framework of the Proposed Study

The government introduced a range of facilities to support the settlement of emerging farmers, such as the Settlement Land Acquisition Grant (SLAG), Land Redistribution for Agricultural Development (LRAD), Comprehensive Agricultural Support Program (CASP) and Micro Agricultural Finance Institute of South Africa (MAFISA). However, these facilities are underfunded and cooperation between the stakeholders involved is inadequate. The cost of land and other inputs, for example machinery, is one of the major reasons why emerging farmers have high debt ratios that contribute to their downfall. A farmer with limited financial resources and experience finds it difficult to enter farming. Secondly, the role of the state and various government departments' plans and work impact on the agricultural sector. Related to this is land reform that is inevitably driven by the state and not the owners of the land or the landless. (Department of Agriculture and FIVIMS, (2007).

The view expressed by many engaged in agrarian reform is that the state must play a significant role. It becomes clear that a successful agricultural enterprise requires a number of factors to be in place to be successful. These include access to land through the Department of Rural Development and Land Reform which agricultural support within a supportive agricultural framework is Department of Agriculture, Forestry and Fisheries. Accessibility to consistent water supply for production is from Department of Water Affairs and access to finances from the Department of Trade and Industry and various state agencies. Small-scale farmers need to abide with conducive labour market regulation within the Department of Labour and sound industrial policies in Department of Trade and Industry. Department of Economic Development, National Treasury assist with economic planning and macro policy and appropriate education, training and skills development through the Department of Higher Education and Training and Human Resources Development Council. There are other government departments as well as provincial and municipal structures that play a role in making sure that there is a success in agricultural enterprises. (Agri-SETA, 2010)

To consolidate gains and address weaknesses, the departments of Agriculture and Land Affairs, in collaboration with NAFU and Agri-SA, have developed a common long-term vision for a united and prosperous agricultural sector. The medium-term goal is to generate equitable access and participation in a globally competitive, profitable and sustainable agricultural sector. Planning for achieving this goal began in 2002. South Africa, at most times, is able to meet its own food requirements, with considerable food exportation. However, the inherent limitations of the natural resource base and variable climate require land users to be very circumspect in how they use and manage these resources so as to retain their productive capacity. Ninety percent of South Africa can be regarded as arid, semi-arid and dry sub-humid, and it is these areas where desertification can occur (Moyo, 2010).

2.11 Summary of Review of Literature

Agriculture is regarded as a national priority sector in South Africa's overall development strategy and is envisaged 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, the lack of post-settlement support, lack of production skills, insufficient production inputs, lack of funding, lack of market accessibility and the lack of entrepreneurial skills are very often major stumbling blocks to achieve this goal (Limpopo Department of Agriculture, 2012).

Studies provide a wide range of different systems in classifying sources of income. Terms like off-farm and non-farm income are used at first glance in a synonymous way, but with slightly different definitions. The rural poor depend largely on agriculture, fishing, forestry, and related small-scale industries and services. Moreover, the rural poor are not a homogeneous group. One important way to classify the rural poor is according to their access to agricultural land: cultivators have access to land as small landowners and tenants, and non-cultivators are landless, unskilled workers. Lack of farming expertise and experience is highly noticeable, this is a persistent problem, despite the well-established evidence indicating the low level of experience and capacity of the beneficiaries in the interest of sustaining the flagship projects (Limpopo Department of Agriculture, 2012).

Access to agricultural support services and market therefore remains the major factor constraining the growth of small-scale agriculture in South Africa, most especially the former homelands. Experience from other countries indicates that a comprehensive approach to the provision of support services is required to achieve growth in the small-scale agriculture sector (SASIX, 2007).

CHAPTER 3 RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a clear and detailed description of the research design, methodology, population and sampling, data collection and analysis, and ethical consideration followed in the research. The study is descriptive in nature and involves both quantitative and qualitative data gathered from farmers and extension officers through questionnaires. A descriptive study, amongst others, attempts to explain the reasons for the characteristics of the population by examining samples of the population (Cooper and Schindler, 2003).

3.2 Description of the Study Area

Sekhukhune District is approximately 13 264 square kilometers (Drimie et al. 2009). The district municipality is mainly rural, and used to be a cross border municipality between Limpopo and Mpumalanga. The district consists of five local municipalities', Fetakgomo, Greater Marble Hall now called Ephraim Mogale, Makhuduthamaga, Greater Tubatse and Greater Groblersdal now called Elias Motsoaledi. The study was done in the five districts of Sekhukhune Municipality in the Limpopo Province.

The Province of Limpopo is rural in nature and agriculture is regarded as the main pillar of the economy. The province is regarded as the second poorest in the country with 89 percent of the population living in rural areas (Lahiff et al. 2008). Other economic pillars are mining and tourism. In 2007, the country's gross farming income (GFI) was R79.544million and of this, 55% was generated from animal and animal products (Stats SA, 2007). Horticulture and field crops followed with 24% and 20% respectively.

According to Drimie, et al. (2009) the Sekhukhune District is one of the Bantustan areas of the apartheid era. The total population of Sekhukhune is about 1 million people. This district constitutes mostly tribal communal land with 95% of the population living in rural areas. The district is currently faced with competing land-uses. A lot of prime agricultural land has already been lost to mining, business and residential development. Dry land communal farming, livestock farming, citrus and grape farming are common in Elias Motsoaledi and Marble hall municipalities.

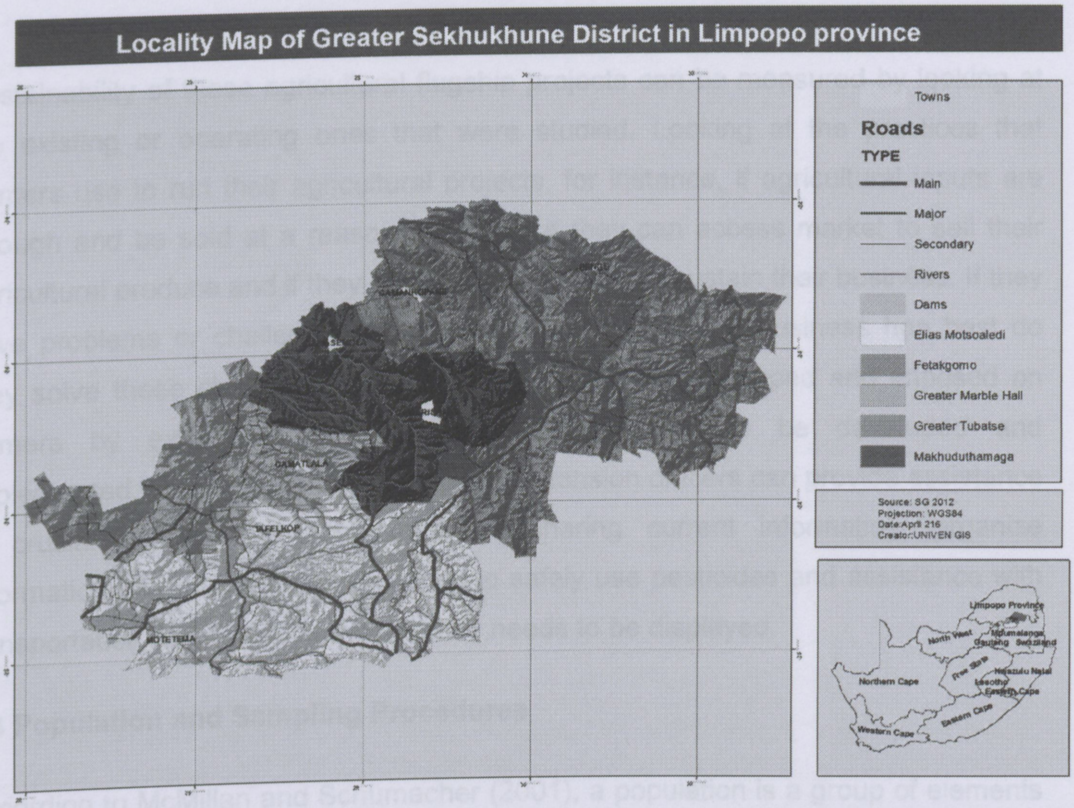

Fig. 3.1: Geographic location of Greater Sekhukhune District Limpopo Province (Greater Sekhukhune District Municipality Profile, 2011)

3.3 Research Design

Cooper and Schindler (2003) refer to research design as a blueprint for the collection, measurement and analysis of data. The design helps the researcher to allocate his/her limited resources by choosing appropriate research instruments. The use of open and ended questions to collect data from projects farmers, chairpersons and extension officers was appropriate for the validity of this type of the study. This was used to obtain facts and opinions about assessment of the sustainability of agricultural flagship projects of farmers. The questionnaire was designed to accommodate specific areas from the farmers such as: biographic data, project management, business and farming skills, marketing infrastructure, extension services, access to inputs and agricultural credits, co-ordination between the farmers and departments (and within departments), problems and challenges faced by agricultural flagship projects and suggestions to overcome the problems. Descriptive statistics analysis was used to analyze and compare data which is presented as graphs and tables.

Sustainability of these agricultural flagship projects can be measured by looking at the existing or operating ones that were studied. Looking at the practices that farmers use to run their agricultural projects, for instance, if agricultural inputs are enough and be sold at a reasonable price, if they can access market to sell their agricultural produce and if they are able to get funds to sustain their business. If they have problems or challenges in operating their agricultural business hoe best do they solve these challenges. Sustainability cannot be developed and imposed on farmers by extension officers. Sustainability needs to be developed and implemented by farmers or it will not work, extension officers can provide assistance at crucial points, assistance such as sharing current information, organize information day and farmers' day, how to safely use pesticides and assistance with transportation when agricultural produce needs to be displayed.

3.4 Population and Sampling Procedures

According to McMillan and Schumacher (2001), a population is a group of elements or cases, whether individuals, objects, or events, that conform to specific criteria and to which we intend to generalize the results of the research. This group is also referred to as the target population or universe. The target population is often different from the list of elements from which the sample is actually selected, which is termed the survey population or sampling frame.

The population for this study was made up of farmers and extension officers in agricultural flagship projects in Sekhukhune District. A list of all active or operating agricultural flagship projects in the district was drawn up. The total number of the agricultural flagship projects came to thirty nine and only twenty of these flagship projects were active or operating during the time of the study in the 5 municipalities. The nineteen agricultural flagship projects that were inactive were either the members are no longer in the projects because they are working in other provinces or the members are old. From the twenty operating flagship projects, there were 300 beneficiaries and a sample of 80 beneficiaries was selected. The random sampling procedure was used to select farmers to be surveyed. Chairmen of the projects were purposely sampled and three active committee members namely, the treasurer, secretary and one additional member were interviewed. All twenty extension officers in the district were interviewed. Permission was first requested from the Department of Agriculture in Limpopo since they were found to be at the forefront in providing post-settlement support to most projects in the area. The Head of Department granted the permission. In order to ensure a good reception at the district, the Head of the District was approached and also agreed to grant permission to conduct the study in the area and to allow officials to assist in the process.

3.5 Data Collection

According to Bless (2008), data collection methods basically refer to the tools used in collecting information from the respondents. The use of structured questionnaires is popular amongst researchers. Questionnaires can be administered in various ways. In this study, the questionnaire was administered personally.

Two sets of questionnaires were developed to collect data from farmers and extension officers in face to face interviews. The questionnaire had closed and open-ended questions. The questionnaire was further sub-divided into sections to collect different types of data pertaining to the research objectives. A pilot test was conducted to check the reliability of the data and to check if it would address the objectives of the study.

The data was collected in face-to-face interviews with the project beneficiaries of flagship projects and extension officers who are assigned to help the farmers in their agricultural farming business. The questions were designed in such a way as to avoid ambiguity, insensitivity while provoking interest in the study.

Secondary data was collected through the assistance of Sekhukhune District Department of Agriculture. The flagship projects database was made available for the collection of information. The database had some limitations since certain information was not consistently completed. Information like the telephone numbers of some beneficiaries was missing as well as the exact number of project beneficiaries. Nevertheless, the database assisted towards reaching many of the beneficiaries who were important for the study. Government Officials were also useful in providing other missing information, arranging for meetings and venues. The interviews were conducted by the researcher and two enumerators who were trained to conduct interviews in one section of the area after hours. Questions during the interview were translated from English to the local language mostly in order to ensure better understanding. The majority of respondents were the Sepedi speaking group with few of the Ndebele on the eastern side of Groblersdal. The purpose of the survey was explained to the respondents and consent forms were made available and signed.

3.6 Data Analysis

Data analysis is the process of bringing order, structure and meaning to the mass of collected data McMillan and Schumacher (2001). After the data was collected, all questionnaires were checked for possible omissions and where errors seemed to have occurred verification was made telephonically to correct and verify facts. Descriptive statistics were used to analyze the data. Random sampling of 80 beneficiaries from 20 projects (three active members), all chairpersons and all extension officers also was appropriate. Quantitative data was captured and analyzed using the Statistical Package for Social Sciences (SPSS) Version 20. The percentages were calculated for numerical data and presented as graphs and tables to compare the response table's content from data of open-ended questions (qualitative data) were analyzed to develop themes.

3.7 Ethical Statement

An Ethical Certificate received from the University of Venda Ethical Clearance Committee was used to attain permission for undertaking the study. Privacy or voluntary participation, harmful or at least uncomfortable situations to participants were avoided. The respondents were made aware that their participation was voluntary and respected. The respondents were also given consent letters for confidentiality of the information provided since the research was dealing with human beings, it was necessary to understand the ethical and legal responsibilities of conducting research.

According to McMillan and Schumacher (2001), ethics are generally considered to deal with beliefs about what is right or wrong, proper or improper, good or bad. As the primary investigator of this study, this researcher was responsible for the ethical standards to which the study was to adhere. Before commencing the study, the researcher informed the respondents of all aspects of the research that might influence willingness to participate and answer all inquiries of subjects on features which could have adverse effects or consequences. The researcher was open and honest with the respondents as possible and a full disclosure of the purpose of the research was made. Permission was granted by the Limpopo Department of Agriculture, Sekhukhune District and from all the five municipalities that formed part of the study.

The researcher was at all times protecting the respondents from physical and mental harm. In case of potentially distressing questions, respondents had the right not to answer those questions and this was made clear from the start. Confidentiality was vital to the researcher and the respondents, as the researcher had to conform to data protection legislation which meant that information obtained from a research respondent was confidential. This means that the researcher was to keep anonymous data that was obtained from respondents. Respondents were also informed about their right to withdraw their participation if they no longer wanted to participate in the study. In addition, the researcher complied with other research principles like the use of appropriate language and use of sensitive materials (Cooper et al. 2003).

CHAPTER 4 FINDINGS AND DISCUSSION

4.1 Introduction

This chapter discusses the research findings from the questionnaire survey. The responses on the closed and open-ended questions are summarized and presented using graphs and tables from frequencies and percentages. Two types of questionnaires for the farmers and officials were used to collect data which comprised different sections and the research findings will be presented in respective sections.

The aim of the study was to assess the sustainability of agricultural flagship projects in Sekhukhune district. The data collected from the respondents was interpreted using SPSS computer package. Descriptive statistics such as frequency distribution and percentages were used to present the findings of the study.

The data collected through the questionnaire has been divided into sections A and B. Section A captures the data collected from farmers whiles section B captures the data collected from extension officers.

SECTION A

4.2 Results from farmers

4.2.1 Demographics of farmers

4.2.1.1 Age of the farmers

Figure 4.1 presents the average age of the respondents that were interviewed during the study, according to the age groups or the ranges of their age group of the respondents involved in the agricultural flagship projects. One percent of the respondents were from the age group of 20-29 years, 11.3% from 30-39 years, 42.5% from 49-49 and 50-59 years respectively, and 2.5% from 60-69 years. The majority of respondents were aged between 40-49 years and 50-59 years and both this age group represents 42.5%.

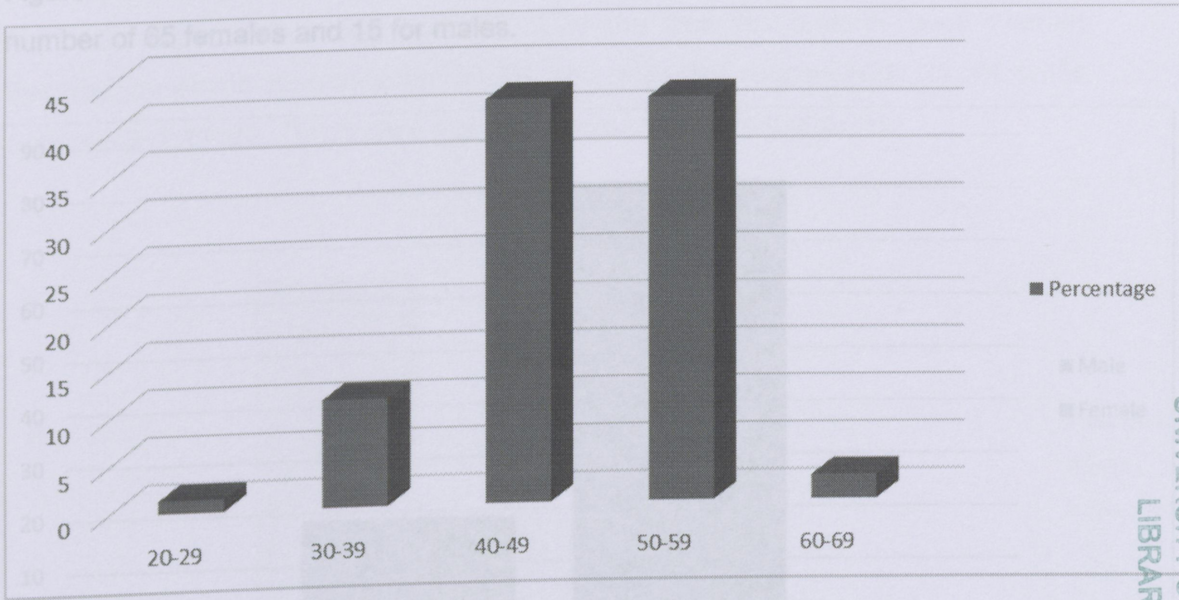

Fig. 4.1 Age of the farmers

The impression behind the majority of the farmers being in farming might be that farming is for old people. Only a small minority of 1.3% were between the ages of 20-29 years. Whilst this age distribution of the majority respondents (42.5%) reflects maturity on the part of the respondents and it also causes concern in that it is not ideal for the majority to do the physical work demands of agriculture.

Elderly people are physically challenged but can take advantage of their dependents' strength (Baiyeghuni, 2009). The fact that the majority are older persons further requires a specific learning methodology and older people find it difficult to learn and assimilate new knowledge. The poor participation by young people could be a result of low income that farming generates monthly and annually and that they are also not attracted to agriculture. There is a major role to be played by the Department of Agriculture to promote the passion of agriculture to the youth in the Province.

4.2.1.2 Gender of the farmers

Figure 4.2 shows the gender distribution/ representation of the respondents, indicating which specific gender is more involved in agricultural flagship projects.

Figure 4.2 show that 81.3% were female and males were only 18.8% with the total number of 65 females and 15 for males.

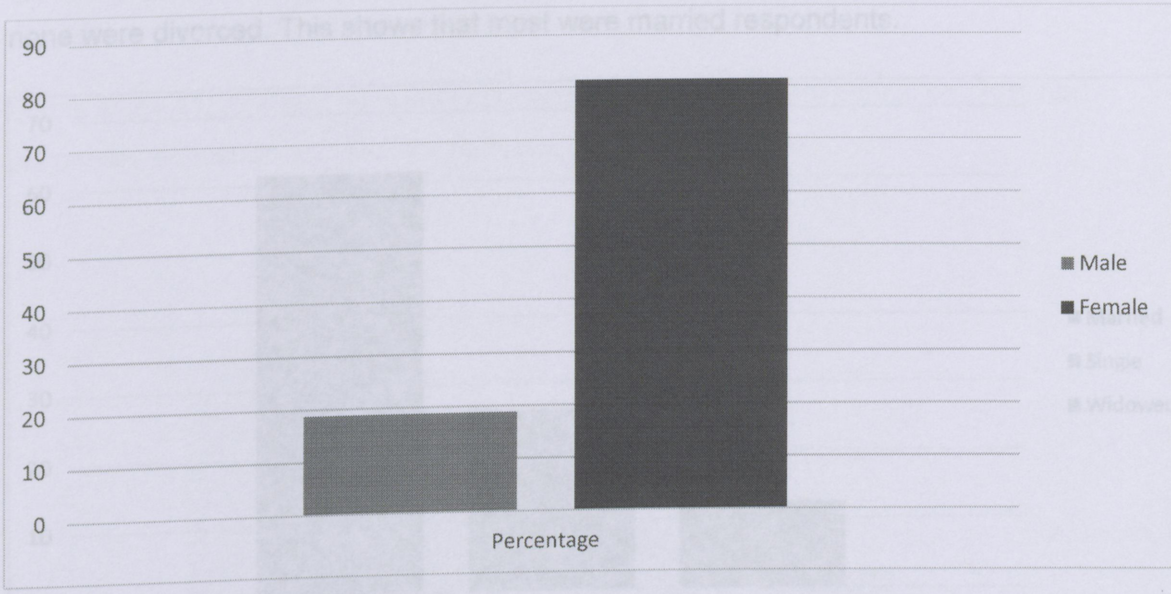

Fig. 4.2 Gender of farmers

Based on the figure, the dominated gender among the respondents were females. This might also mean most male farmers are involved on off farm activities than their female counterparts. Most male are in off farm employment in cities and town, therefore according to the researcher's observation agriculture would be for women. This follows the normal pattern in South Africa with the majority of persons involved in rural agriculture being female. As a rule, women are mostly involved with community gardens, dry land and poultry production (which allow them to attend to other chores such as the care of children, preparation of food and the general maintenance of the households). Men, on the other hand, are mostly involved with larger projects such as large scale animal husbandry and irrigation schemes if they are not seeking employment in urban areas to be able to support their families (French, 2007).

4.2.1.3 Marital status of the farmers

A person's marital status indicates whether the person is married or single in relation to the marriage laws or customs of the country. Figure 4.3 indicates the marital status of the respondents, showing those that are mostly likely to be in agricultural business. Figure 4.3 shows that 61.3% of the total respondents were married followed by single respondents, 26.3% and widowed respondents, 12.5% while none were divorced. This shows that most were married respondents.

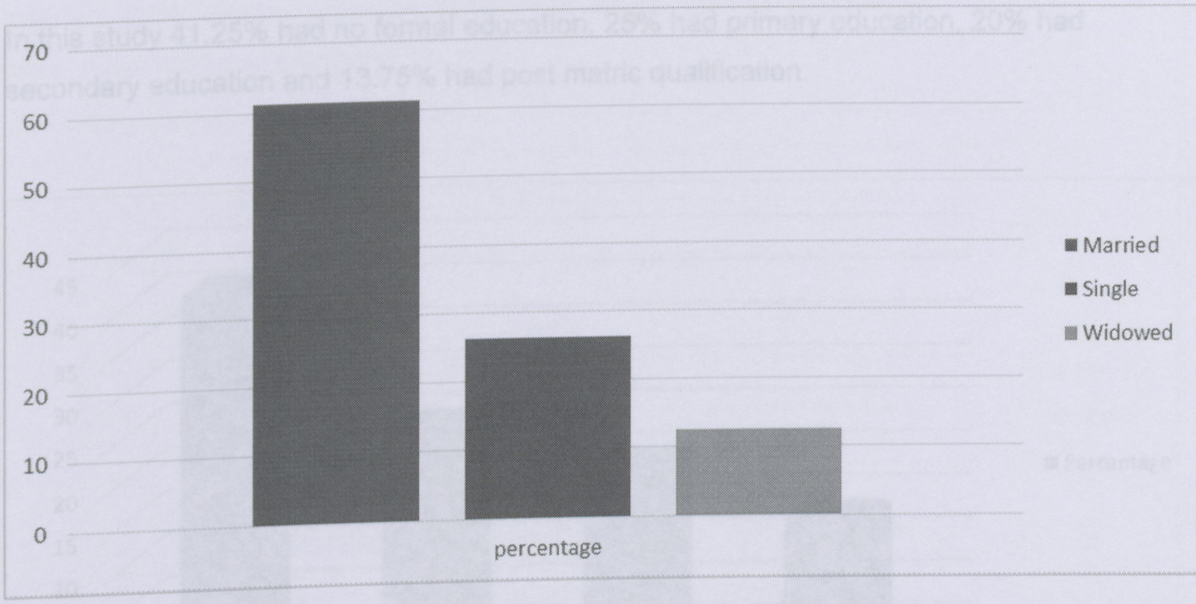

Fig. 4.3 Marital status of the farmers

Based on the high percentage of the respondents being married this can mean that the respondents are likely to participate in agricultural farming and this could be because their partners are working for income elsewhere. The number of female-headed households is increasing rapidly because of the migration of rural men to urban areas and even to other countries in search of employment and better income and livelihood opportunities (Obi, 2012).

4.2.1.4 Academic qualifications

The acquisition of an educational qualification implies the successful completion of a course of study or training programme. Therefore, academic qualifications are degrees, diplomas, certificates, professional titles and so forth that an individual has acquired whether by full-time study, part-time study or private study, whether conferred by educational authorities, special examining bodies or professional bodies (Mathabatha, 2005).

Figure 4.4 shows the educational level of the respondents, showing which academic qualifications they have. The educational level of farmers is regarded as also an appropriate variable which allows for the use, gathering and better interpretation of the information for improved profit margins.

In this study 41.25% had no formal education, 25% had primary education, 20% had secondary education and 13.75% had post matric qualification.

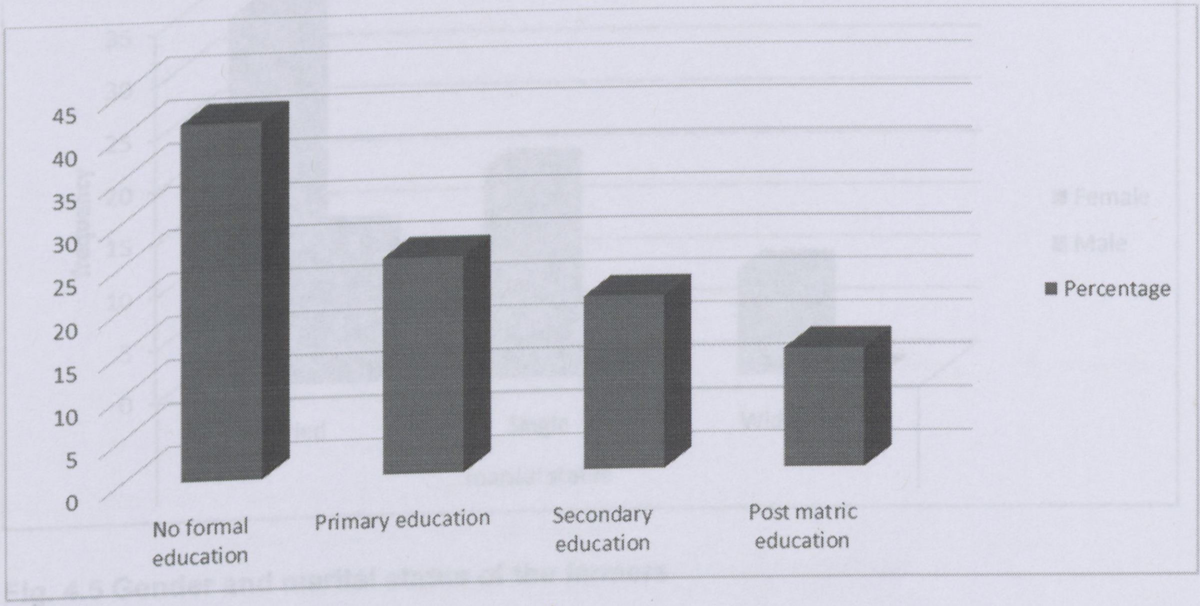

Fig. 4.4 Academic qualifications

According to Wilson and Ramphele (2003), formal education is practically an obligatory variable in studies of the adoption of agricultural technology. Farmers with higher education tend to be early adopters of new technology, but show that education may have little influence on productivity in areas practicing traditional agriculture, where new techniques play a minor role. The majority being those respondents with no formal education will thus far require specific inputs of an ABET nature prior to enrolment for higher levels of learning. It further implies that learning for this group should preferably be of a practical nature. Written theoretical material should be kept to an absolute minimum. The level of education assists respondents to take decisions that are vital for the functioning of the projects. This might indicate that respondents who had no formal education might be because of lack of funds to further their education or reluctance to study further.

4.2.1.5 Gender and marital status of the farmers

Figure 4.5 shows cross tabulation of the gender and marital status of the respondents. The figure showed that 35% were females and 14% males who were married, 20% females and 1% males were single, 10% of females and no males were in the widowed category.

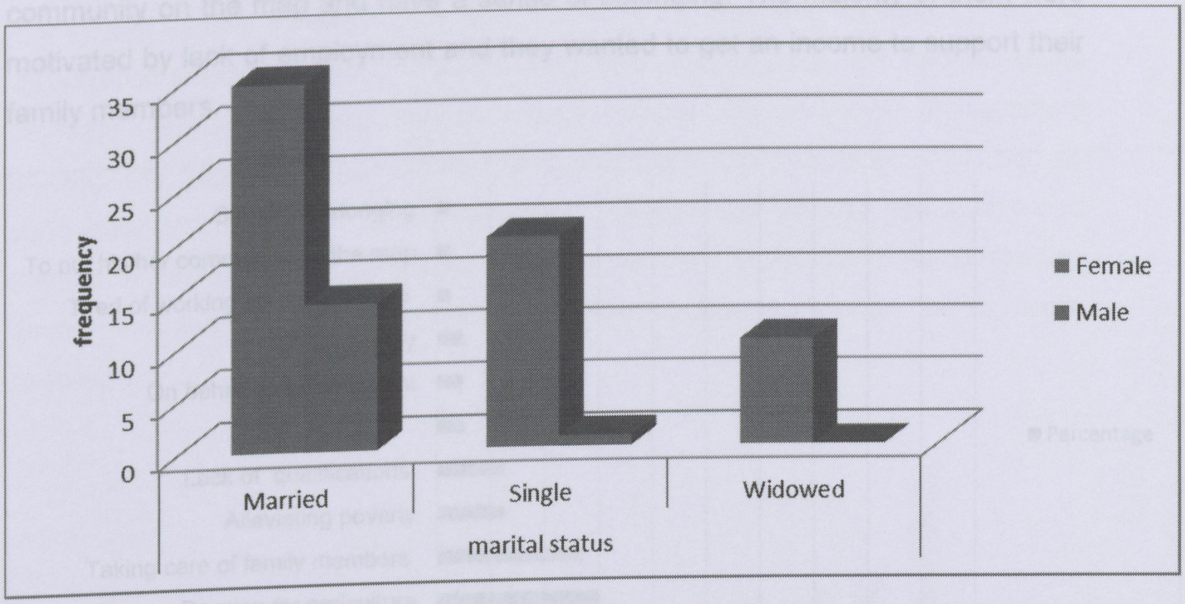

Fig. 4.5 Gender and marital status of the farmers

Most women irrespective of their marital status use agriculture as a coping strategy or source of income for household responsibilities such as taking care of their family members. The fact that the majority are married (35% of females and 14% of males) may again suggest that parents share household responsibilities in maintaining the family members (Mathabatha, 2005).

4.2.1.6 Motivation for entering farming business

Success in any enterprise is possible provided one does research first and plan carefully. If the primary motivation is to earn profit, potential business operators need to be aware that it may take several years for an enterprise to start producing a profit and some crops will require significant capital upfront to install infrastructure such as trellising and irrigation systems. Figure 4.6 indicates what motivated the respondents into entering the farming business.

Figure 4.6 describes the motivation why respondents entered into the farming business. 47.5% said it was because of lack of employment, 15% due to the passion for agriculture, 13.75% for taking care of family members, 6.25% for alleviating poverty and lack of qualifications, 2.5% because they are taking care of the family after the death of a breadwinner, to keep busy and also that they are doing so on behalf of a sick parent, 1.25% are tired of working for other people, to put his/her community on the map and have a sense of belonging. The majority of them were motivated by lack of employment and they wanted to get an income to support their family members.

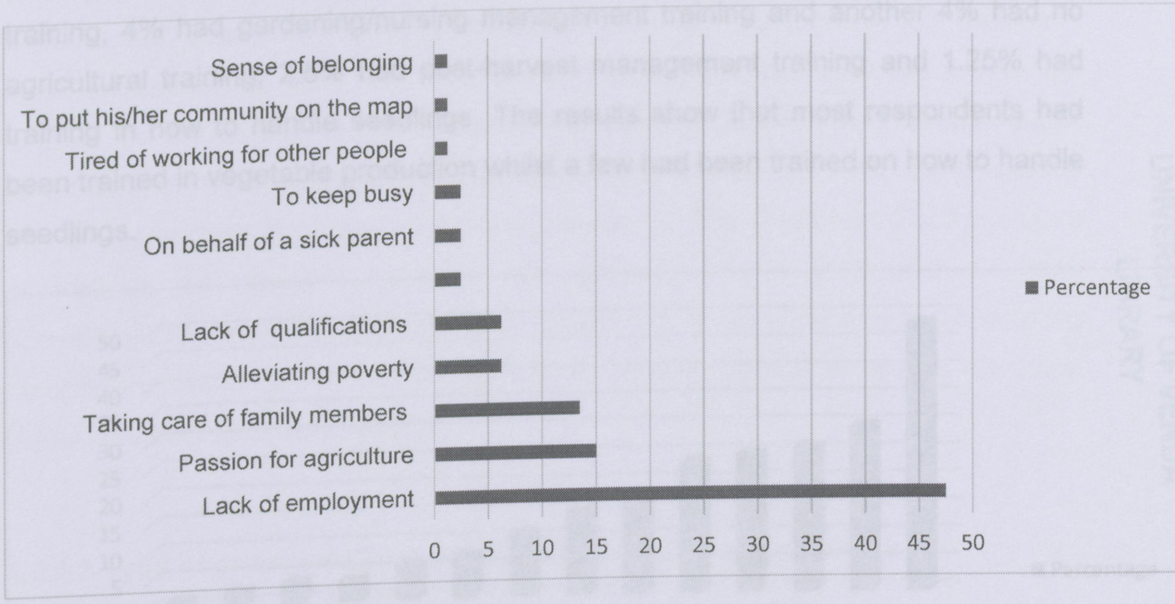

Fig. 4.6 Motivation for farming

The results showed that most of the respondents were unemployed due to lack of education which prevented them from finding a better job. When working on the farming projects, it requires little or no education as most work is practical and is done manually. Integrated Development Plan (2007/08) stated that the main reason why the agricultural sector does not contribute more to GDP is because of water scarcity. Other reasons could include the combined effects of land claims, which creates uncertainty and discourages further investment, as well as the low demand of global commodities. Agriculture in the Sekhukhune District is a mixture of both commercial and subsistence farming. The high unemployment levels contribute to the high poverty levels in the district.

4.2.1.7 Agricultural training

For people to achieve success in the agricultural flagship projects they need training. Figure 4.7 shows agricultural training the respondents had. Forty nine percent indicated that they had been trained in vegetable production, 30% were trained in agro-food processing, 27% had business planning training, 25% had poultry production training, 24% had financial management training, 17% had record/book keeping training, 15% had soil preparation training, 12% had marketing training, 8% had pest and disease control training, 6% had layer management training, 4% had gardening/nursing management training and another 4% had no agricultural training, 2.5% had post-harvest management training and 1.25% had training in how to handle seedlings. The results show that most respondents had been trained in vegetable production whilst a few had been trained on how to handle seedlings.

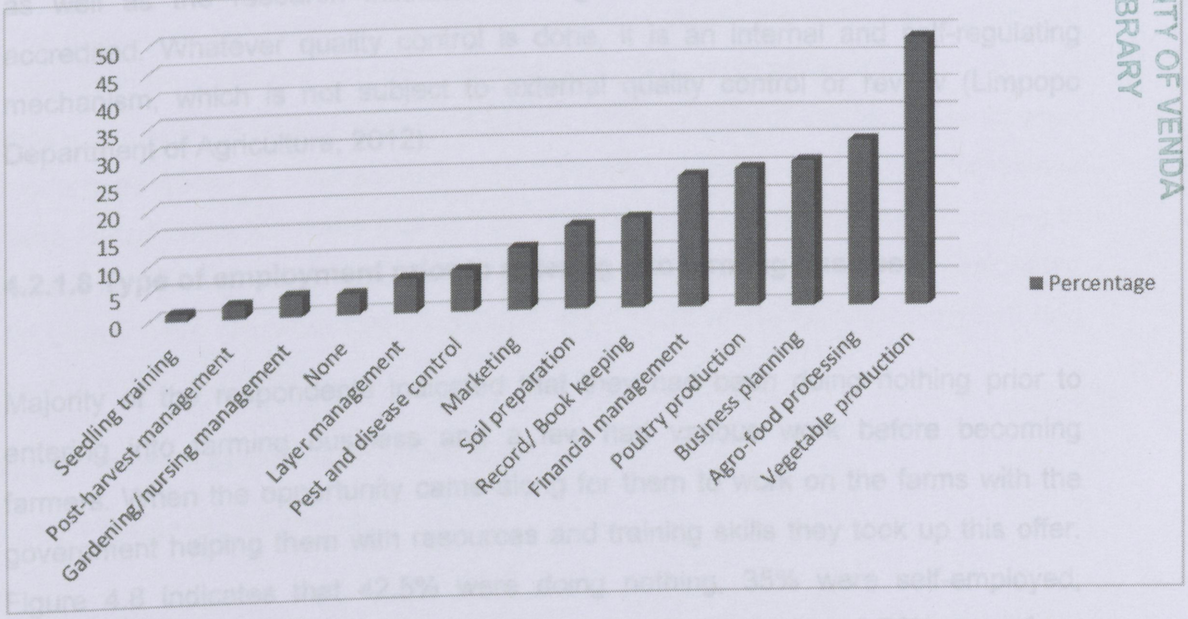

Fig 4.7 Agricultural Training

The Department of Agriculture has been involved in training short skills courses for farmers through the assistance of the extension officers in order to improve their projects and have basic knowledge in agriculture. This is the reason why most respondents have training on vegetable production and a few on how to handle seedlings and post-harvest management skills training. The trainings are governed by an agricultural policy that stresses on the improvement of skills and value addition for farmers.

Non-formal agriculture institutions do not have any formal or pre-stated admission requirements. However, in cases where formal and accredited courses are to be given according to levels or grades, it is expected that any farmer attending a higher level course, should have pre-requisite knowledge and skills pertaining to the preceding level. It cannot be expected of a farmer to deal with a much more advanced concept such as calibration of equipment or dipping tank, when he/she does not have basic numeracy skills. This is where some of the problems are encountered, where training in agriculture is not done in conjunction with training in basic education, life skills and rural development in general, nor does it take into cognizance the degree of proficiency in the pre-requisite skills and knowledge. In terms of informal and non-formal institutions, only the Skills for All offers courses that are accredited in terms of SAQA requirements. The Department of Agriculture as well as the research institutes offer general courses that have not been accredited. Whatever quality control is done, it is an internal and self-regulating mechanism, which is not subject to external quality control or review (Limpopo Department of Agriculture, 2012).

4.2.1.8 Type of employment prior to entering into farming business

Majority of the respondents indicated that they had been doing nothing prior to entering into farming business and a few had various work before becoming farmers. When the opportunity came along for them to work on the farms with the government helping them with resources and training skills they took up this offer. Figure 4.8 indicates that 42.5% were doing nothing, 35% were self-employed, 11.25% were domestic workers, 6.25% were doing gardening, 3.75% were farm workers at their respective farms nearby and 1.25% were cooks.

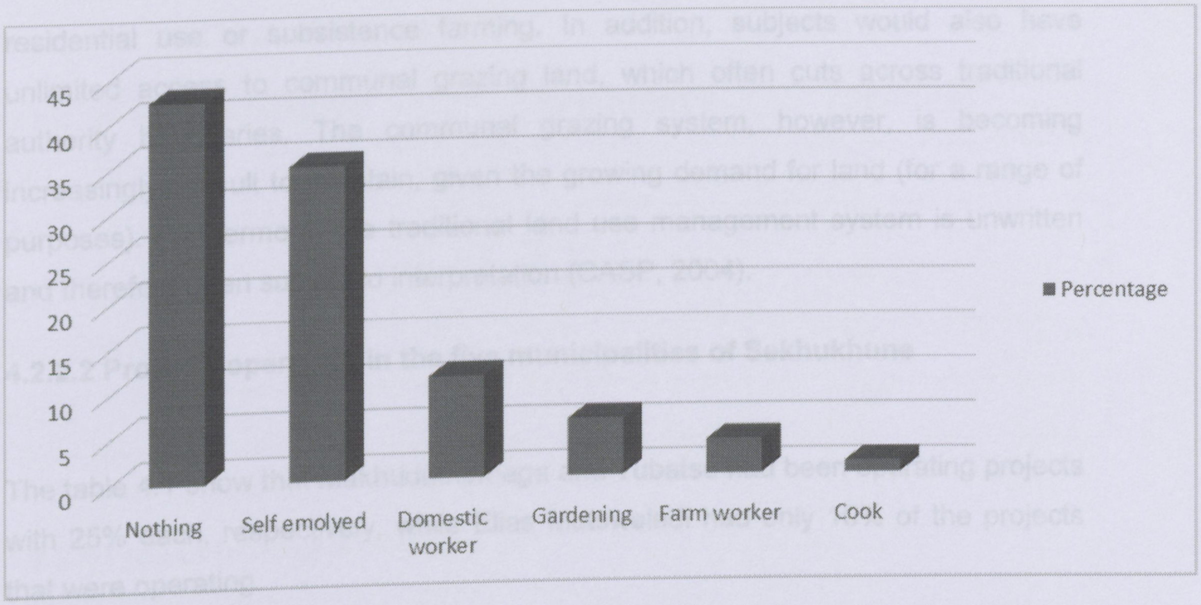

Fig. 4.8 Employment status before farming

The majority of the respondents were not working due to the lack of education and they relied on social grants. Other respondents (35%) were self-employed doing odd jobs such as hawking or repairing of shoes, while minority of the respondents were working as cooks in local schools. The 13 million people found in the homelands were forced under a poverty trap just after the homeland demarcations. According to Wilson and Ramphele (2003), the living conditions of the blacks in areas designated for blacks were characterized by poverty, high infant mortality, unemployment and lack of proper education.

4.2.2 Project background information

4.2.2.1 Business information

All the flagship projects studied were in the communal land owned by traditional leaders. There are three types of land ownership in the area: privately owned land for commercial farming purposes, state owned land for commercial and residential purposes and tribal land for subsistence farming (very overcrowded). The traditional system is rendered more complex by the fact that each of the approximately 70 traditional authorities in the area has its own unique land use management system. In general, however, each traditional authority allocates land to a subject for either residential use or subsistence farming. In addition, subjects would also have unlimited access to communal grazing land, which often cuts across traditional authority boundaries. The communal grazing system, however, is becoming increasingly difficult to maintain, given the growing demand for land (for a range of purposes). Furthermore, the traditional land use management system is unwritten and therefore often subject to interpretation (CASP, 2004).

4.2.2.2 Projects operating in the five municipalities of Sekhukhune

The table 4.1 show that Makhuduthamaga and Tubatse had been operating projects with 25% each, respectively, while Elias Motswaledi had only 10% of the projects that were operating.

Table 4.1: Business information of active projects

PROJECTS PER MUNICIPALITY	FREQUENCY	PERCENT
Elias Motswaledi	2	10
Ephraim Mogale	4	20
Makhuduthamaga	5	25
Elias Motswaledi	4	20
Tubatse	5	25
TOTAL	**20**	**100**

4.2.2.3 Establishment of the projects

From the year 2007 -2009 most projects were established at 35% while 15% of the flagship projects were established between the years 2010 -2012.

Table 4.2: Year of establishment

YEAR OF ESTABLISHMENT	FREQUENCY	PERCENT
2001 – 2003	5	25
2004 – 2006	5	25
2007 – 2009	7	35
2010 – 2012	3	15
TOTAL	**20**	**100**

4.2.2.4 Type of farming enterprises

Fifty five percent of the respondents were farming with vegetables, 25% were in poultry, 15% were practicing mixed farming enterprise such as poultry and vegetables, poultry and eggs, geranium and vegetables, and 5% were into seedlings. This shows that there is a gap for animal husbandry.

Table 4.3: Type of enterprises

TYPE OF FARMING ENTERPRISE	FREQUENCY	PERCENT
Vegetables	11	55
Poultry	5	25
Seedlings	1	5
Mixed Enterprise	3	15
TOTAL	**20**	**100**

4.2.2.5 The type of support received

For any business enterprise to operate smoothly support is needed. Table 4.3shows the type of support that the projects received. Fifty nine percent of beneficiaries received support from the Department of Agriculture, 40% of beneficiaries received support from Khula Enterprise, 13.75% received support from Department of Social Development, 7.5% received support from SEDA, 5% received support from AFRICARE, while 2.5% received support from the Department of Science and Technology and CSIR respectively.

The South African government has made a commitment to eradicate poverty through land reform programme as the major contributing factor. The aforesaid program's commitments to this objective were expressed by the formation of grants/products such as Land Redistribution for Agricultural Development (LRAD), Comprehensive Agricultural Support Program (CASP) and Community Project Fund for Support Program (CPFSP). These programs are aimed at availing capital resources to the poor, vulnerable, previously disadvantaged and unemployed individuals in order to ensure that they have an opportunity to start their agricultural businesses (Groenewald, 2008).

Table 4.4: Supporting services and institutions

NAME OF SUPPORTING SERVICES AND INSTITUTIONS	FREQUENCY	PERCENT
Dept. of Agriculture	47	58.75
Dept. of Social Development	11	13.75
Dept. of Science & Technology	2	2.5
CSIR	2	2.5
AFRICARE	4	5
SEDA	6	7.5
Khula Enterprises	8	40

The table shows the type of support the respondents received. Sixty one percent received fencing, 56.25% received funding, 55% received support in the form of infrastructure, 50% received fertilizers, 47% received tractors, 43.75% received water tanks, 38.75% received gardening tools, 31.25% received seedlings and 28.75% received electricity.

Table 4.5: Type of support received by farmers

TYPE OF SUPPORT	FREQUENCY	PERCENT
Fencing	49	61.25
Funding	45	56.25
Infrastructure	44	55
Fertilizers	40	50
Tractors	38	47.5
Water tanks	35	43.75
Gardening Tools	31	38.75
Seedlings	25	31.25
Electricity	23	28.75

4.2.2.6 Challenges faced by farmers in their farming business

Farmers are faced with problems such as drought which can hinder them from having a good produce and making a profit. Figure 4.9 below lists some of the problems that the respondents face in their farming business or projects. Figure 4.9 indicates that 33.75% lacked funding, 28.75% had no access for marketing their agricultural products, 13.75% lacked sufficient water, 10% had the problem of expensive electricity, 5% experienced high mortality rate of their chickens especially in winter season and high production costs with low return respectively, 2.5% had problems with thieves and 1.25% had no problems.

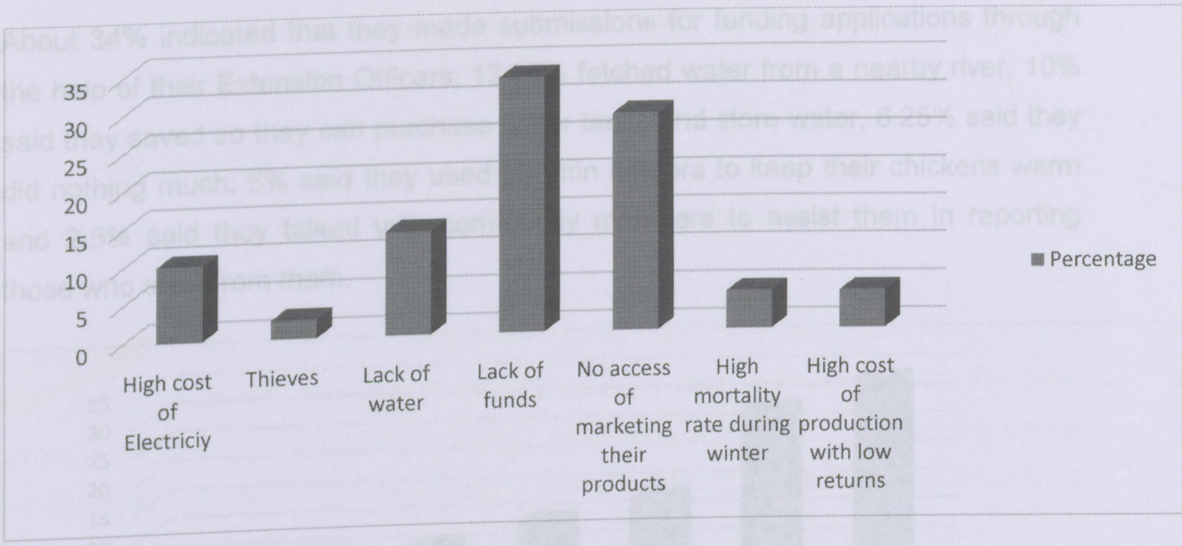

Figure 4.9 Problem faced in farming business

In South Africa, agricultural produce from small scale farmers is often lost after production due to spoilage and inability to access the markets. It is mainly because most smallholders and emerging farmers are faced with a range of technical and institutional challenges that affect market access and compromise the profitability of farming at that level. For all the distortions of market forces during apartheid, South Africa remained a market-driven economy. The determinants of economic growth in market-based economies are always complex, and those of widely shared growth and development even more so, especially in resource-rich economies. Market accessibility might be a challenge to farmers mainly because they cannot grow sufficient volume of high quality produce. Lack of funding also might be because most of the farmers do not submit relevant documents. For instance, they may not know how to draw a business plan. Infrastructure, including water, transport, electricity and ICT should be upgraded to improve integration, productivity and competitiveness in the farms (Obi, 2012).

4.2.2.7 Resolutions of challenges by farmers

To every problem faced there are number of solutions that can help in solving the challenges or problems faced by the farmers. The figure shows how challenges mentioned by the respondents in figure 4.9 are solved.

About 34% indicated that they made submissions for funding applications through the help of their Extension Officers, 13.75% fetched water from a nearby river, 10% said they saved so they can purchase water tanks and store water, 6.25% said they did nothing much, 5% said they used paraffin heaters to keep their chickens warm and 2.5% said they talked with community members to assist them in reporting those who steal from them.

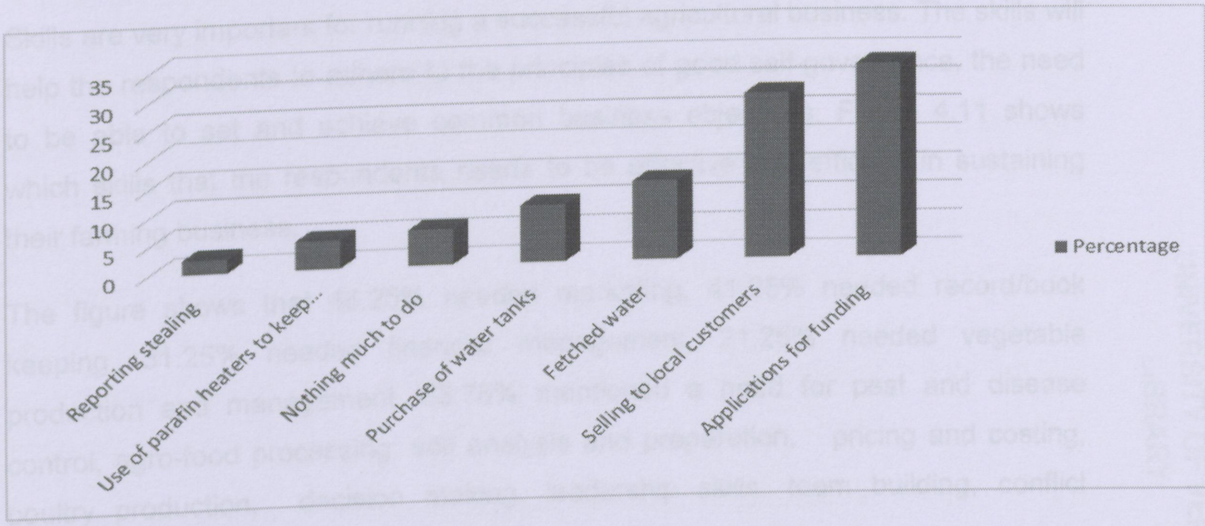

Fig.4.10 Resolutions to challenges faced by farmers

Funds be available will assist farmers to sustain their agricultural flagship projects which will also help them to market their agricultural products locally and nationally without them worrying about the logistics of transporting or package their produce. . The majority of the respondents showed that they submitted their applications for funding to stakeholders or sell their agricultural produce to local customers in order for them to generate income which will assist them in sustaining their farming business. Sustainable markets are necessary to ensure adequate cash flow for any business.

These farmers also listed various constraints which impede them from farming effectively. However, in spite of these difficulties, they do have survival strategies that they employ to alleviate the effects of these constraints. Although agricultural activities should contribute to the area's economy, most farming is done on a subsistence basis and only 30% of the district's land is utilized for commercial farming. The scarcity of water is one of the reasons why farmers do not do well.

Investment in irrigation schemes and projects is one of the biggest priorities for local government (CASP, 2004).

4.2.3 Skills capacity

4.2.3.1 Skills needed for efficient and effective farming business

Skills are very important for running a successful agricultural business. The skills will help the respondents to adhere to the principles of good self-governance, the need to be able to set and achieve common business objectives. Figure 4.11 shows which skills that the respondents needs to be effective and efficient in sustaining their farming business.

The figure shows that 46.25% needed marketing, 41.25% needed record/book keeping, 31.25% needed financial management, 21.25% needed vegetable production and management. 53.75% mentioned a need for pest and disease control, agro-food processing, soil analysis and preparation, pricing and costing, poultry production, decision making, leadership skills, team building, conflict management and communication skills.

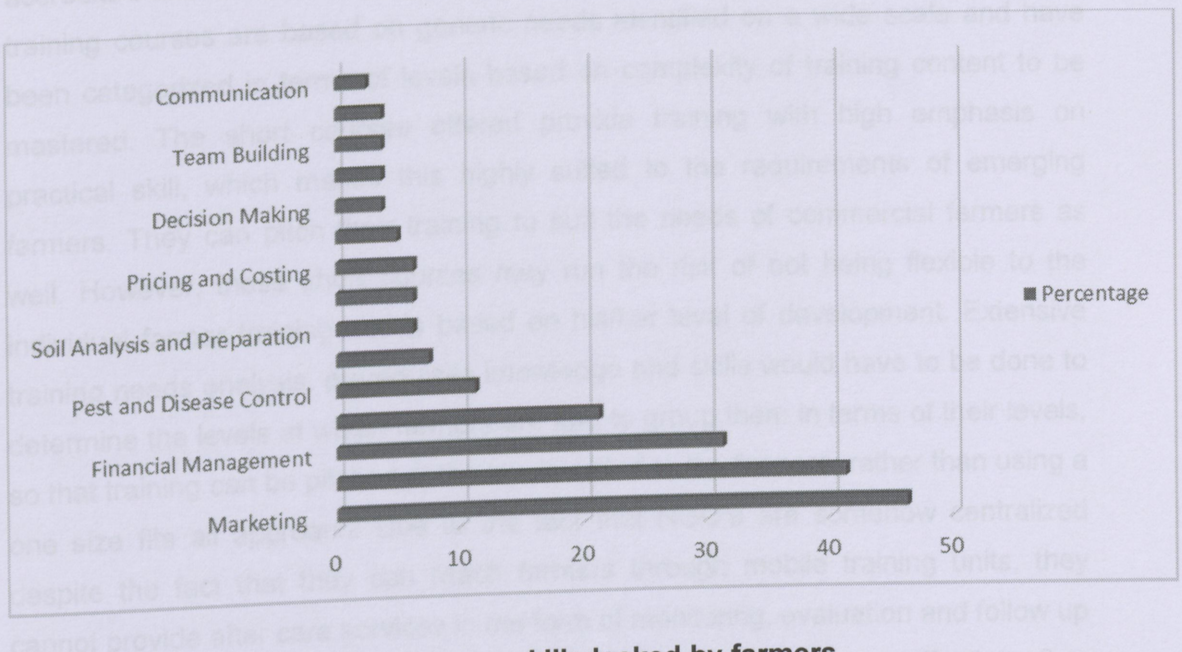

Fig. 4.11 Effective farming business skills lacked by farmers

Most black rural communities, who are now landowners as a result of settled claims and redistributed projects, were in the past marginalized and excluded from the mainstream economy. As a result, they lack skills and capacity to run big commercial farms. Their skills and technologies are only sufficient for small family farms (Lahiff, 2001).

A lack of technical and managerial skills can be the biggest constraint on the commercialization of subsistence and emerging farmers. Training to farmers is usually based on identified training needs, but at times it is based on what is perceived as needs of farmers by field staff. Farmers are given training through: formal training courses, demonstrations, lessons, farmer's days and field tours. The knowledge and skill transfer is not based on standard units of competencies which have to be mastered, but each training intervention is designed by a government official to suit the needs and circumstances of the recipients. Because of the decentralized nature of the department, training is usually taken to where farmers are (Limpopo Department of Agriculture, 2012).

The training programs or short courses offered by agricultural institutions are accredited and therefore conform to certain standards in terms of content. These training courses are based on generic needs identified on a wide scale and have been categorized in terms of levels based on complexity of training content to be mastered. The short courses offered provide training with high emphasis on practical skill, which makes this highly suited to the requirements of emerging farmers. They can pitch their training to suit the needs of commercial farmers as well. However, these short courses may run the risk of not being flexible to the individual farmer training needs based on his/her level of development. Extensive training needs analysis, prerequisite knowledge and skills would have to be done to determine the levels at which farmers are and to group them in terms of their levels, so that training can be pitched at the levels suited to the farmers, rather than using a one size fits all approach. Due to the fact that NGO's are somehow centralized despite the fact that they can reach farmers through mobile training units, they cannot provide after care services in the form of monitoring, evaluation and follow up training and/or advice. They do not have the capacity to render an effective after-care service (Limpopo Department of Agriculture, 2012).

4.2.3.2 Acquiring of skills

The skills mentioned can be acquired with the help of the extension officer assigned to assist the farmers. The skills are essential as they will help the respondents to improve their agricultural farming business. The table 4.6 describes the type of skills needed by the farmers and how the skills will be acquired. Forty six percent of the respondents said they would acquire the skill through the help of the Extension Officers in order for them to produce good quality products so that they can be marketed in big food chain stores. Forty one percent said through the help of the Extension Officer as the skills will help them arrange their books properly and also be able to explain them better to their members. Others said through the help of the Extension Officers in order to better record all activities that take place in the project and this will help them know and understand where they need to improve. Thirty eight percent said through the help of the Extension Officer they will have current information and implementable skills to improve their project so that it can be sustainable. Thirty one percent said through the help of the Extension Officer they are able to implement whatever skill they have acquired in order for them to sustain the project. Others said through the help of a government officials they will be able to understand their finances better. Eight percent of the respondents said through the help of the Extension Officer they can process and preserve their produce if they are not all sold instead of throwing them away.

Table 4.6: Perceived skill's providers

Skills acquired	Frequency	Percentage
Through the help of the Extension Officer as this will help them to improve their project so that it can be sustainable and have current information and implementable skills.	30	37.5
Through the help of the Extension Officer as the skill will help them to arrange their books in order and know and explain them better to their members.	33	41.25
Through the help of the Extension Officer as they will be able to implement whatever skill they have acquired in order for them to sustain the project.	25	35.2

Through the help of a government official so they can understand their finances better.	25	35.2
Through the help of the Extension Officer so they can be able to record all activities that are taking place in the project better and this helps them know and understand where there is a need for improvement.	33	41.25
Through the help of the Extension Officer in order for them to process and preserve their produce if they are not all sold instead of throwing them away	6	7.5
Through the help of the Extension Officer so they can produce good quality products for marketing to big food chain stores.	37	46.25

This shows that the majority of the respondents (46.25%) expect assistance from their local assigned government officials to help them acquire the needed skill so that the farming business brings good and high quality produce. A minority (7.5%) said they are able to process and preserve their produce if they are not all sold instead of throwing them away. This shows that the respondents rely on government officials to gained skills as they play a major role of being mediators. This means the respondents depend entirely on their extension officers in order for them to acquire skills needed in sustaining their business. Therefore extension officers play a major role in assisting the farmers in acquiring the perceived skills needed such as assisting them with marketing their agricultural produce and recording all activities that will be taking place in their business as this will help them in make improvements were necessary.

4.2.4 Profit and loss

4.2.4.1 Perceived profit or loss made in the last 6 months in the farming business

Profit and loss measures the business's sales and expenses over a specified period of time. It summarizes the revenues, costs and expenses incurred during a specific period of time. The figure 4.12 describes the profit or loss that the respondents have made in the past six months.

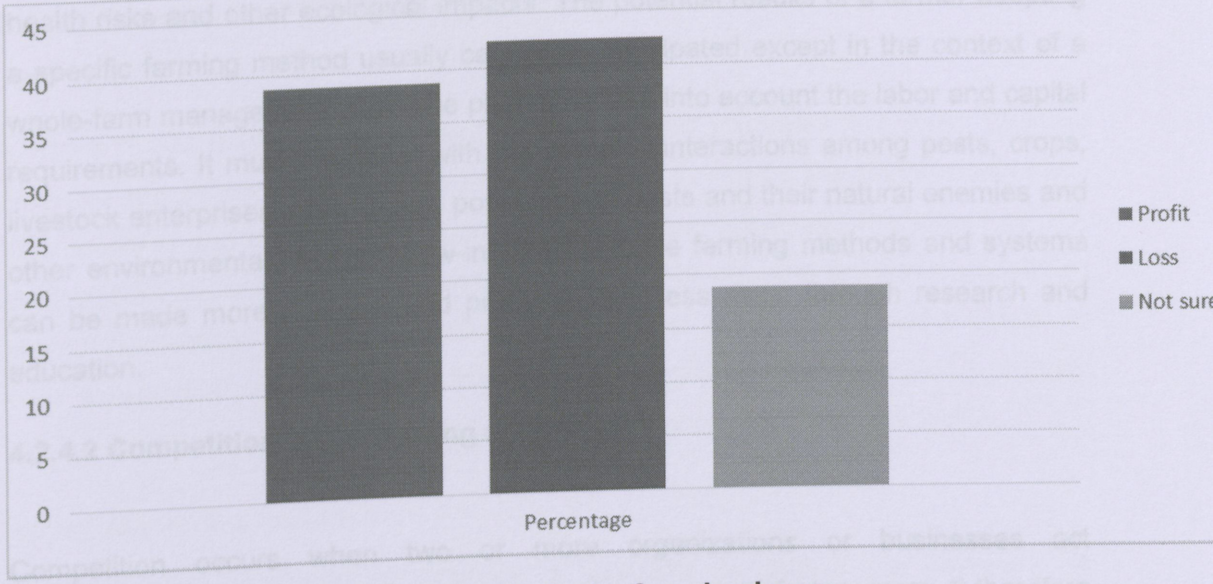

Fig. 4.12 Perceived profit or loss made in the farm business

Figure 4.12 shows that 38.75% made profit, 42.5% made a loss and 18.75% of the respondents were not sure as their records were not in place. The loss during the last 6 months was on vegetables such as cabbages, carrots, onions and spinach. Profit was made on broilers, eggs, tomatoes, beetroots, onions, and carrots. Those who were not sure whether they made profit or loss cultivated geranium, butternuts, onions, sugar beans, and watermelons. Loss on the farming business might be because of poor record keeping and prices increasing on agricultural inputs such as seedling and labour. Climate change, such drought play a role when profit is not made, this might make the agricultural produce not be of good quality or no production at all.

Kamara (2004) argues that if a method of farming is not profitable, it cannot be sustainable and somewhat lower yields plus much lower costs equal higher profits. While some low-input farming methods and systems may be adopted quickly and easily, others require several years of transition. The time required for the transition depends on existing residues of pesticides, soil organic matter, climate and other factors. Low-input/sustainable farming methods and systems are highly site-specific. Farmers should be provided full, accurate, and readily usable information regarding the impacts that adoption of low-input/sustainable methods and systems are likely to have on the farm's cash flow and profits, labor and management requirements, financial risks, long-term productivity of the soil, impact on water quality, human health risks and other ecological impacts. The potential results of a farmer adopting a specific farming method usually cannot be anticipated except in the context of a whole-farm management plan. The plan must take into account the labor and capital requirements. It must also deal with the complex interactions among pests, crops, livestock enterprises, soils, water, population of pests and their natural enemies and other environmental impacts. Low-input/sustainable farming methods and systems can be made more practical and profitable and less risky, through research and education.

4.2.4.2 Competition in the farming enterprise

Competition occurs when two or more organizations or businesses act independently to supply their products to the same group of consumers. It therefore means that competition is rivalry among sellers trying to achieve such goals as increasing profits, market share, and sales volume by varying the elements of the marketing mix: price, product, distribution, and promotion (Vink and Kirsten, 2002). Figure 4.13 show competitors in the area where respondents have their farming business.

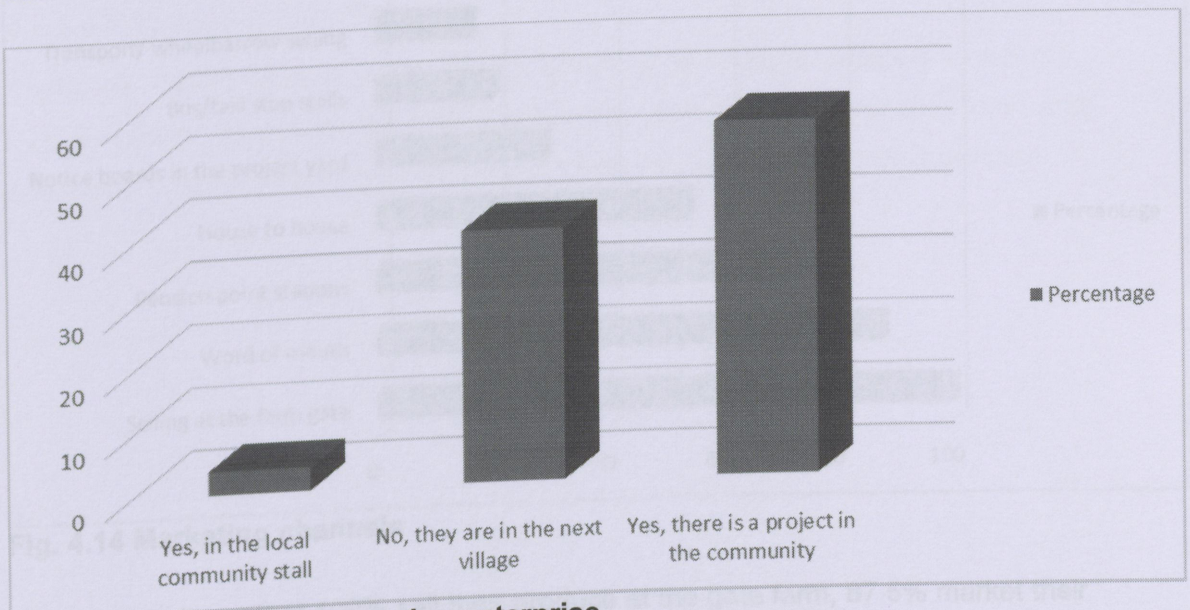

Fig. 4.13 Competition in farming enterprise

The figure 4.13 shows that 56.25% of respondents answered yes indicating existing projects in the village, 40% responded by saying no which means that they do not have competition and 3.75% said yes there is competition in the local community stall.

Once a cluster begins to form, a self-reinforcing cycle promotes its growth. Clusters improve competitiveness by increasing productivity by driving the direction and pace of innovation and by stimulating the formation of new business. It is therefore, the perfect context, within which to develop a strategy to promote economic growth, to create sustainable opportunities for local economic development and SMMEs, to offer acceptable returns for investments in development and to review commodity pricing linked to trade protection for commodity products (Groenewald, 2008).

4.2.4.3 Marketing channels

The marketing of agricultural produce is regarded as unique and deserving of specialized attention due to the perishability and bulkiness of the product involved. Most of these products are basic food stuffs. Figure 4.14 shows how the respondents market their agricultural produce.

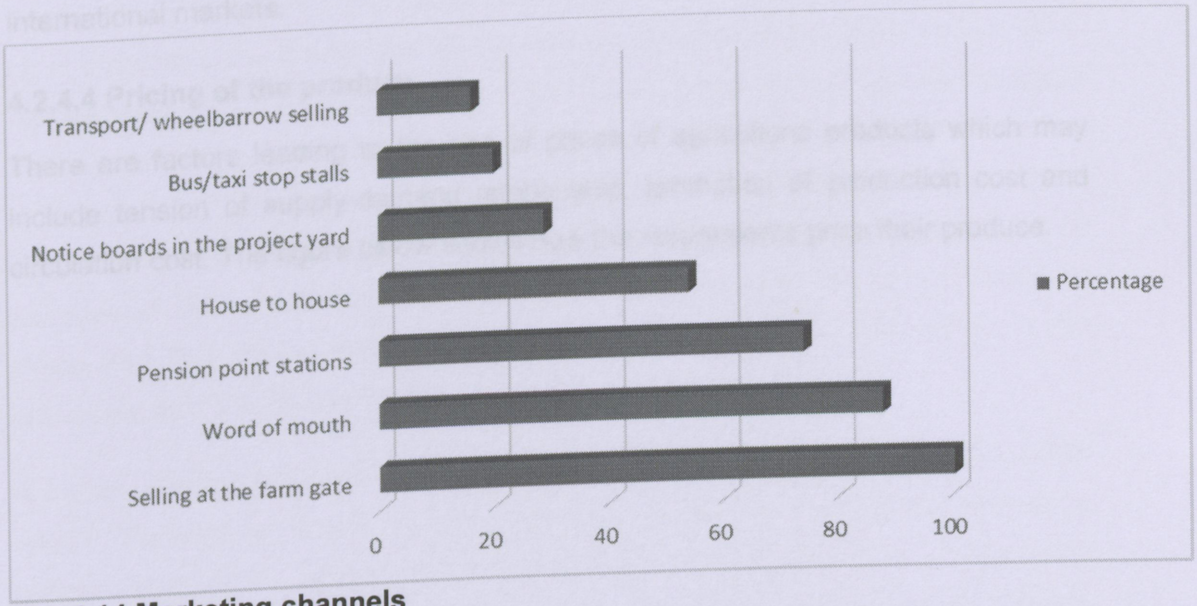

Fig. 4.14 Marketing channels

Figure 4.14 shows that 100% sell their produce at the gate farm, 87.5% market their produce by spreading the word, 73.75% market their produce at pension point stations, 53.75% market their produce house to house, and 28.75% market their produce using notice boards in their project yards. The results show that a lot of respondents prefer selling from their farming business as the first option as they believe that produce will be easy to access and the customers are given priority to choose straight from the garden and this is less expensive. The results can also mean that the respondents can market a small amount of their agricultural produce at the gate where there is less competition unlike when they have to market their products at places such as pension point's stations with other competitors.

Development of markets improves input-output market accessibility and it is of crucial importance for the growth in farm productivity (Mitta and Tripathi, 2009). Access to output markets is the key for small farmers to earn more from the sale of their produce. If agricultural inputs and output markets are more accessible, rural households will tend to use these services more, leading to improved productivity (Kamara, 2004). In South African rural areas, for example, smallholders are often geographically dispersed, roads and access to communication are poor. High costs of inputs, inefficient input/output markets and poor organizations of farmers are resulting in high production costs at farm level, limiting farm level profitability and significantly hampering the ability of farmers to compete in liberalized domestic and international markets.

4.2.4.4 Pricing of the produce

There are factors leading to the rise of prices of agricultural products which may include tension of supply-demand relationship, promotion of production cost and circulation cost. The figure below shows how the respondents price their produce.

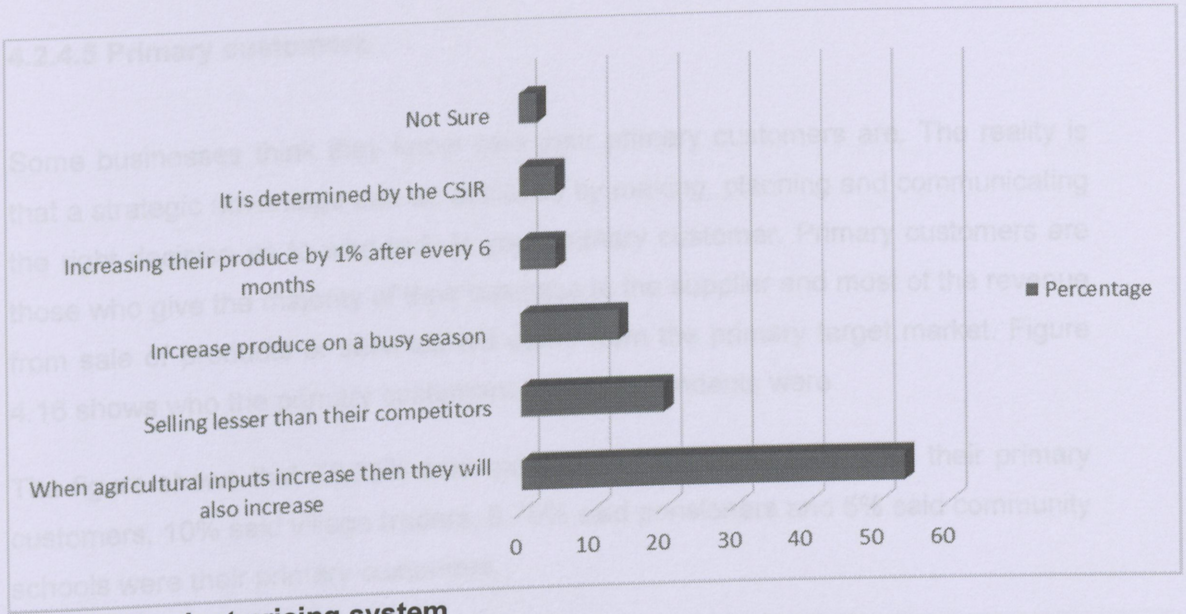

Fig.4.15 Product pricing system

Figure 4.15 shows that 53.75% of the respondents said they increase their price when agricultural inputs increase, 20% said by selling their producer at a lesser amount than their competitors, 13.75% said they increase their prices on a busy season such as festive, 5% said by increasing their produce after every six months by one percent, and others said their prices are determined by CSIR, while 2.5% of respondents said they are not sure. The results show that if agricultural inputs increase in terms of pricing, then the respondents also have to add a certain amount in order for their projects to be sustainable and generate income. Those respondents who were not sure how their agricultural inputs are priced might be because of lack of interest in the project's activities. Again the results might be interpreted that the respondents had lack of financial management skills to run effectively their farming business.

A farmer will not invest in a new technology unless it offers a reasonable economic return. Calculating those returns, especially when the investment implies a redeployment of household labour or the acquisition of new skills, or when the results may only become obvious after several seasons, can be a tricky business (Alders et al., 1993)

4.2.4.5 Primary customers

Some businesses think they know who their primary customers are. The reality is that a strategic advantage can be achieved by making, planning and communicating the right decision as to who truly is your primary customer. Primary customers are those who give the majority of their business to the supplier and most of the revenue from sale of products or services will come from the primary target market. Figure 4.16 shows who the primary customers of the respondents were.

The figure shows that 76.25% said members of the community were their primary customers, 10% said village traders, 8.75% said pensioners and 5% said community schools were their primary customers.

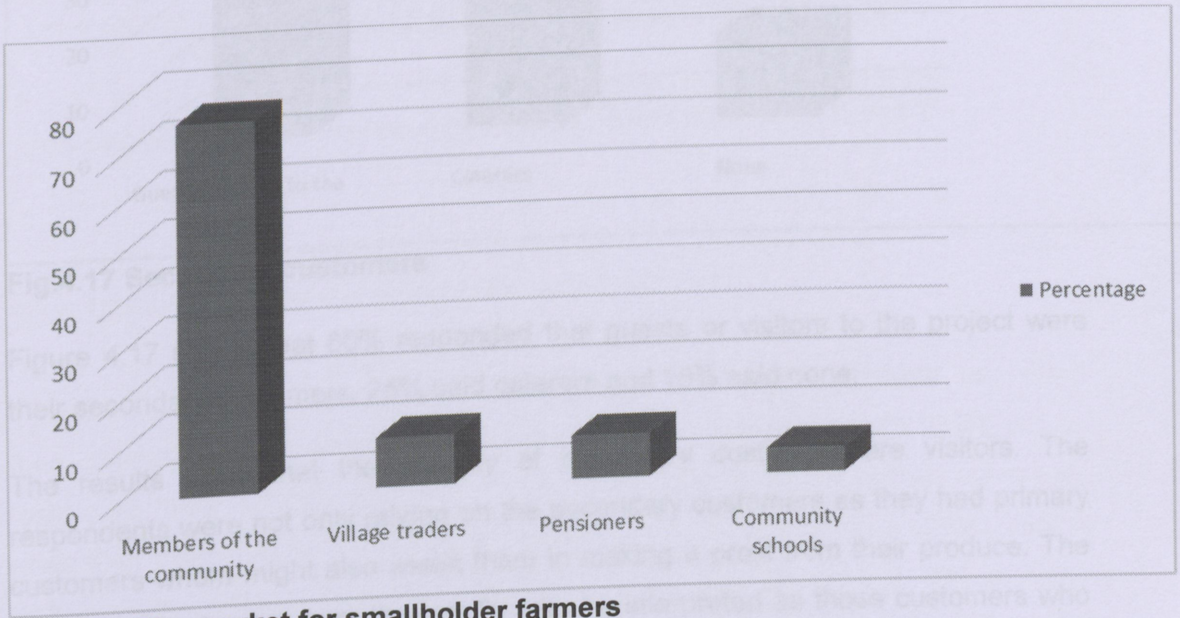

Fig. 4.16 The market for smallholder farmers

As this show in figure 4.16 members of the community are the major role players in the business and this might be because most of the projects are situated in the villages where most people reside. The agricultural business's primary target is a specific group of consumers that one aims to attract through a certain product or services. The results show that the majority of these primary customers are the community members where most projects operate. This means that members of the community assist smallholder farmers in sustaining their agricultural businesses by buying their produce and it might also mean that they can access them and at times buy on credit as they will be known.

4.2.4.6 Secondary customers

Secondary customers are those customers who need to be convinced to buy your product or service. Figure 4.17 shows who the secondary customers of the respondents are.

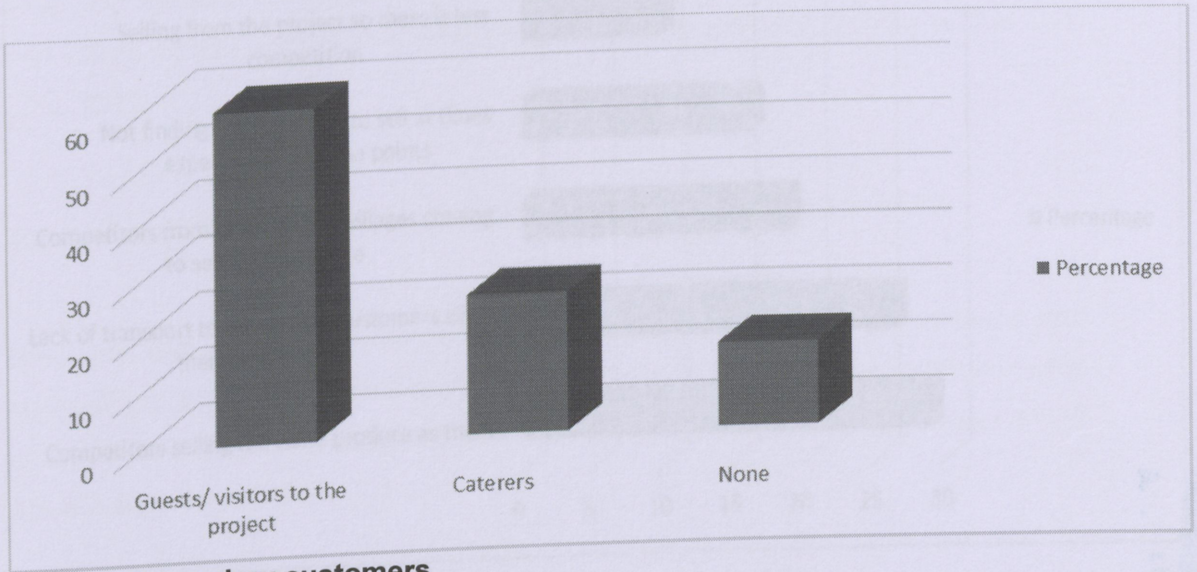

Fig.4.17 Secondary customers

Figure 4.17 shows that 60% responded that guests or visitors to the project were their secondary customers, 25% said caterers and 15% said none.

The results show that the majority of secondary customers are visitors. The respondents were not only relying on the secondary customers as they had primary customers whom might also assist them in making a profit from their produce. The secondary customers from the results may be interpreted as those customers who boost the profit of the business as they only buy when they come or per visit or when an order is made.

4.2.4.7 Problems that are experienced in accessing the market and how they are handled

Farmers are often constrained in what they can produce by limited marketing opportunities. The need around the world for more food and more diverse types of foods gives these small farmers great opportunity, but the challenges they face are significant also. Farmers are faced with new challenges and opportunities every day, from feeding an expanding global population while meeting strict new emissions requirements, to producing more food on fewer acres while minimizing their environmental footprint. The figure describes the problems that were experienced by the respondents in accessing the market.

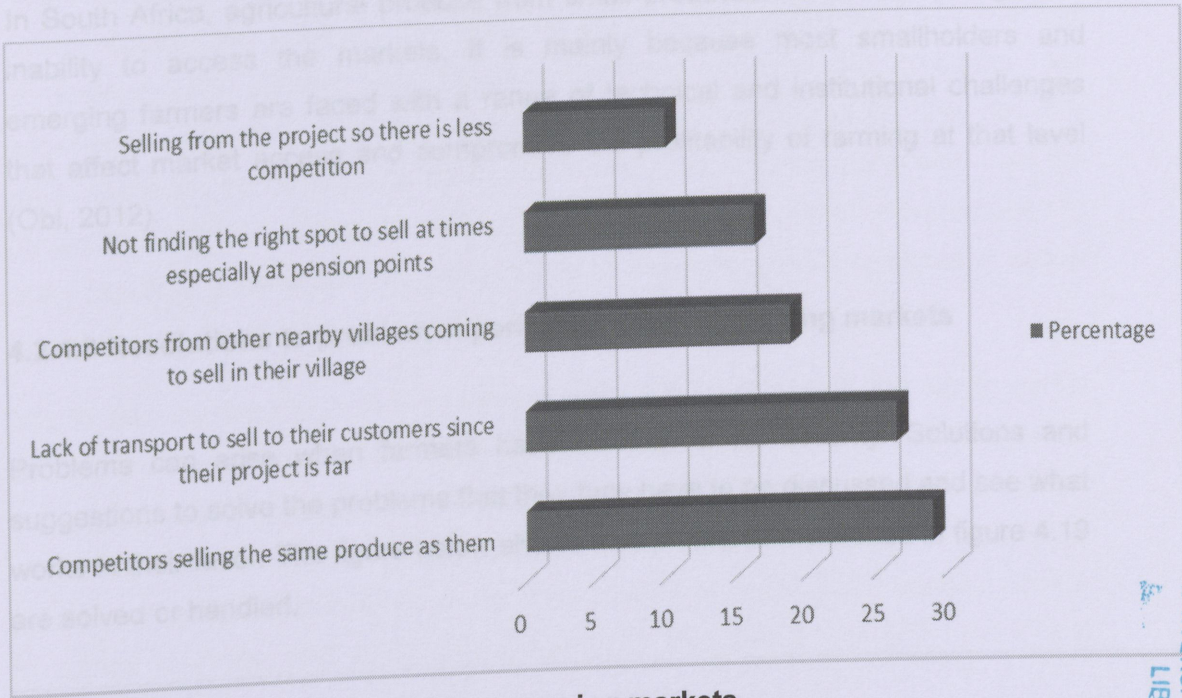

Fig.4.18 Problems experienced in accessing markets

Figure 4.18 shows that 28.75% of the respondents said their problem was when their competitors are selling the same produce. This means they are losing out on most customers. 26.25% said lack of means of transport to sell to their customers since their project is far, 18.75% said competitors from other nearby village coming to sell in their village, and others said not finding the right spot to sell at times especially at pension points, while 10% of respondents said selling from the project so there is less competition.

The results show that the problem is when the same product is being sold by several people. This creates competition and when there is competition then most products might not be sold and no income or profit will be made. A lack of entrepreneurial skills is one of the contributing factors to the collapse of many government-funded and supported projects and this is important if sustainable job creation is to be taken seriously. The results also showed that at times the respondents would not find a spot to sell so this might mean they have to be early to book the best spot that they will know that a lot of customers will be passing.

In South Africa, agricultural produce from small production is due to spoilage and inability to access the markets. It is mainly because most smallholders and emerging farmers are faced with a range of technical and institutional challenges that affect market access and compromise the profitability of farming at that level (Obi, 2012).

4.2.4.8 Resolutions to problem experienced when accessing markets

Problems can arise when farmers have minimal or no security. Solutions and suggestions to solve the problems that they face have to be discussed and see what works in their favor. The figure below shows how problems mentioned in figure 4.19 are solved or handled.

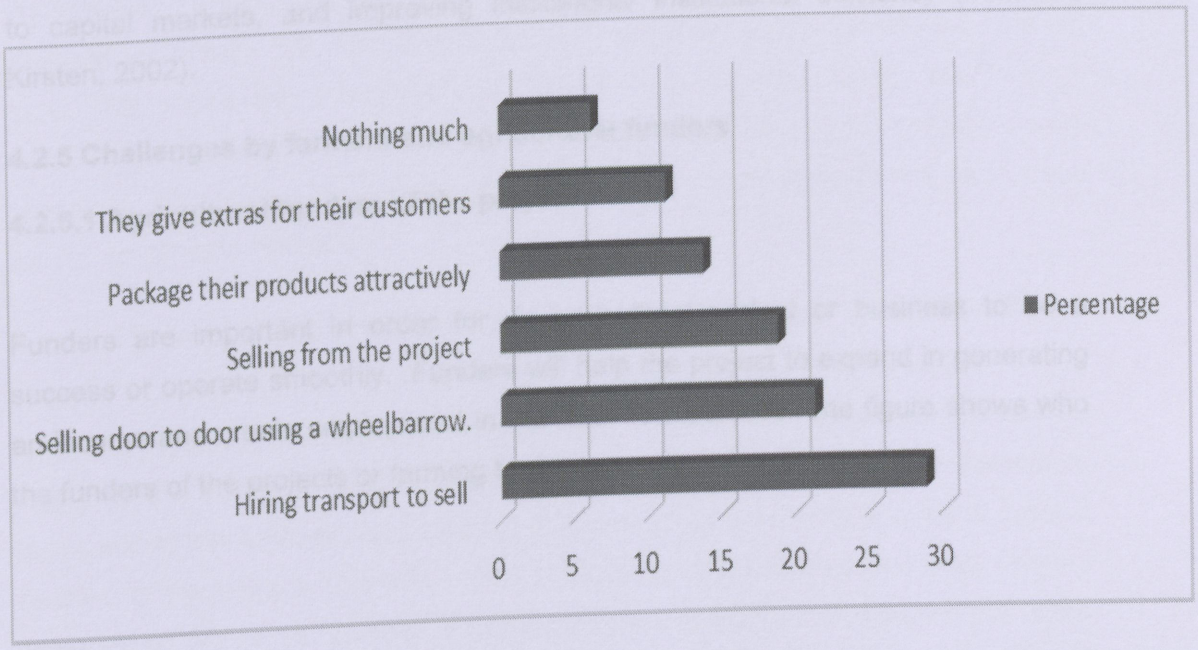

Fig.4.19 Solutions to problems

Figure 4.19 show that 28.75% said they hired transport to sell where they know most community members pass, 21.25% said they try to sell door to door using a wheelbarrow, 18.75% said they continue selling from the project, 13.75% said they try to package their products attractively, 11.25% said they give extras to their customers and 6.25% said they do nothing much.

This shows that if respondents had means of transportation to sell the produce in other villages then profit will be made as hiring is also costly for them and less competition. Six percent said they do nothing in solving the problems they experience when they need to access the market for their product. This can only mean there will be no profit for them and if there is no income generated then the project is likely to collapse. In addition to training, a programme or organization to bring together small-scale farmers is needed to achieve greater volumes of output and share input and transport costs.

Middle and low-income countries have traditionally competed in the world market with cheap labour and natural resources. In order to move beyond this stage, the development of well-functioning clusters is essential. Promoting cluster formation will require policy attention to issues such as improving education and skills; provision of essential infrastructure; building capacity in technology; opening access to capital markets, and improving institutions/ institutional efficiency (Vink and Kirsten, 2002).

4.2.5 Challenges by farmers and agricultural funders

4.2.5.1 Agricultural funders of the project

Funders are important in order for an agricultural project or business to be a success or operate smoothly. Funders will help the project to expand in generating an income and create employment in the rural communities. The figure shows who the funders of the projects or farming businesses are.

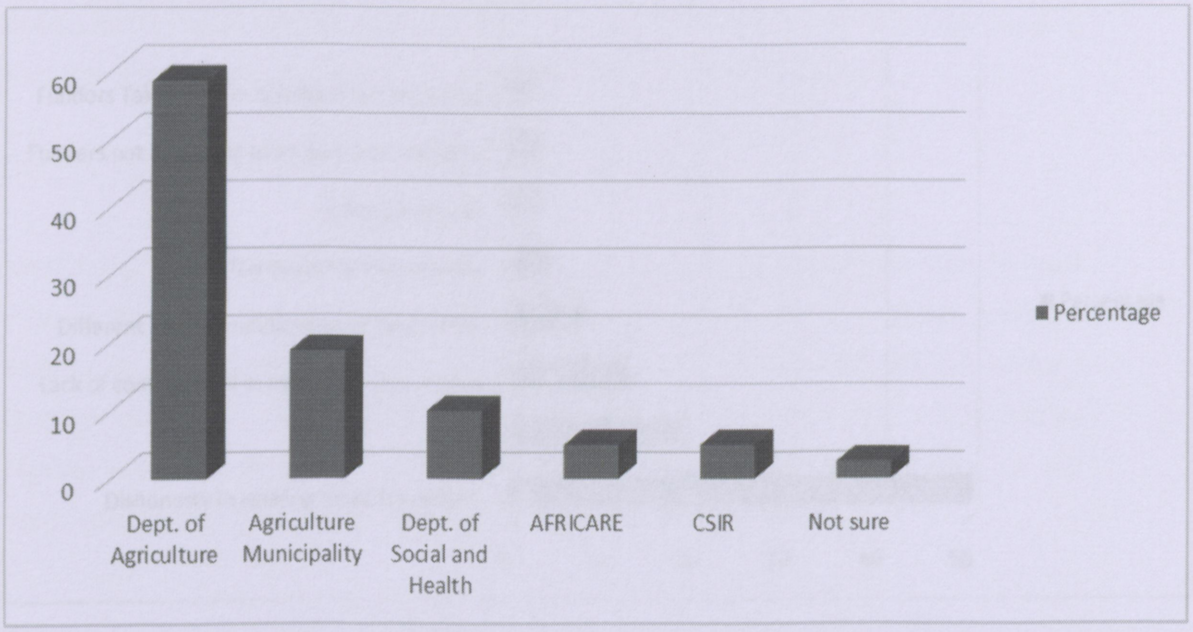

Fig.4.20 Agricultural funders of Project

Figure 4.20 shows that 58.75% said they were funded by the Department of Agriculture, 18.75% said Agriculture Municipality, 10% said Department of Social Welfare and Health, 5% said AFRICARE, 5% said CSIR and 2.5% said they are not sure. This shows that Department of Agriculture is the main funder and assume problems might be that the farmers cannot access funds due to a lot of paper work to submit, such as business plans or financial records which might not be in place for our smallholder farmers.

4.2.5.2 Challenges that are faced by farmers concerning agricultural funders

A lot of agricultural projects need a boast from funders in order for them to sustain their projects. At times it might not be funds that are needed but agricultural inputs. But if neither the funds nor agricultural inputs are given to farmers in order to make a success of the project then this might be because of challenges that most farmers experienced with their funders. The figure below describes challenges that were faced by the respondents concerning funders.

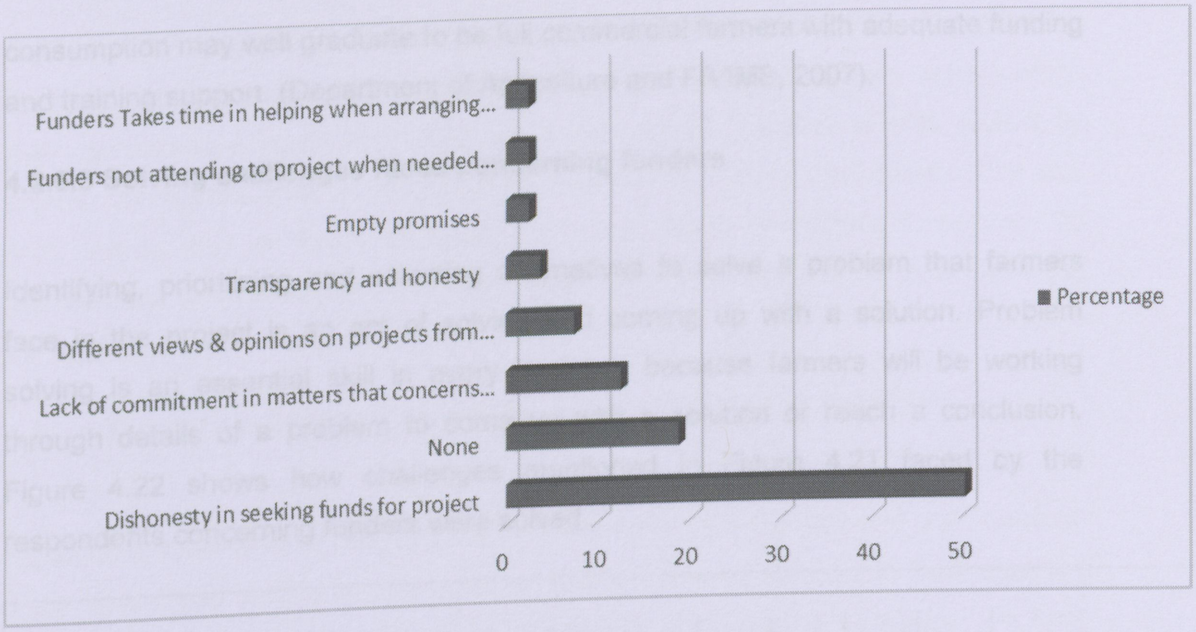

Fig.4.21 Funding challenges faced by farmers

Figure 4.21 shows that 50% said the funders were not transparent with them especially when it comes to the project seeking funds, 12.5% said funders lack commitment in matters that concern the project, 7.5% said when there are different people coming to their project with different views or opinions. Other challenges that farmers faced concerning the funders are lack of transparency and honest with them, not coming to the project when they are really needed for assistance, funders taking a long time in helping them especially when arranging for training for them and 18.75% said they have no challenges with the funders.

The results showed that being transparent is a major challenge for the respondents. If funders are not transparent with farmers they may lose confidence in them and this might lead to their project not being operational. An orientation on how funding process works or how long it takes to be approve needs to be arranged for the farmers. Funders needs to also tell the farmers if they when funds are not available or exhausted by other projects.

It is recommended that the public sector interventions should include the commercialisation of state farms, skills development among small emerging farmers and the encouragement of Public-Private-Partnerships with established commercial farmers. Small scale or emerging farmers in the province are those farmers who are resource poor who though they produce partly for the market and mainly for consumption may well graduate to be full commercial farmers with adequate funding and training support. (Department of Agriculture and FIVIMS, 2007).

4.2.5.3 Solving challenges faced concerning funders

Identifying, prioritizing and selecting alternatives to solve a problem that farmers face in the project is an act of solving and coming up with a solution. Problem solving is an essential skill in every business because farmers will be working through details of a problem to come up with a solution or reach a conclusion. Figure 4.22 shows how challenges mentioned in Figure 4.21 faced by the respondents concerning funders were solved.

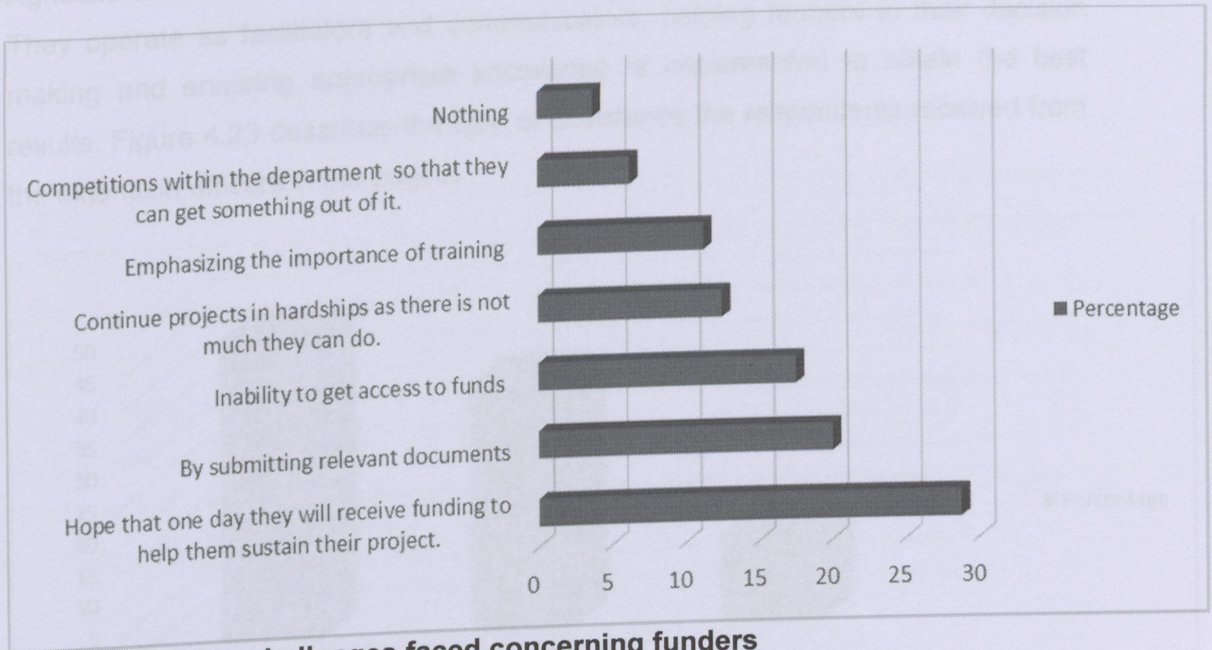

Fig. 4.22 Solving challenges faced concerning funders

Figure 4.22 shows that 28.75% said they hope that one day they will receive funds to help them sustain their projects, 20% said they have submitted relevant documents, 17.5% said they feel they are sent from pillar to post in terms of getting help especially when they want to access funds, 12.5% said they continue with their projects in hardships as there is not much they can do, 11.25% said that they try to emphasize the importance of training needed, 6.25% said they enter competitions within the department so they can get something out of it and 3.75% said they do nothing.

Government should take the primary responsibility in terms of funding farmers. Farmers should consider creating their own funds for sustaining their project which they can use to address their challenges and make a success of their project by looking for opportunities as they present themselves. This is motivated by the fact that due to lack of funds at times from the side of government, as well as bureaucratic delays, farmers are sometimes not in a position to do or achieve the things they want for their own development.

4.2.5.4 Type of assistance from the Extension Officers in the project

Agricultural extension officers are intermediaries between farmers and stakeholders. They operate as facilitators and communicators, helping farmers in their decision making and ensuring appropriate knowledge is implemented to obtain the best results. Figure 4.23 describes the type of assistance the respondents received from the extension officers in the project.

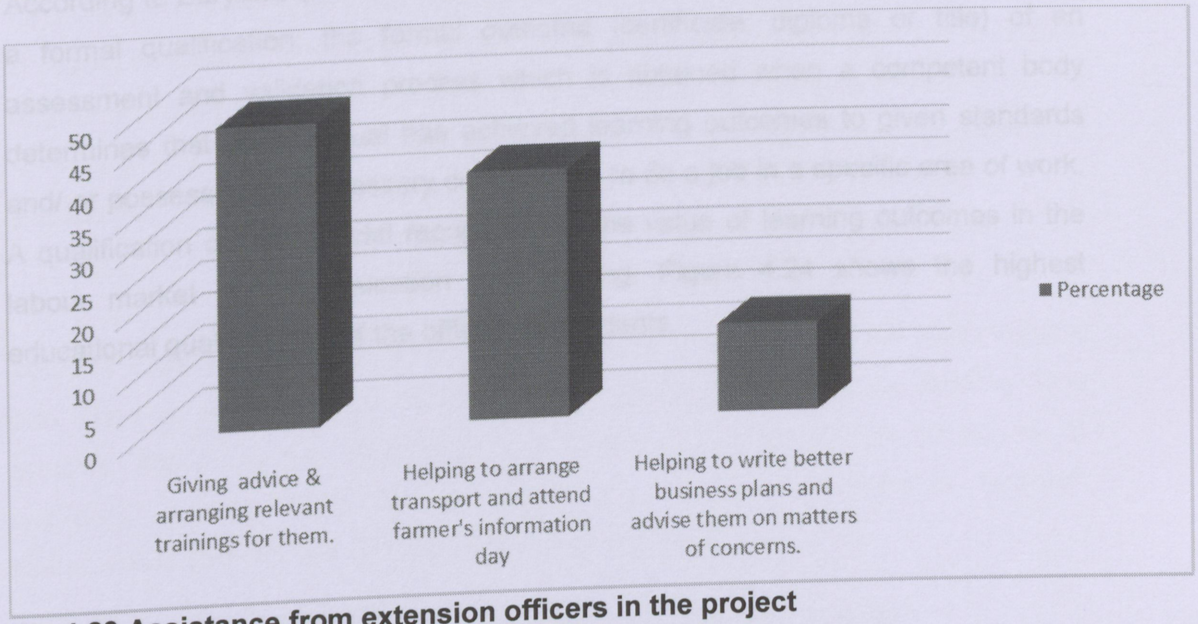

Fig.4.23 Assistance from extension officers in the project

Figure 4.23 shows that 47.5% said they gave advice and current information and arranged relevant trainings for them, 38.75% said they are helped in arranging transport and attending farmer's information day where they display their project's produce and network and share information with other farmers. Fourteen percent said they are helped by extension officers in writing a better business plans and get advice on matters of concern.

The terms 'information' and 'knowledge' are often used interchangeably. Information is often treated as a commodity that can be transferred or shared, while knowledge implies human effort to digest and gain control of information. Farmer to farmer knowledge transfer has to be acknowledged and incentivized as many farmers have expertise in their own farming practices which could be transferred to other developing farmers (Limpopo Department of Agriculture, 2012).

SECTION B

4.3 Extension Officers

4.3.1 Demographics of Extension Officers

4.3.1.1 Educational qualification of the respondents

According to Eurydice (2006) the term highest qualification covers different aspects, a formal qualification: the formal outcome (certificate, diploma or title) of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards and/ or possesses the necessary competence to do a job in a specific area of work. A qualification confers official recognition of the value of learning outcomes in the labour market and in education and training. Figure 4.24 shows the highest educational qualifications of the official respondents.

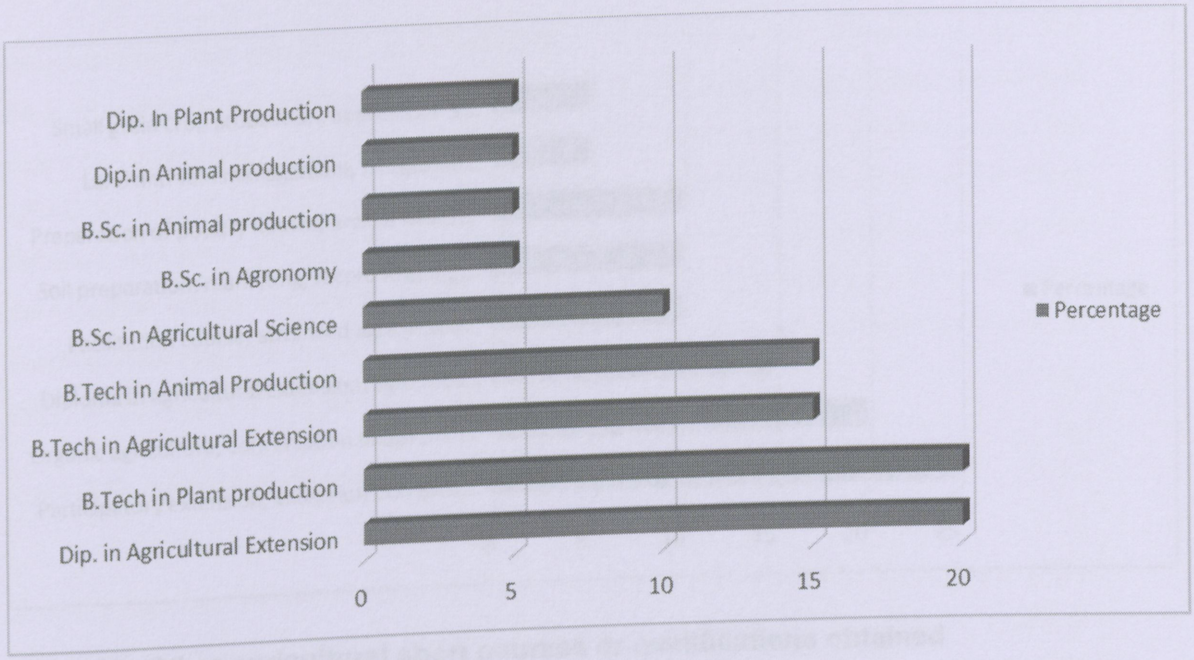

Fig.4.24 Highest Academic Qualification of Extension Officers

Figure 4.24 show that 20% had Diploma in Agricultural Extension, 20% had B.Tech in Plant Production, 15% had B.Tech in Agricultural Extension, 15% had B.Tech in Animal Production, 10% had B.Sc. in Agricultural Science, 5% had B.Sc. in Agronomy, 5% had B.Sc. in Animal production, 5% had Dip. in Animal production and 5% had Dip. in Plant Production.

To have a career in extension services one needs to be interested in agriculture as one plays a crucial role in promoting agricultural productivity, increasing food security, improving rural livelihoods and promoting agriculture as an engine of economic growth. They are responsible for being intermediaries between stakeholders and farmers amongst their responsibilities.

4.3.1.2 Other agricultural short courses or qualifications obtained

Training being a process of acquiring information either formally or informally is very important as it helps maintain effective productivity with the knowledge that one has acquired. There is a general assumption that the more experienced individuals perform best. Figure 4.25 below shows agricultural training the respondents have obtained.

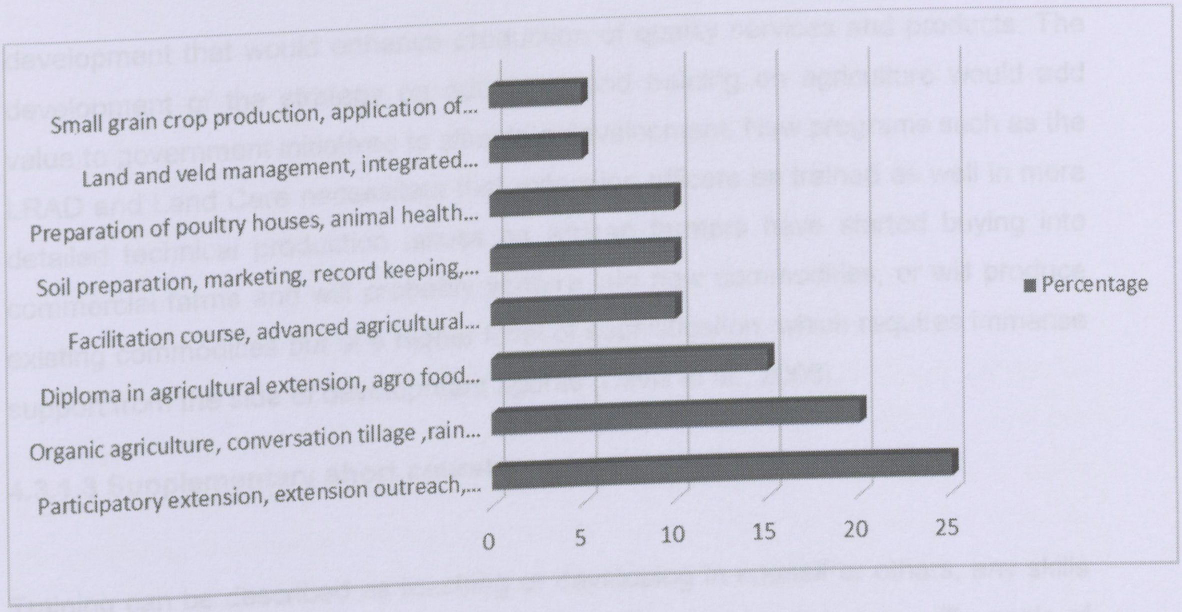

Fig. 4.25 Other agricultural short courses or qualifications obtained

It shows that 25% had training in participatory extension, extension outreach, communications, 20% had organic agriculture, conversation tillage, rain water harvesting, roof water harvesting, 15% had Diploma in agricultural extension, agro food processing, project management, food safety short course, 10% had Facilitation course, advanced agricultural management. Others had training in soil preparation, marketing, record keeping, financial management, entrepreneurship, and preparation of poultry houses, animal health and medicine, broiler's production respectively. Only 5% had training in land and veld management, integrated farming systems and others had training in small grain crop production, application of fertilizers and pesticides.

Due to information technology advancement, the world has become a small place, so to speak, a global village. There are no borders regarding employment, business and communication. This in itself brings a great pressure on the nations to be competitive internationally. Education and training is a convenient vehicle to achieve that and the development of the relevant strategy becomes imperative. The productivity of labour towards the development of the economy can only be possible or achieved through training and education of personnel to meet current challenges to compete meaningfully on international basis. Opportunities that arise through international trade agreements can only be taken advantage of through skills development that would enhance production of quality services and products. The development of the strategy on education and training on agriculture would add value to government initiatives to stimulate development. New programs such as the LRAD and Land Care necessitate that extension officers be trained as well in more detailed technical production issues as African farmers have started buying into commercial farms and will probably venture into new commodities, or will produce existing commodities but at a higher level of sophistication, which requires immense support from the side of development agents (Davis et al., 2008).

4.3.1.3 Supplementary short courses

Training can be described as teaching or developing in oneself or others, any skills and knowledge that relate to specific useful competencies. It has specific goals of improving one's capability, capacity, productivity and performance. Figure 4.26 shows whether the respondents had any other training that they might have obtained besides agriculture.

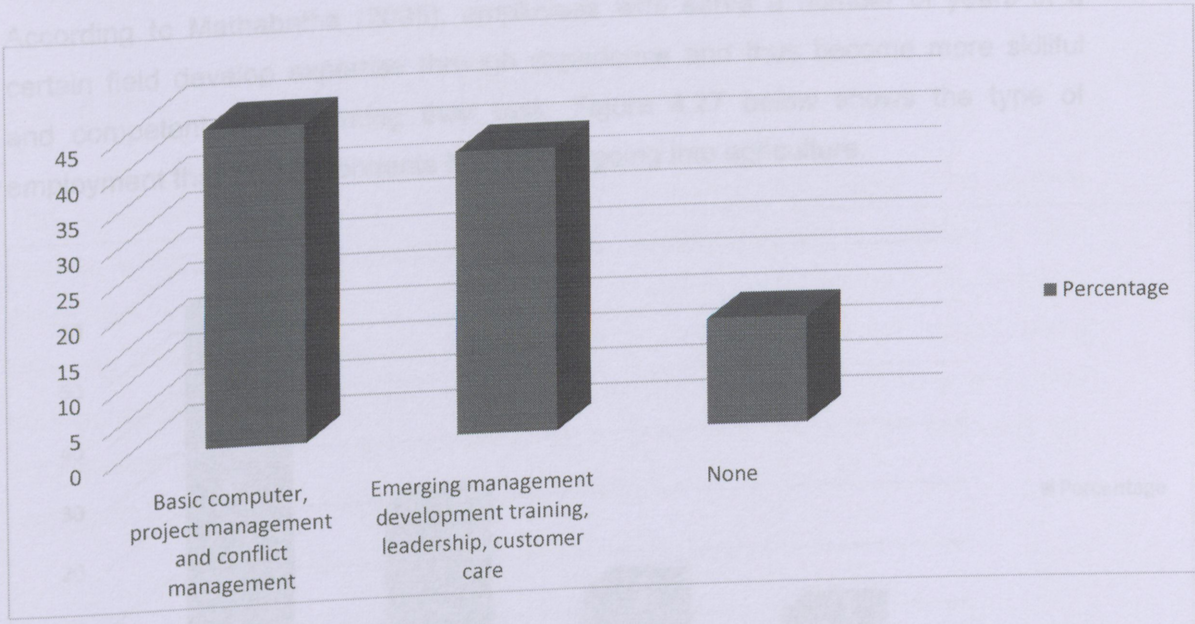

Fig.4.26 Supplementary short courses

The figure indicates that 45% had basic computer, project management and conflict management, 40% had training in emerging management development training, leadership, customer care and 15% had no other training at all.

Education and training institutions should provide skills development programmes that contribute to improved productivity and competitiveness within each cluster. There must be linkages between supply issues and funding mechanisms for resource poor farmers. Training in technical skills has not been identified that strongly and it is difficult to clearly identify which area of production techniques emphasis should be laid on. Given the low response in terms of production techniques, it can be concluded that either extension officers are of the belief that they have enough basic production techniques and thus require intermediate to advanced skills and knowledge, or that they feel they are sufficient with the knowledge they have in relation to their current client base, or the majority of them are preparing themselves for upward career moves which would require more of generic support, computer and business/financial management skills, than pure hands-on technical skills (Department of Agriculture, 2005)

4.3.1.4 Type of employment before going into agriculture

According to Mathabatha (2005), employees who serve a number of years in a certain field develop expertise through experience and thus become more skillful and competent in performing their task. Figure 4.27 below shows the type of employment that the respondents had before going into agriculture.

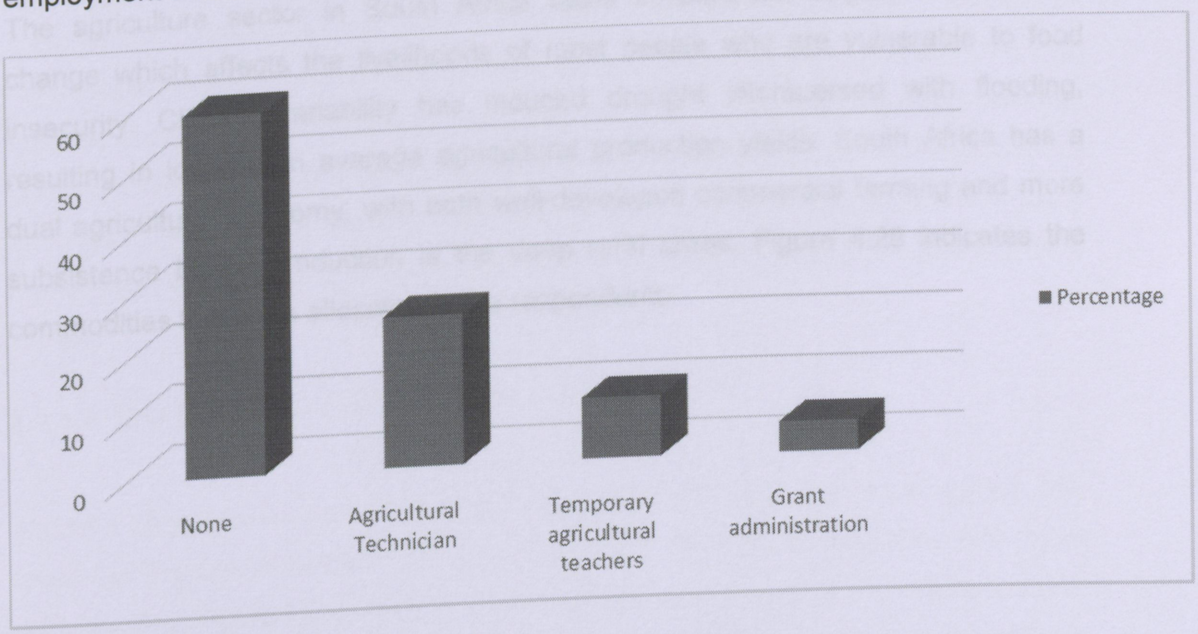

Fig.4.27 Employment type before getting into agriculture

The figure shows that 60% were doing nothing, 25% were agricultural technicians, 10% were temporary agricultural teachers and 5% were administrating grants.

The significance of this is that unemployment is still a major problem to South Africans especially in agriculture. Unemployment rate in South Africa decreased to 25 percent in the second quarter of 2015 from a ten-year high of 26.4 percent in the previous period. Employment rose to 1.3 percent quarter-on-quarter to 15.55 million people. The largest gains were observed in community and social services (98 000), construction (79 000) and trade (73 000). In contrast, job losses were recorded in finance, manufacturing and agriculture (31 000, 23 000 and 22 000 respectively). The non-agricultural formal sector gained 39 000 jobs while employment in the informal sector increased for the fifth consecutive quarter by 177 000. In the second quarter of 2015, the labour force participation rate decreased to 58.1 percent from 58.6 percent in the previous period. The expanded definition of unemployment, which includes people who have stopped looking for work slowed to 34.9 percent to 36.1 percent (Stat SA, April 2015).

4.3.1.5 Allocation of agricultural commodities

The agriculture sector in South Africa faces considerable impact from climate change which affects the livelihoods of most people who are vulnerable to food insecurity. Climate variability has induced drought interspersed with flooding, resulting in lower than average agricultural production yields. South Africa has a dual agricultural economy, with both well-developed commercial farming and more subsistence based production in the deep rural areas. Figure 4.28 indicates the commodities that were allocated to the respondents.

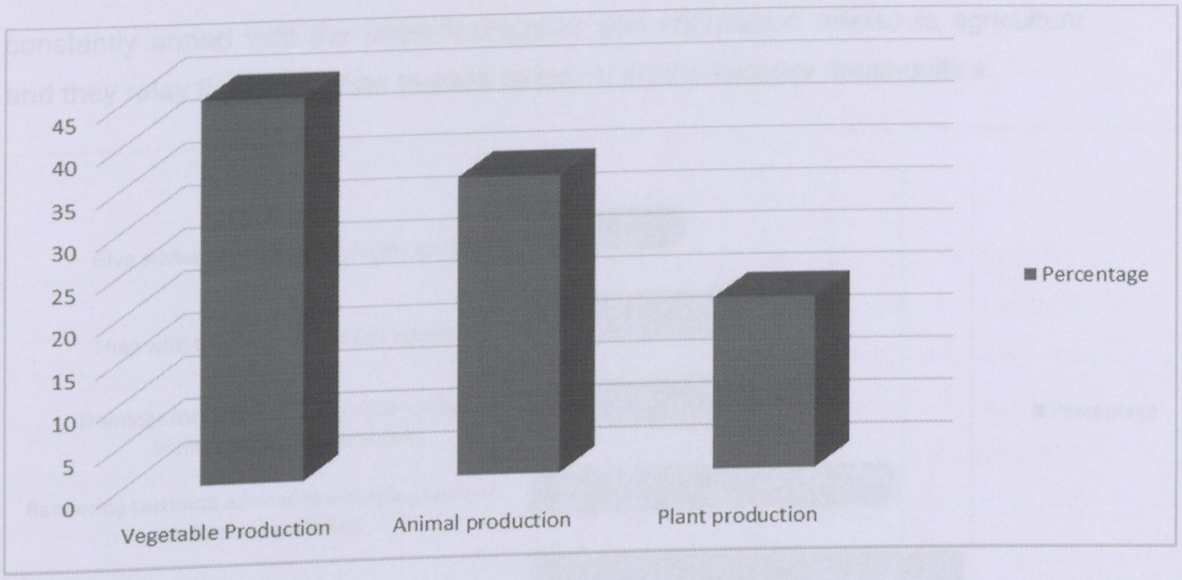

Fig.4.28 Allocation of agricultural commodities

Figure 4.28 shows that 45% were in vegetable production, 35% were in animal production and 20% were in plant production. In context this is in animal and plant production being allocated to all extension officers based on the skills, experience and qualifications they might have.

Results show that the majority of the respondents are specialists in vegetable production followed by those in plant production. Hall (2008) states that agricultural commodities come from the raising of crops or animals. While some agricultural commodities, such as corn or beef, are direct products of the earth, others, like high fructose corn syrup, are derived from them. Farmers across the scale of production identify training in production techniques and business financial management as priorities. The fact that training needs have been identified based on commodity means that such training courses have to be commodity specific in order to have impact.

4.3.1.6 Role players in the agricultural projects

Figure 4.29 indicates the role played by the Extension Officer in each project. The roles for the extension officers is to directly work with the farmers and other stakeholders related to agriculture. Their primary role is to aid the farmers to make better decisions to increase agricultural production. The extension officers are constantly armed with the latest techniques and information related to agriculture and they relay the information to each farmer in their respective commodities.

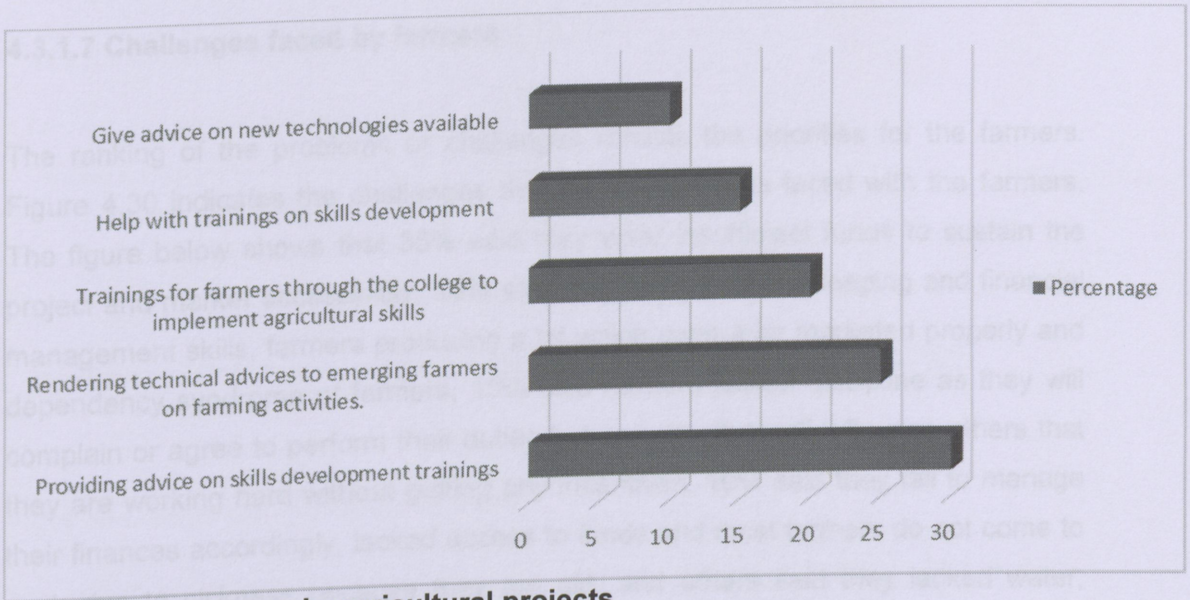

Fig.4.29 Role players in agricultural projects

Figure 4.29 show that 30% said they provided advice on sustainable agricultural production as well as skills development trainings, 25% said they rendered technical advices to emerging farmers on farming activities such as harvesting and application of pesticides, identifying needs of the farmers, 20% said they arranged trainings for farmers through the college to implement agricultural skills, arranged information days for farmers by inviting specialists to address the farmers in giving them sound advice and helping farmers in making decisions, 15% said they offered advice on matters of agriculture, helping with trainings on skills development and helping with transport whenever there are agricultural functions that farmers need to attend and 10% said they gave advice on new technologies available, helping farmers to network and forming cooperatives and arrange trainings for them.

The most commonly known role played by the extension officers in the project includes advisory support. The majority of the respondents mentioned that they provide farmers with advisory services based on their agricultural activities. The advices that the small scale farmers and emerging farmers receive will empower farmers to use and conserve natural resources in a sustainable manner, and assist farmers with whole farm planning also to facilitate accessibility of finances for farmers. Extension officers must be made available again to assist developing farmers.

4.3.1.7 Challenges faced by farmers

The ranking of the problems or challenges reflects the priorities for the farmers. Figure 4.30 indicates the challenges that the respondents faced with the farmers. The figure below shows that 35% said they were insufficient funds to sustain the project and market accessibility, 15% said they lacked record keeping and financial management skills, farmers producing a lot which cannot be marketed properly and dependency syndrome of farmers, 15% said farmers lacked discipline as they will complain or agree to perform their duties but one member will influence others that they are working hard without getting any incentives, 10% said they fail to manage their finances accordingly, lacked access to funds and most farmers do not come to work due to sickness because they are old, and others said they lacked water, lacked accessibility of market as most times products are not of good quality and 5% said there were high mortality rate during winter season due to the cold weather as there will be no electricity.

Different farmers are faced with unique challenges according to the type of production and the level of enterprise. According to figure 4.30 the majority of these farmers had insufficient funds and no market accessibility and this indicated that farmers are faced with common challenges such as skills development, farming infrastructure, access to production input and output market, skills, transport.

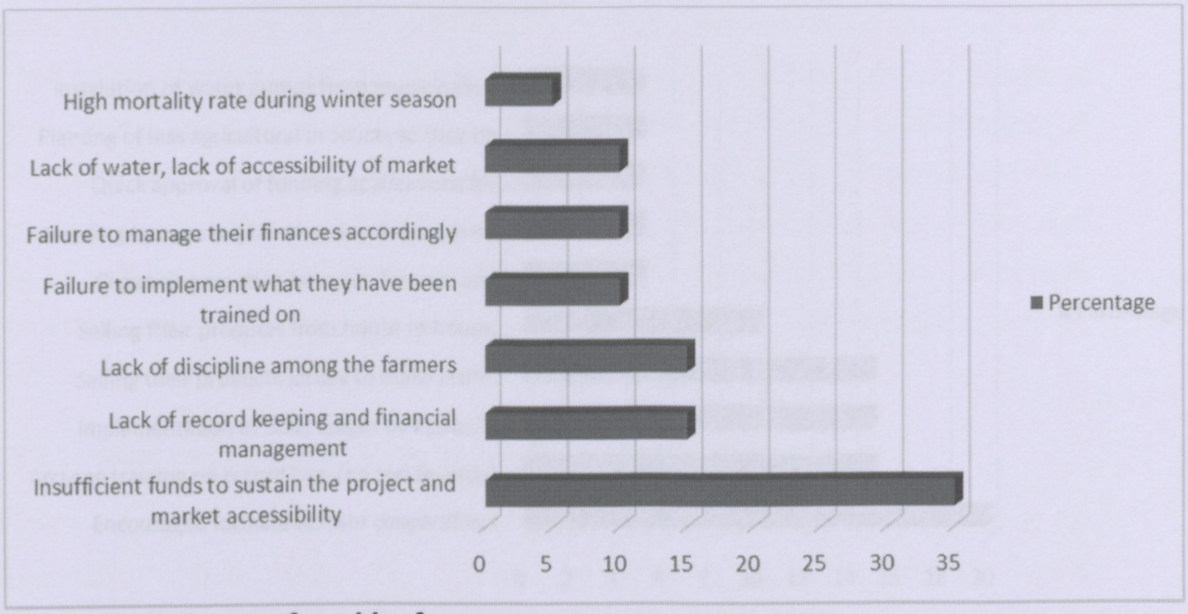

Fig.4.30 Challenges faced by farmers

The effect of globalization and market deregulation in South Africa places huge demands on emerging farmers to learn to survive in this cut-throat environment. The need for support from development agents in terms of market analysis and business management is very high, hence the need to make sure that development agents are well clued up in these issues in order to support these farmers effectively and to give support to the existing commercial farmers. It is clear from the training needs of these commercial farmers that their needs are commodity specific and they address a wide range of commodities not currently covered by the government service extension staff. This raises a question as to whether government department extension staff has the capacity to provide training to commercial farmers, to include commodities other than those traditionally covered by emerging farmers (Hall and Aliber, 2010).

4.3.1.8 Suggestions to improve the challenges

Problem solving is one of the most essential skills in life. How one deals with challenges will often be a determining factor in how successful one has overcome the challenge or problem faced. Figure 4.31 show the suggestions to overcome challenges that were mentioned in figure 4.30

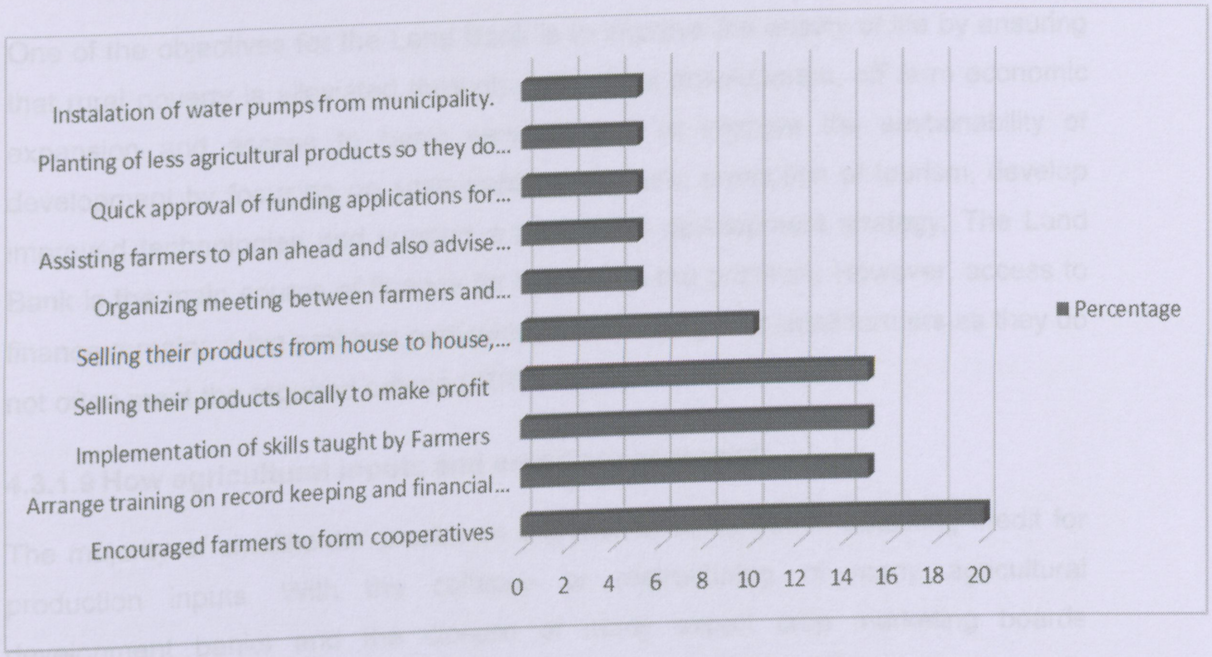

Fig. 4.31 Suggestions to overcome challenges

The figure indicates that 20% said the farmers were encouraged to form cooperatives so they can purchase their products in bulk and sell them to make more profit to big markets, 15% said they arranged training on record keeping and financial management short courses, 15% said farmers were encouraged to implement the skills they had acquired to show they have understood what was taught to them, 15% said farmers were encouraged to sell their products locally to make profit and also people from outside were sourced to give them advice for good marketing products, 10% said farmers were encouraged to sell their products house to house, pension points so they can make profits.

Other responses were to arrange meetings with their extension officer wherein differences are ironed out and matters resolved, helping farmers to plan ahead and also advising them to draw water from a nearby river for their agricultural products applications for funding took time to approve, farmers in the meantime make initiatives by not getting incentives so their project can be sustainable, and farmers were encouraged to plant less agricultural products so they do not lose much because of market accessibility. Applications to municipality to help them with the installation of water pumps were submitted and when there is less milk left they switch off the refrigerator and take the milk home for consumption in order to save electricity.

One of the objectives for the Land Bank is to improve the quality of life by ensuring that rural poverty is alleviated through agricultural development, off farm economic expansion and access to basic services and to improve the sustainability of development by focusing on sustainable agriculture, promotion of tourism, develop improved technologies and support a population development strategy. The Land Bank is the main source of finance for farmers in the province. However, access to finance remains a big problem particularly to emerging and small farmers as they do not often meet the required criteria (IRRD, 2003).

4.3.1.9 How agricultural inputs and credit are accessed

The majority of smallholder producers experience difficulties in obtaining credit for production inputs. With the collapse or restructuring of many agricultural development banks and the closure of many export crop marketing boards (particularly in Africa), which in the past supplied farmers with inputs on credit, difficulties have increased rather than decreased. Figure 4.32 shows how agricultural inputs and credit were accessed.

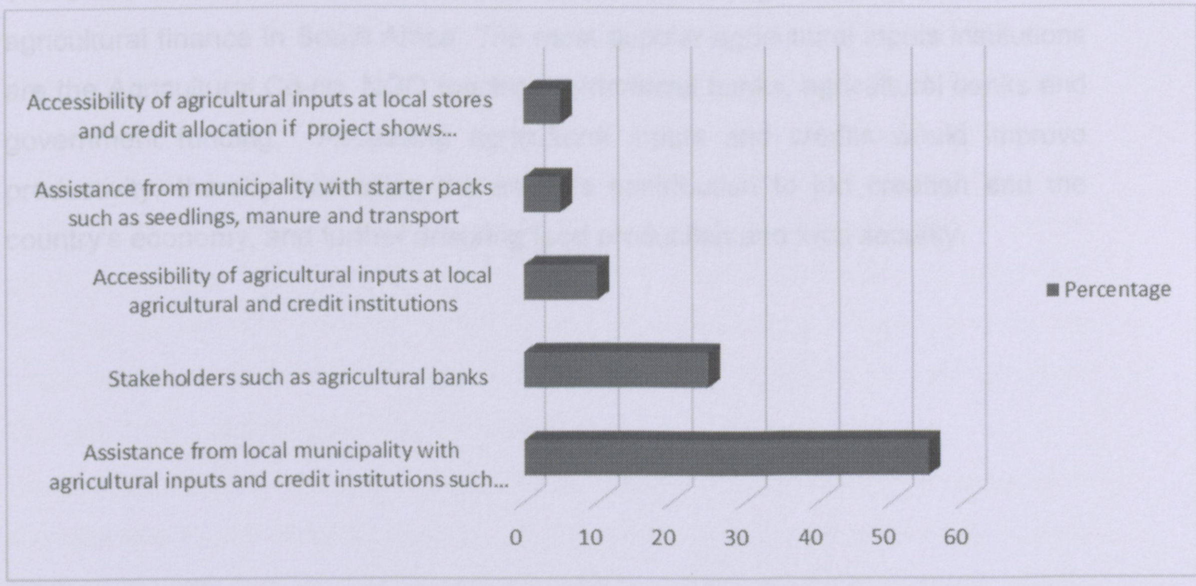

Fig.4.32 How agricultural inputs and credit facilities are accessed

Figure 4.32 shows that 55% of the respondents said the local municipality assisted farmers with agricultural inputs such as seedlings, when business plans were well written farmers apply for credit through agricultural credit institutions such as CASP, 25% said relevant stakeholders such as agricultural banks were contacted to state relevant documents when applying for credit and local agricultural shops where inputs were cheaper, farmers were advised to buy from there, 10% said farmers accessed most of the agricultural inputs at local agricultural shops but when their livestock needs to be vaccinated their local municipality would assist and credit is applied at credit institutions, 5% said where possible the municipality assisted farmers with starter packs such as seedlings, manure and transport and 5% said farmers accessed their agricultural inputs at local stores and credit was applied for if their project was stable and showed some sustainability and when they had collateral.

Majority of the farmers are assisted through their local municipalities in accessing agricultural inputs and applying for credits. The results shows that agricultural municipalities are trying very hard in assisting their small-scale farmers with seedlings among other agricultural inputs. Furthermore this show that the municipalities would like to see the agricultural flagship projects being sustainable, generating income and creating employment.

There are different institutions available to access the agricultural inputs and the agricultural finance in South Africa. The most popular agricultural inputs institutions are the Agricultural Co-op, NGO funding, commercial banks, agricultural banks and government funding. Accessing agricultural inputs and credits would improve productivity, thereby increasing the sector's contribution to job creation and the country's economy, and further ensuring food production and food security.

CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes and draws conclusions out of the findings of the research. Recommendations are also provided based on the conclusions reached. The main objective of the study was to assess the sustainability of agricultural flagship projects in Sekhukhune District. The study also provides an analysis of the sustainability of agricultural flagship projects for farmers in five municipalities in the Sekhukhune District.

5.2 Summary of Findings

The study findings revealed that farmers become more vulnerable to problems in sustaining their projects which then have serious implications for their livelihoods.

5.2.1 Marketing agricultural produce

The results showed that most farmers sold their produce at the gate, while other market their produce by word of mouth and at pension point stations which in most cases there are competitors selling the same products as them and at the same time book for a spot in the early hours. Selling house to house is also done in order to gain profit which at times is not easy as wheelbarrows are used and as most are aging this can be tiring to them. Selling at their farm gate is also another strategy to market their produce as the customer has an advantage of getting them fresh and of good quality and this is not time consuming. At the same time there are problems that they experience when marketing their agricultural produce. Some had to hire transport to sell at pension pay points and some use wheelbarrows and package their produce in a way that will attract customers.

Small-scale famers in remote areas have limited opportunities to participate in markets due to high transport costs. The private sector either does not source from them or requires high margins to cover its costs. Dispersed and inconsistent supply leads to high transaction costs for the procuring firm, unless farmers aggregate their output by means of cooperatives or informal groups. This increases the scale of operations and reduces the costs of activities that relate to transport and marketing and also to input purchases. Extension workers have a role in initiating agreements. Specifically, they can match market requirements with farmers' products. They can help identify reputable buyers and producer groups that can work together to the advantage both sides. They can also help monitor and enforce agreements (Kamara, 2004).

5.2.2 Requisite skills for the farming business

The study findings revealed that most farmers need to be capacitated, with marketing skills, book keeping and financial management and other skills such as vegetable production and management, pest and disease control, agro-food processing, soil analysis and preparation, pricing and costing, poultry production, need decision making, leadership skills, team building, conflict management and communication skills. The majority of the respondents revealed that they expected assistance from their local assigned government officials for them to acquire the needed skills so that the farming business brings good and high quality produce. A minority said that being able to process and preserve their produce when there was an excess was the skill they needed. The findings showed that most of the respondents rely on government officials in order for them to be skilled as they play a major role of being mediators. Farming and business skills and n how to start and manage projects need to be improved in order to enable farmers to sustain their projects. The requisite skills will help them undertake income generating activities and to access markets with less competition as cooperatives will be formed to sell their agricultural products in bulk. It is inevitable that some smallholder farmers, especially those who lack skills and productive assets, may not be able to participate effectively in markets even with appropriate support.

5.2.3 Problems experienced by farmers

The study findings revealed that farmers were faced with problems such as drought which hinder them from having a good produce and make profit. The findings indicated that they lacked funding, had no access of marketing their agricultural products, lacked sufficient water, had a problem of electricity being expensive amongst other problems they faced. The farmers mentioned that problems that they face can be solved if they made submissions for funding applications through the help of their extension officers, fetched water from a nearby river, saved so they could purchase water tanks and store water, or talked with community members to assist them in reporting those who steal from them.

5.2.4 Motivation for entering farming business

Most farmers said they entered farming because they were unemployed, some had passion for agriculture and others lacked proper qualifications. A minority of the farmers are taking care of the family after the death of a breadwinner, to keep busy and also some are doing so on behalf of a sick parent, are tired of working for other people, or in order to put his/her community on the map and have a sense of belonging. The motive of entering farming business is a good thing for the smallholder farmers, therefore government need to take note and assist them where possible and empower them to grow globally as this will increase food security.

5.2.5 How agricultural inputs and credit are accessed

It was revealed that most of the famers were assisted by their local agricultural municipalities with agricultural inputs such as seedlings and business plans to apply for credit through agricultural credit institutions such as CASP. Relevant stakeholders such as agricultural banks are contacted through the help of an extension officer in submitting relevant documents when applying for credit. Local agricultural shops are also accessible for small-scale farmers to purchase their agricultural inputs where they can get them cheaper and nearer. Small-farmers are advised to buy in bulks to avoid transport costs. When livestock need to be vaccinated the local agricultural municipality assist. Credit is applied at credit institutions and where possible the municipality assist farmers with starter packs such as seedlings, manure and transport. This is a good thing for the municipalities to assist smallholder farmers but the problem arises when the agricultural inputs are not delivered in time when they are needed, for instance when they want to use fertilizers or vaccinations.

5.2.6 Effect of age of farmers on productivity

Young people need to be encouraged to get involved in the farming business as the findings revealed that most of the farmers were the elderly. Most of the farmers are elderly and weak, prone to illnesses and therefore this will result in low yields which in the long run affect food supply and production. Therefore it is not economically wise to invest on an elderly as they skills might not be implemented as soon they will disappear due to illness or death.

5.2.7 Poor linkage between agriculture officials and farmers

Contrary to the study assumptions, it was revealed that there was no significant linkage between agricultural researchers, extension officials and farmers. There was also poor communication and coordination level and insufficient information available on relevant issues to the projects. Governments can provide significant support to small scale farmers' development by, for example, ensuring high-quality agricultural research clearly targeted at smallholder farmers and consumer needs, where possible in partnership with the private sector.

The study achieved it's the overall objective, assessing the sustainability of agricultural flagship projects.

5.3 Recommendations

5.3.1 Access to market

When running a farm business, production must always be linked to a market. Access to markets is often constrained by factors such as poor communications, infrastructure and marketing facilities, lack of reliable and timely market information, limited purchasing power and even negative attitudes of buyers. Without proper skills and required infrastructure to maintain market requirements, productivity will remain an impossible dream to sustain. Marketing integrates all the functions of a business and speaks directly to the needs of the customer (Jacobs, 2008).

It is, therefore, recommended that farmers have a timely and reliable information about markets. In addition, the provision of information on prices, a whole range of business-related information is essential, such as who the buyers are and what their terms and conditions for doing business are. Market information services have often suffered from problems, in particular related to the timeliness of the information provided. Newly developed technologies offer the opportunity to overcome this constraint. In particular, the rapid expansion of cell phone usage in most developing countries means that information can be shared with even very small farmers.

5.3.2 Addressing issues of training and related challenges

Developing capacity as an entrepreneur and as a successful farmer is not a simple task. Many small-scale farmers are not able to develop these capacities without assistance. Many factors are involved: education, experience, land size, financial situation, interest and distance to markets. Small-scale farmers are also often less able to deal with the additional risks involved in increased market participation. These farmers will need help to develop their capacity as successful entrepreneurs. Many farmers need assistance to adapt to the changes in the economy and to develop their capacity as successful entrepreneurs. Entrepreneurial farmers need skills to run their farms as a profit-making business, invest profits back into the business and seek long-term growth. While field level extension workers will rarely be responsible for designing and organizing trainings in entrepreneurship development, it is useful for them to understand what works and what does not. Sometimes they may work closely with Subject Matter Specialists who have experience in management training or even in facilitating external trainers (Davis et al., 2008)

To have a healthy farming sector, training facilities and support must be easily available to farmers. Effective institutions need to be developed to provide education and training at the right time, in the right place, and with the right balance of technical knowledge and practical skills. Market-oriented farmers selling surplus produce may need help to improve business skills, but at a basic level. This may also need to be accompanied by literacy and numeracy training. Therefore, farmer training is critical for the viability and sustainability of agricultural projects. Three methods to facilitate the skills transfer to small-scale farmers are training through agricultural colleges, mentorship, and management programmes. Examples of this trainings are plant production and animal production related short skills course such as, agricultural calculations and basic plant and animal science among others. Through skills assessment needs to be done before the skills can be implemented in the projects.

It is also recommended that government and other stakeholders must put more focus on knowledge and skills transfer to strengthen the farmers if they are to compete successfully in the commercial agricultural farming sector. Development or improvement of their technical and business skills could put them at the same level of competition with other commercial farmers in their localities. Taylor-made training programs could be developed for specific types of flagship project beneficiaries. The result of such programs is that the farm will become more productive, sustainable and farmers in turn will be able to stand on their own. By furthering their education and skills development, farmers will become more self-sustained, self-reliant, competent and successful in their own private subsistence farming operations, regardless of what the future holds.

5.3.3 Access to production capital

Greenberg S. (2010) argued that smallholder agricultural growth cannot be achieved without access to farmer support services such as grant funding, credit and finance. International experiences have shown that with adequate support services, smallholder farmers can significantly increase agricultural productivity and production. Simply providing applicants with land in the absence of support services is unlikely to make a significant difference to their livelihoods. Capital assets or access to credit to fund investments are also important. Large farmers enjoy significant advantages over small–scale farmers in accessing credit due to their ability to offer collateral, provide necessary information to banks and accumulate reputation through their commercial and institutional activities. Smaller farms face considerable difficulties in accessing credit, as financial institutions are often reluctant to lend due to poor collateral and lack of information. Small women farmers face even greater disadvantages than their male counterparts as they typically have lesser access to financial and social capital, market information and productive resources such as land.

Access to credit alone is not enough. Farmer entrepreneurs also need a clear understanding of how credit works – particularly repayments and interest. They need to understand the difference between credit for longer-term investments (such as for equipment and machinery) and for operating capital for production inputs and other seasonal production costs. Therefore, the small-scale farmers are recommended to learn a skill and experience in negotiating fair contracts to ensure that they protect their interests and are not taken advantage of or caught unawares about long-term implications of using credit. For the agricultural projects to be sustainable in production and income generation depend on access to finance for production start-up inputs like seed and fertilizer, and for fixed capital improvements.

5.3.4 Supporting partnerships and networking

In the changing agricultural environment, farmers need reliable and economical supplies of raw materials, production inputs and equipment and must ensure they have sufficient products of appropriate quality to capture better markets. Group purchasing and collective marketing are examples of farmers working together to gain advantages not available to individuals. Partnerships and networks can be developed among farmers and with other role-players in the value chain. These role-players can help farmers' access information on markets, government policies and technologies, enter outside markets, and obtain training, extension, credit and marketing services. Success in market-oriented farming improves greatly when farmers have strong partnerships with and linkages among role-players in the value chain. Many farmers will need help developing partnerships and networks. These linkages or "networks" might be temporary to achieve a short-term objective, such as marketing the current season's crop. They might be more permanent to achieve long-term goals such as ensuring improved access to extension services (Obi, 2012).

It is therefore recommended that networks be formed through the help of extension workers, who can draw on experienced farmers with the time and ability to organize the schemes to take the initiative. This will reinforce entrepreneurial capacity by ensuring that the farmers own the cooperative action and that capacity to sustain is built among the participating farmers. This can be further reinforced with training and mentoring entrepreneurial capacity, partnerships and networking by extension workers, private service providers and farmer (producer) organizations.

5.3.5 Entrepreneurial

Entrepreneurship is a key factor for the survival of small-scale farming in an ever-changing and increasingly complex global economy. Farmer-entrepreneurs see their farms as a business. They see their farms as a means of earning profits. They are passionate about their farm business and are willing to take calculated risks to make their farms profitable and their businesses grow. Successful farmer-entrepreneurs are technically competent, innovative and plan ahead so they can steer their farm businesses through the stages of enterprise development from establishment and survival to rapid growth and maturity. However, there are many challenges that these farmers face: social barriers, economic barriers, regulations, access to finance and information, and their own managerial capacity to cope with risks and changes and to seize opportunities (Andretsch et al., 2008).

It is recommendable for small-scale farmers to become entrepreneurs as they need all of these qualities and more. They need to be innovative and forward-looking. They need to manage their businesses as long-term ventures with a view to making them sustainable. They need to be able to identify opportunities and seize them. The main emphasis is the importance of skills, knowledge and experience within the flagship projects beneficiaries. In the projects studied in the current study, a few of the beneficiaries have demonstrated positive elements of entrepreneurial capabilities. These entrepreneurial capabilities are unfortunately lacking in most of the projects making it difficult for them to compete in a highly competitive field. Farmers are sensitized before they engage in the agricultural production of what will be required by the market, for instance, good quality and well packaged produce

5.3.6 Institutional support

Institutional support refers to the roles and responsibilities of stakeholders. Adequate support to the farmers requires an integrated approach from the stakeholders because of diverse competencies enshrined in their institutions as well as their different mandates. In all the flagship projects studied, the LDA remains the only stakeholder actively involved in supporting the farmers in terms of transport and up-to-date information. The risk of this arrangement is that the LDA does not have adequate resources to provide comprehensive support as it is expected for sustainability of these farming businesses.

The study shows that the support from LDA to the agricultural flagship projects in Sekhukhune District is inadequate. To be successful, projects require the support of various government departments, with a key role for the local municipality as well as the agricultural sector. There is also a need for stakeholder mobilization beyond government departments to support agricultural flagship projects as well as to monitor and evaluate their progress.

5.3.7 Improving infrastructure

Often, what is blocking starting and growing profitable farm businesses is basic infrastructure, things, such as poor roads leading to markets, inadequate storage and market facilities, and even irregular supplies of electricity that create very real and practical barriers to developing farm businesses that will sustain these flagship projects when the infrastructure is improved. This will save time in transporting agricultural inputs and produce to rural households. It increases the volume of marketable goods and reduces costs for inputs needed to produce these costs. This will also give them much greater access to social services, including health and education which can provide them with new livelihood opportunities. It is important to encourage the participation of beneficiaries in planning, construction and operation, and maintenance of the infrastructure in order to strengthen their ownership and sustainability.

5.4 Conclusions

The conclusion that can be drawn from this study is that under the current circumstances, flagship projects are not sustainable due to the unavailability of finances if not subsidized by off-farm sources of income. Under the current circumstances, smallholder farmers are not able to sustain the viability of their projects in the absence of government support.

Financial institutions should finance agricultural projects if most of the farmers lack both farming and managerial skills. Monitoring mechanism for projects should be in place. Therefore, those that are responsible for implementation of agricultural programs in the province should know what policies and approaches are working well against those that need adjustment. Sufficient resources for training should be available to all farmers and training budget provided. The training that will be provided should also offer technical/ farming skills for farmers even though many farmers are old and illiterate, and are not well catered for in the training programs provided.

Grant acquisition process should not be kept for long considering that farmers need to sustain their projects while waiting for their grant application to be approved and they should be updated should there be a problem with their application. The consequences of the delays for the grants to be approved will result in some farmers losing patience and dropping out of the project and by the time they get approval some intended applicants' turn out to be ghost beneficiaries.

Extension officers need skills or knowledge in order to do their work effectively. They may generalize in all fields or focus on a narrow field of agriculture. They require the same technical skills and knowledge as required by farmers, though at a higher level of complexity. In addition to these, they require training on some of the following methods of conducting needs analysis, data collection/ research/ statistical skills, policies affecting agricultural production nationally and internationally and marketing issues globally and markets analysis. This transfer of technical information and teaching farmers will increase productivity. However, the question remains whether extension officers are capacitated to render tasks given the level and type of their education they have, very little knowledge on management and marketing, lack of farming skills and inadequate infrastructure are some of the factors impacting negatively on the success of agricultural projects. Extension officers are adequately capacitated to deal with challenges of smallholder farmers.

Various institutions such as Colleges of Agriculture, Universities, Development Banks, Non-Governmental Organizations and international institutions should provide support to farmers. Their capacities have a direct influence on the profitability and sustainability of these agricultural businesses as is the case with commercial counterparts. Weak linkages between training institutions and farmers need to be addressed and strengthened. Experts in specific commodities should be linked to farmers dealing with that particular commodity in order to obtain first-hand information.

Considering that the majority of the farmers are very elderly, there should be a conscious effort to promote youth into agriculture by the various sectors. There should be collaboration between the youth authority and the national service to post-graduates into farming businesses and attractive packages made available to attract them into agriculture.

REFERENCES

ADB. (2008). Food Prices and Inflation in Developing Asia: *Is Poverty Reduction Coming to an end? Special Report.* Manila: Asian Development Bank.

Agriculture in South Africa, second edition. (1978). Hortors printers, Johannesburg, South Africa.

AgriSETA. (2010). *AgriSETA 2008/2009 Annual report.* Pretoria: AgriSETA.

Alders, C., Haverkort, B.and Van Veldhuizen, L., (1993). *Linking with farmers: Networking for low external-input and sustainable agriculture,* Intermediate Technology Publications, UK.

Alexandratos, N. (1996). Socio-political and economic environment for food security. *World Food Summit technical background documents Rome.* FAO and Chichester, UK.

Andretsch, D.B., Bonte, W. and Keilbach, M. (2008). "Entrepreneurship capital and its impact on knowledge diffusion and economic performance." *Journal of business venturing,* 23.

ASCCI, (2007). The SMME business toolkit. *The step by step approach to starting and running a small business in Southern Africa, today by association of SADC Chambers of commerce and industry:* 1-120.

Asset Research. (2015). Sustainable farming as a viable option for enhanced food and nutritional security and a sustainable productive resource base: *A field Report, An initiative of the Development Bank of Southern Africa and the Department of Environment Affairs*

Atkinson, D. and Buscher, B.L. (2006). *Municipal Commonage and implications for land reform: A profile of commonage users in Philippolis,* Free State, South Africa. Agrekon 45 (4). 451.

Babbie, E. (2001). *The practice of Social Research.* 9th ed. California: Wadsworth.

Baiphethi, M.N. and Jacobs, P.T. (2009). *The contribution of subsistence farming to food security* in South Africa. *Agrekon*, 48(4): 459-482.

Baiyeghuni, L.J. (2012). *Access to credit and the effect of credit constraints on household welfare in the Eastern Cape Province, South Africa.* PhD thesis, University of Fort Hare, Alice.

Benton, T.G. (2012). Managing agricultural landscapes for multiple services: The policy challenge. *International Agricultural Policy* 1: 7-18. [Available] http://ageconsearch.umn.edu/bitstream/130373/2/Benton.pdf. Accessed on 10-08-2016

Boland, M. (2006). *What is value added agriculture,* Kansas State University, Washington DC 20250-9410.

Bonti, A. S. (2001). *Addressing Food Security in South Africa. Pretoria: The National Institute for Economic Policy Department of Agriculture. 2002.* The Integrated Food Strategy for South Africa. Pretoria: Department of Agriculture.

Bless, C. and Smith, C. (2000). *Fundamentals of Social Research Methods: An African perspective,* Landowne, Juta.

Blumenfeld, J. (2010). *Reflection on 100 years of struggle between the polity and the market in South Africa,* The Journal of the Helen Suzan Foundation- Issue 57.

Chambers, R. and Conway, G. (1992). *Sustainable rural livelihoods: Practical Concepts for the 21st Century*, Brighton: Institute for Development Studies, University of Sussex.

Comprehensive and Agricultural Support Policy, (2004). Department of Agriculture. Pretoria: DAFF.

Coetzee, G. (2007). Rural finance: lessons of experience and best practices. [Available] http://www.afraca.org/rural.PDF. Accessed 09-08-2016.

Collier, P. and Dercon, S. (2009). *African agriculture in 50 years: Smallholders in a rapidly changing world?* Paper presented at the FAO High-Level Expert Forum on

How to Feed the World in 2050, Rome. [Available] www.fao.org/3/a-ak983e.pdf. Accessed 09-08-2016

Collier, P. (2008). The politics of hunger: How illusion and greed fan the food crisis. *Foreign Affairs* 87 (November/December): 73. https://www.foreignaffairs.com/articles/2008-11-01/politics-hunger. Accessed 12-08-2016

Cooper, D. and Schindler, P.S., (2003). *Business research methods. 8th edition.* McGraw Hill/Irwin, New York.

Cotula, L., Vermeulen, S., Leonard, R. and Keeley, J. (2009). Land grab or development opportunity? *Agricultural investments and international land deals in Africa.* London/Rome: IIED/FAO/IFAD.

Davis, K.E., Ekboir, J. and Spielman, D.J., (2008). *Strengthening agricultural education and training in Sub-Saharan African from an innovation systems perspective: A case study of Mozambique,* Journal of agricultural education and extension, Mozambique.

Department of Agriculture, (2005). *Norms and standards for extension and advisory services in South Africa*

Department of Agriculture and Land Affairs, (2007), Annual report 2007/2008, [Available] www.gov.za/sites/www.gov.za/files/agriculture%20annual%20report%200708.pdf. Accessed 09-08-2016

Department of Agriculture and FIVIMS, (2007). *How households fight stresses that contribute to food insecurity.* Information brief 7. April 2007.

Department of Agriculture (2014). Strategic plan 2015/16-2019/20

D'Hease, L. and Kirsten, J. (2003). *Rural Development focusing on small scale Agriculture in Southern Africa.* Revised Version: Pretoria: University of Pretoria.

Deiniger, K. and May, J. (2000). *Can there be growth with equity? An initial assessment of land reform in South Africa.* Washington DC. Policy Research working paper World Bank development Research group.

Department of Land Affairs, (1997). *Whitepaper on the South African Land Policy*, Department of Land Affairs, Pretoria.

Dorward, A. and Kydd, J. (2006). *Making agricultural market systems work for the poor: Promoting effective, efficient and accessible coordination and exchange.* Making Markets Work for the Poor, Manila, Philippines.

Drimie, S., Germishuyse, T., Rademeyer, L. and Schwabe, C. (2009). *Agricultural production in Greater Sekhukhune: the future for food security in a poverty node of South Africa?* Agrekon.

Eurydice, (2009). *European education and training and training foundation.* http://www.cedefop.europa.eu/EN/Publications/13125.aspx.

Education.nationalgeographic.org/encyclopedia/ rural-area, 2015

Gadzikwa L., Lyne M.C. And Hendriks S., (2006). *The State of Food Insecurity in the World* 2002. Rome: Food and Agriculture Organization.

Greater Sekhukhune District Municipality Profile, (2011) *Annual Report 2011*.Unpublished Report. Polokwane: DoA

Food and Agricultural Organization (FAO), (2006). *The state of food insecurity in the world. Eradicating world hunger- taking stock ten years after the world summit.* Italy. [Available] http://www.fao.org/icatalog/inter-e.htm Accessed 12-11- 2015]

Food and Agricultural Organization (FAO), (2011). *Save and grow: A policymaker's guide to the sustainable intensification of smallholder crop production. Rome*: Food and Agriculture Organization of the United Nations.

Francis, C.A. (1990). *Sustainable agriculture in temperate zones*, New York, USA.

Francis, R.D. (1999). *A code of ethics for psychologists, Leicester, BPS Books Integrated Development Plan,* (2007/08). Greater Sekhukhune District Municipality.

French, J.H. (2007). *Farm household decision making and extensive framework for understanding farm household-level decision making and design of agroforestry extension strategies.* Asia-Pacific Agroforestry Network, FAOAPAN, Bogor, [Available] http://www.fao.org/docrep/x0266e/x0266e01.htm#P15_788. Accessed 29-09- 2015]

Greengerg, S. (2010). *Status report on land and agricultural policy in South Africa, Institute for poverty, land and Agrarian studies,* School of Government, University of the Western Cape. Research report.

Groenewald, J.A. (2008). *Personal Communication. Agricultural SMME's.* University of Free State, Brandwag, Bloemfontein.

Groenewald, J. Geldenhuys, F. Jooste, A. Balyamujura, H.V and Doyer, T. (2003). *The marketing of agricultural products in the new millennium.* Johannesburg: First National Bank Agricultural Division, South Africa.

Habtemariam, A. G.and Düvel, G. H.(2003).Towards a categorization of behavior determinants with a view to a more meaningful analysis, intervention and evaluation of adoption behavior. S.A Journal of Agricultural Extension Volume 32: 73 – 84. [Available] sabinet.co.za/document/EJC18517. Accessed 10-08-2016

Hall, R. (2004). *'A political economy of land reform in South Africa' Review of African Political Economy.* No. 100. ROAPE Publications LTD.

Hall, R. (2008). *State, Market and Community: The Potential and Limits of Participatory Land Reform Planning in South Africa.* Cape Town: University of Western Cape.

Hall, R. and Aliber. M. (2010). *The Case for Re-strategizing Spending Priorities to Support Small-scale Farmers in South Africa. Working Paper 17,* Institute for Poverty, Land and Agrarian Studies (PLAAS): University of the Western Cape.

International Fund for Agricultural Development (IFAD). 2010. *The Rural Poverty Report 2011.*

Rome: IFAD. [Available] https://www.ifad.org/documents/10180/f2136c2e-3b40-4074-9b71-bfac80efc410. Accessed 09-08-2016

Integrated Development plan, (2015/2016). *Sekhukhune District Municipality,* Final Review

Integrated Development Plan, (2007/08). *Greater Sekhukhune District Municipality Annual Report 2007/08.* Unpublished Report. Polokwane: DoA

Integrated Rural and Regional Development, (October 2003). *Land Redistribution for Agricultural Development: Case studies in Three Provinces.* Human Sciences Research Council. Pretoria.

International Water Management Institute (IWMI), (2003). Irrigation management transfer: How to make it work for Africa's smallholders. Pretoria: IWMI Southern Africa. [Available] http://www.iwmi.cgiar.org/Publications/Water_Policy_Briefs/PDF/wpb11.pdf. Accessed 09-08-2016

Jacobs, P. (2008). *Market Development and Smallholder Farmers-A Selective Literature Survey.* HSRC: Durban.

Kamara, A.B. (2004). *The impact of market access on input use and agricultural productivity: Evidence from Machakos District,* Kenya. Agrekon.

KIMEMIA, P. (2004). The role of credit in rural development: A theoretical review. The small Business Monitor Volume 2- Number 1-2004. [Available] http://www.ntsika.org.za/journal_articles/(2)credit.pdf. Accessed 09-08-2016

Kirsten, J.F. and Van Zyl, J. (1998). *Defining small-scale farmers in the South African context*, Agrekon, Vol. 37, No.4, pp. 560-571.

Lahiff, E. (2008). *Land reform in South Africa: A Status Report Research Report 38. Programmes for land and Agrarian Studies.* University of Western Cape. South Africa. 2008

Limpopo Department of Agriculture, (2012). *CASP annual report 2012.* Unpublished Report. Polokwane: DOA.

Limpopo Department of Agriculture, (2012). *CASP business plan*. Unpublished plan. Polokwane: DOA

Limpopo Department of Agriculture. (2012). *CASP annual report 2012*. Unpublished Report. Polokwane: DOA.

Makhura, M. Kirsten, J. and Delgado, C. (2001). *Transaction costs and smallholder participation in the maize market in the Northern Province of South Africa.* Proceedings of the Seventh Eastern and Southern Africa Regional Conference, Pretoria, South Africa.

Maracinianu, F. Semcu, A. and Constantin, E. (2002 April) *Contribution to the Formation of the data base for projects regarding the agricultural sustainable development.* Volume 1, Number 3-4. Ovidius University Annals of Constructions.

Mathabatha, M.C. (2005). *Supervisory skills of extension managers in Sekhukhune district of Limpopo Province, South AFRICA,* M. Inst. Agrar Dissertation, Department of Agricultural Economics Extension and Rural Development, University of Pretoria, Pretoria.

McMillan, James H. and Schumacher, S. (2001). *Research in Education.* Harrisonburg: Longman

May, J. and Roberts, B. (2000). *Monitoring and evaluating the quality of life of land reform beneficiaries: Technical report 1998/1999.* Unpublished report. Pretoria: DLA.

Miguel, A. (2004). Linking ecologists and traditional farmers in the search for sustainable agriculture, The Ecological Society of America. [Available] www.frontiersinecology.org. Accessed 10-08-2016

Mittal, S. and Tripathi, G. (2009). *Role of Mobile Phone Technology in Improving Small Farm Productivity.* Agricultural Economics Research Review, Vol. 22, pp 451-459.

Mouton, H. (2001). *The practice of Social Research.* Southern Africa: Oxford University Press.

Monitoring and Evaluation Unit: Agricultural Planning and Statistics, (2008). *Women's Major Group Commission on Sustainable Development Summit on cycle's 16 and 17*, Ministry of Agriculture.

Montshwe, B.D. (2006). *Factors affecting participation in mainstream cattle markets by small scale cattle farmers in South Africa,* Unpublished MSc Thesis, University of Free State, Bloemfontein.

Moyo, S. (2010). *The Agrarian question and the development state in South Africa.* In Edigheji, O: Constructing a democratic developmental state of South Africa, HSRC PRESS.

National Development Agency (NDA). (2005). *Census of commercial agriculture 2002: Financial and production statistics*. Pretoria: NDA/Statistics South Africa.

Nieman, G., Hough, J. and Nieuwenhuizen, C. (2004). *"Entrepreneurship: A South African Perspective."* Van Schaik Publishers.

Nelworth, D. (2009). *'Approaches to Sustainable Livelihoods for the Rural Poor'.* ODI Poverty Briefing, 2, January 1999.London: Overseas Development Institute.

Obi, A. (2012). *Institutional constraints to small farmers' development in southern Africa*, Wageningen Academic Publishers: Netherlands.

Okurut, N. Schoombee, A. and Van Der Berg, S. (2004). *Credit demand and credit rationing in the informal financial sector in Uganda.* Paper to the DPRU/Tips/Cornell Conference on African Development and Poverty Reduction: The Macro-Micro Linkage October 2004.

Ortmann, G.F.and King, R.P. (2007). *Agricultural cooperatives II: Can they facilitate access of small-scale farmers in South Africa to input and product markets? Agrekon,* 46 (2): 219-244.

Pote, P.P.T. (2008). *Technical constraints in smaller holder agriculture: A Case Study of Nkonkobe Municipality, Eastern Cape, South Africa.* Unpublished MSc thesis, University of Fort Hare, Alice.

Prax, V. (2010), *American family farmers feed 155 people each- 2% Americans farm*. [Available] http://suite101.com/article/american-family-farmers-feeds-155-people-each-2-americans-farm-a231011 Accessed 10-08-2016

Raman S. (2006). *Agricultural sustainability: principles, process and prospects,* The Haworth Press Inc., 10 Alice Street, Binghamton, NY.

Roling N.G. and Wagemakers M.A.E. (1998). *Facilitating sustainable agriculture,* United Kingdom at the University Press, Cambridge.

Royal Society. (2009). Reaping the benefits: Science and the sustainable intensification of global agriculture. Royal Society Policy Document 11/09, RS1608. London.

SASIX, (2007). Food security projects. [Available] http://www.sasix.co.za/projects/index/ Accessed 08-08-2016

Statistics South Africa. (2009). *Census of commercial agriculture,* Statistical release P1101, Pretoria: Statistics South Africa.

Statistics South Africa, (2010). *General household survey 2009,* Statistical release P0318, Pretoria: Statistic South Africa

Statistic South Africa, (2010). *Gross domestic product first quarter 2010,* Statistical release P0441. Pretoria: Statistic South Africa.

Statistics South Africa, (2012). *General Household Survey Series Volume IV: Food security and agriculture (2002-2011): In Depth analysis of General Household Survey.* Statistics South Africa: Pretoria.

Statistics South Africa, (2015). *Employment statistics [online],* [Available] http://www.statsaa.gov.za.

Tauger, M.B. (2011). *Agriculture in world history,* Routledge, USA and Canada.

Terblanche, S. (2013). Agricultural training needs of the non-government advising sector in South Africa. S.A Journal of Agricultural Extension Volume 41: 94-106. ISSN 0301-603X

Tripp, R. (2006), *Self-sufficient agriculture: Labour and knowledge in small scale farming,* Published by Earthscan in the UK and USA.

Van der Meer, C. Ruben, R. Slingerland, M. and Nijhoff, H. (2006). Exclusion of small-scale farmers from coordinated supply chains. The agro-food chains and networks for Development, Dordrecht: Springer

Van Schalkwyk, H.D. Groenewald, J.A. Fraser, G.C.G., Obi, A. and Van Tilburg, A. (2012). *Unlocking Markets for Smallholder in South Africa,* Wageningen Academic Publishers, Wageningen.

Vink, N. and Kirsten, J. (2002). *Pricing behavior in the South African food and agricultural sector.* Pretoria: National Treasury.

Vorley, B. Del Pozo-Vergnes, E. and Barnett, A. (2012). *Small producer agency in the globalized market: Making choices in a changing world.* London: International Institute for Environment and Development; The Hague: Hivos.

Vorley, B. Cotula, L. and Chan, M.K. (2012). Tipping the balance: Policies to shape agricultural investments and markets in favour of small-scale farmers. London: International Institute for Environment and Development (IIED) and Oxfam International.

Wilson, F. and Ramphele, M. (1989). *Uprooting poverty: the South African challenge*. Cape Town: David Phillip.

APPENDICES

Appendix 1: Questionnaires used for data collection for both farmers and extension officers

QUESTIONNAIRE FOR FARMERS

POSITION IN THE COMMITTEE

SECTION A: BIOGRAPHC DATA

1. How old are you?

2. Gender?

3. What is your marital status?

4. What are your academic qualifications?

5. Describe your motivation for entering the farming business.

6. Describe any agricultural training you might have.

7. Mention any other training you might have.

8. How many dependents do you have?

9. How many people live in your household?

10. What is the relationship of each of them to you?

11. Describe the type of employment you had before getting into farming.

12. Are you part-time or full-time in the farming business?

13. What is the main source of income in the household?

14. Describe your position in the project.

SECTIONAL B: PROJECT BACKGROUND INFORMATION

1. What is the name of the Project?

2. In which municipality is the Project?

3. What is / are your farming enterprise / s?

ENTERPRISES	HECTARES

4. What type of land ownership does the project have?

5. When was the project established?

6. How many male and females are in the project?

FEMALES	
MALES	

7. What type of support program has assisted your project?

NAME OF SUPPORTPROGRAMME	TYPE OF SUPPORT	YEAR OF SUPPORT

SECTION C: BUSINESS INFORMATION

1. How many permanent employees are there in the project? What are their responsibilities?

2. How many temporary employees are there in the project? What are their responsibilities?

3. What are the main expenses in the farming business?

TYPE OF EXPENSES	ESTIMATED COST

4. What are your businesses' strengths and weaknesses?

BUSINESS STRENGTH	BUSINESS WEAKNESS

5. What are the problems faced by your farming business? How are they solved?

PROBLEMS FACED	HOW WE DEAL WITH THE PROBLEM

6. How often do you hold meetings?

7. How many members are there in the committee?

8. Explain what each member in the committee does.

POSITION	RESPONSIBILITIES

9. How often are new committee members selected in terms of responsibilities and how are the elections organized?

SECTION D: SKILLS CAPACITY

1. Which skills do you need to be efficient and effective in your farming business?

SKILLS NEEDED	HOW WILL THE SKILLS ACQUIRED BE OF ASSISTANCE TO THE BUSINESS? WHO DO YOU THINK CAN TRAIN YOU?

SECTION E: PROFIT

1. Was there any profit or loss made in the last 6 months in your farming business? If yes or no, please explain:

MONTH	TYPE OF PRODUCTION	COST OF INPUT	SALES FOR LAST MONTH	PROFIT/LOSS

2. Describe how your business accesses inputs.

SECTION F: MARKETING OF FARMING BUSINESS

1. Do you have any competitors in your area, in terms of your farming business? If yes explain.

2. How is your produce marketed?

3. Describe how your produce is priced.

4. Who are your primary and secondary customers?

PRIMARY CUSTOMERS	SECONDARY CUSTOMERS

5. What type of record is kept and by who?

TYPE OF RECORD KEPT	BY WHO

6. When there are complaints, how are they solved?

TYPE OF COMPLAINT	HOW THEY ARE SOLVED

7. Discuss the problems experienced when accessing the market and how they are handled.

PROBLEMS EXPERIENCED WHEN MARKETING	HOW THEY ARE HANDLED

SECTION G: CHALLENGES BETWEEN FARMERS AND FUNDERS

1. Who are the funders of the project?

2. Do the funders visit the project per invitation or on their own?

3. Describe the challenges that you face concerning the funders and what you suggest to solve these challenges.

CHALLENGES FACED	HOW YOU DEAL WITH THE CHALLENGES

4. At what stage are the funders involved in your farming business? E.g. production, harvesting etc. Please explain.

5. How do the Extension Officers help in your project?

THAT YOU FOR YOUR CO-OPERATION!!!

QUESTIONNAIRE FOR EXTENSION OFFICERS

SECTION A: BIOGRAPHIC DATA

1. What is your age?

2. What is your gender?

3. What is your marital status?

4. What is your occupation?

5. What is your highest academic qualification?

6. Describe any agricultural training you have obtained.

7. Describe any other training obtained.

8. Describe the type of employment you had before going into agriculture?

9. How long have you been working? (in terms of experience)

SECTION B: EXTENSION SERVICES INFORMATION

1. In which municipality are you based?

2. Which commodities are you working with? Please mention.

3. How many projects are under your supervision?

4. Describe your role in each project mentioned.

SECTION C: CHALLENGES BETWEEN STAKEHOLDERS AND FARMERS

1. How often are the farming businesses visited?

2. Describe the challenges faced in dealing with farmers.

3. What suggestion do you have to improve the above mentioned challenges?

4. How are agricultural inputs and credit accessed?

THANK YOU FOR YOUR CO-OPERATION!!!

Appendix 2: Letters accompanying the questionnaire used to collect data

PRIVATE BAG X9619

MARBLE HALL

0450

The Manager

Makhuduthamaga Municipality

Dear Sir/Madam

APPLICATION TO CONDUCT A RESEARCH

I, SELINA TSHEPHISO SHILAJOE, a student at the University of Venda hereby apply to conduct a research at the above mentioned municipality.

I am doing a Masters in Rural Development (MRDV), and the topic of my study is **AN ASSESSMENT OF THE SUSTAINABILITY OF AGRICULTURAL FLAGSHIP PROJECTS FOR FARMERS IN SEKHUKHUNE DISTRICT, LIMPOPO PROVINCE.**

I hope for a positive response from your municipality.

Yours faithfully,

Shilajoe S.T (Ms.)

PRIVATE BAG
X9619
MARBLE HALL
0450

The Manager
Fetakgomo Municipality

Dear Sir/Madam

APPLICATION TO CONDUCT A RESEARCH

I, SELINA TSHEPHISO SHILAJOE, a student at the University of Venda hereby apply to conduct a research at the above mentioned municipality.

I am doing a Masters in Rural Development (MRDV), and the topic of my study is **AN ASSESSMENT OF THE SUSTAINABILITY OF AGRICULTURAL FLAGSHIP PROJECTS FOR FARMERS IN SEKHUKHUNE DISTRICT, LIMPOPO PROVINCE.**

I hope for a positive response from your municipality.

Yours faithfully,
Shilajoe S.T (Ms.)

PRIVATE BAG
X9619
MARBLE HALL
0450

The Manager
Elias Motswaledi Municipality

Dear Sir/Madam

APPLICATION TO CONDUCT A RESEARCH

I, SELINA TSHEPHISO SHILAJOE, a student at the University of Venda hereby apply to conduct a research at the above mentioned municipality.

I am doing a Masters in Rural Development (MRDV), and the topic of my study is **AN ASSESSMENT OF SUSTAINABILITY OF AGRICULTURAL FLAGSHIP PROJECTS FOR FARMERS IN SEKHUKHUNE DISTRICT, LIMPOPO PROVINCE.**

I hope for a positive response from your municipality.

Yours faithfully,
Shilajoe S.T (Ms.)

PRIVATE BAG
X9619
MARBLE HALL
0450

The Manager
Greater Marble Hall Municipality

Dear Sir/Madam

APPLICATION TO CONDUCT A RESEARCH

I, SELINA TSHEPHISO SHILAJOE, a student at the University of Venda hereby apply to conduct a research at the above mentioned municipality.

I am doing a Masters in Rural Development (MRDV), and the topic of my study is **AN ASSESSMENT OF SUSTAINABILITY OF AGRICULTURAL FLAGSHIP PROJECTS FOR FARMERS IN SEKHUKHUNE DISTRICT, LIMPOPO PROVINCE.**

I hope for a positive response from your municipality.

Yours faithfully,
Shilajoe S.T (Ms.)

PRIVATE BAG
X9619
MARBLE HALL
0450

The Manager
Greater Tubatse Municipality

Dear Sir/Madam

APPLICATION TO CONDUCT A RESEARCH

I, SELINA TSHEPHISO SHILAJOE, a student at the University of Venda hereby apply to conduct a research at the above mentioned municipality.

I am doing a Masters in Rural Development (MRDV), and the topic of my study is **AN ASSESSMENT OF SUSTAINABILITY OF AGRICULTURAL FLAGSHIP PROJECTS FOR FARMERS IN SEKHUKHUNE DISTRICT, LIMPOPO PROVINCE.**

I hope for a positive response from your municipality.

Yours faithfully,
<u>Shilajoe S.T (Ms.)</u>

PRIVATE BAG
X9619
MARBLE HALL
0450

Dear Respondent

The researcher is a student at the University of Venda studying for a Masters in Rural Development (MRDV). I am interested in the topic **AN ASSESSMENT OF SUSTAINABILITY OF AGRICULTURAL FLAGSHIP PROJECTS FOR FARMERS IN SEKHUKHUNE DISTRICT, LIMPOPO PROVINCE**.

This questionnaire is designed mainly to identify factors that hinder projects from attaining the poverty alleviation goal. For your protection you need not write your name or any identification; your responses will be highly confidential.

The completion of this questionnaire will not take much of your time and feel free to complete it in your own time. Remembering you will remain anonymous.

In anticipation, thank you very much for your co-operation.

Yours sincerely
Shilajoe S.T (Ms.)