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The extent of sustainable extension support to beneficiaries in the Proactive Land Acquisition Strategy, Nkangala District, Mpumalanga, South Africa

by

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DECLARATION

I, Maria Fanifani Mahlangu, declare that this dissertation hereby submitted for the degree of Master of Science in Agricultural Extension at the University of Pretoria, is entirely my own work and has not been submitted anywhere else for the award of a degree or otherwise.

Signature: …..…….

Date: ……

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I dedicate this study to my mother, the late Johannah Masango.

ABSTRACT

The extent of sustainable extension support to beneficiaries in the Proactive Land Acquisition Strategy: Nkangala District, Mpumalanga South Africa

By

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Department: Agricultural, Economics, Extension and Rural Development
Degree: MSc. Agric. (Agricultural Extension)

The main purpose of the study was to investigate the extent of sustainable extension support provided to Proactive Land Acquisition Strategy (PLAS) beneficiaries in the Nkangala District of Mpumalanga Province and to determine beneficiaries' skills, interests and experiences in farming. The researcher used a qualitative research methodology to conduct the research. The study was conducted in four Local Municipalities in Nkangala District with existing PLAS projects, namely Emakhazeni, Steve Tshwete, Emalahleni and Victor Khanye. All the thirty-three PLAS projects in the four municipalities were selected for the study, and interviews were conducted.

A sample of 120 PLAS beneficiaries was selected, drawn from the population of 33 transferred PLAS projects reflected in various records and files of the Department of Agriculture, Rural Development and Land Administration (DARDLA) and the Department of Land Affairs (DLA), as applicable at the end of the 2010/2011 financial year. The study included 14 extension officers who were providing extension support to farmers. The interviews focused on access of farmers to resources and support services such as agricultural extension service, institutional support, training services and credit services. Farmers' interest and commitment to farming were evaluated. The Statistical Package Social Sciences version (SPSS 20.0) was used for entering, coding and analysis of data. Descriptive statistics were used, since most of the data was qualitative. Tables; graphs, Descriptive Analyses, Frequencies, means, Mann-Whitney U Test, and Fisher's Exact Tests were used to analyse the data.

The findings from this study show that the highest level of education of 41 % of farmer respondents is between Grades 6 and 11. Gratuities and remittances are the biggest contributors to farmers' income. A total of 46 % of farmers are not engaged on a full-time basis. Some items of the equipment/machinery and infrastructure were in poor condition when the farm was acquired (as indicated by farmer respondents). The poor conditions of infrastructure could have led to farmers not staying on the farm. According to Table 5.2, the two most important reasons for the delays were lack of funds (32 %) and social challenges (25 %). The excessive delays could have led to farms being vandalised. The study also shows that 28 % of the farmers are managing their farms without a farm business plan and that almost all projects with a plan were not operating according to their respective plan. PLAS projects must have a detailed business plan and must operate according to the plan. The majority (76; 63 %) of farmer respondents did not receive any financial assistance to operate their farms.

A total of 17 (18 %) farmer respondents indicated that an extension officer was not assigned to them. A total of 22 farmers (23 %) indicated that the extension officer was only assigned to them more than 6 months after their occupation of the farm. In terms of project visits by the extension officers, a total of 18 % of farmers indicated that the extension officer took longer than once a month to visit their projects. Lack of training is demonstrated in this study, and in some of the projects, it was not clear who called the project meetings; it varies between chairperson (43; 32 %), secretary (26; 19 %) and extension officer (16; 12 %). Minutes were not taken or kept of all the proceedings of meetings (60 % 'yes', 23 % 'do not know') and attendance registers were not completed (15 %). The average attendance of project meetings by farmers is 50 %, as indicated by the farmer and extension officer respondent categories. The study also revealed that 72 (60 %) farmers use cell phones for accessing agricultural information and a total of 59 (49 %) rely on extension officers to provide them with agricultural information. A total of 55 % of the farmers rated technical advice as the most important service offered by the extension officers when visiting their farms, while an alarming 12 % of farmer respondents indicated that no service was offered. Only 25 % of PLAS beneficiaries indicated that they did undergo training.

TABLE OF CONTENTS

LIST OF ABBREVIATIONS USED IN THE DOCUMENT

Abbreviation	Meaning
AFASA	African Farmers Association of South Africa
ARC	Agricultural Research Council
AgriSETA	Agricultural Sector Education and Training Authority
DAFF	Department of Agriculture, Fisheries and Forestry
DARDLA	Department of Agriculture, Rural Development and Land Administration
DEDET	Department of Economic Development and Tourism
DoH	Department of Housing
DLA	Department of Land Affairs
DoA	Department of Agriculture
DRDLR	Department of Rural Development and Land Reform
Ha	Hectares
IDP	Integrated Developmental Plan
LRAD	Land Re-Distribution for Agricultural Development
MALA	Ministry of Agriculture and Land affairs
MPLRO	Mpumalanga Provincial Land Reform Office
NAFU	National African Farmers Union
NDA	National Department of Agriculture
NDP	Nkangala District Municipality
PLAS	Proactive Land Acquisition Strategy
SLAG	Settlement Land Acquisition Grant

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION TO THE STUDY

1.1 BACKGROUND

1.1.1 South African Land Reform Programme

Before the advent of South African democratic government in 1994, the right to own or to rent land depended on a person's racial classification, pursuant to the "Native Land Act" of 1913 (DLA, 1997). To redress the injustice caused by apartheid policies, the government of South Africa introduced the Land Reform Programme which was envisaged to contribute to food security by eradicating poverty (Department of Land Affairs, 1997). The Department of Land Affairs (DLA) was established and mandated to redistribute 30 per cent of white owned agricultural land to black farmers by 2014 (DLA, 1996a).

Within the policy of the reconstruction and development programme, a national land reform programme is seen as being the central and driving force of rural development, and its aim is to contribute to the economic development by engaging households in productive land use by increasing employment opportunities (DLA, 1997). Some land reform projects have not met the expectations of the DLA. The department relates some of the failures to the lack of commitment by the beneficiaries and lack of planning of the projects, as well as the lack of institutional alignment and access to support measures (DLA, 2009).To ensure capacity building and the success of the implementation of land reform projects, the DLA has engaged strategic partners in some of the restitution projects (DLA, 2009). During their assessment, however, they discovered that some of the strategic partners did not yield the expected results (DLA, 2009). Consequently, the DLA is reviewing such partnerships. It was reported that the lack of skills on the part of beneficiaries remains a challenge with the implementation of land reform programmes (DRDLR, 2010).

During the financial year 2009/10, the restitution programme delivered 145 492 hectares of land to 9294 benefiting households (DRDLR, 2010). Since the commencement of the programme, 75 844 restitution claims have been processed and 324 712 households have benefited (compared with the cumulative of 2.47 million hectares of land redistributed during the financial year 2008/09) (DRDLR, 2010:28). Under the redistribution programme, a total number of 443 600 hectares of land were distributed to 14 457 beneficiaries (DRDLR, 2010:28), compared with the 2009/10 figure of 239 990 hectares of land distributed to 11 362 beneficiaries. (DRDLR, 2010:28). This shows more progress in land redistribution in the 2008/9 period than in the 2009/10 period.

All the land acquired through the Proactive Land Acquisition Strategy (PLAS) during the 2008/09 financial year has being registered in the name of the state (DLA, 2009). In certain instances, the state provides the potential beneficiaries with access to the land by means of lease or caretaker arrangements (DLA, 2009).The Mpumalanga Provincial Land Office (MPLRO) managed to transfer 52 272 hectares of land to 1177 beneficiaries during the 2008/9 financial year. A total of 37 025 hectares were acquired through PLAS during this period (DLA, 2009).

During the financial year 2009/10, the PLAS programme budget was R1 041 116.00, while R250 million was set aside for the recapitalisation and development of the PLAS farms. A total of 239 990 hectares was identified and delivered to 11 362 beneficiaries, being registered in the name of the state with the state providing potential beneficiaries access to the land by means of lease or caretaker arrangements until the land is transferred permanently to suitable beneficiaries (DRDLR, 2010).

1.1.2 Components of land reform programme

1.1.1.1 Land redistribution

The main aim of the programme is to provide the poor with access to land for both production and residential purposes, using the “willing buyer willing seller” (buy land

directly from the willing seller**)** principle in an effort to improve their living conditions (DLA, 1997). This programme is intended to assist both urban and rural poor, farm workers, labour tenants and emergent farmers (DLA, 1997). The Land Acquisition Grant was made available for this purpose. The Settlement Land Acquisition Grant (SLAG) of R15 000 per household was provided to the beneficiaries to buy land and to develop their farms (DLA, 1997). Lahiff, Maluleke, Manenzhe and Wegerif (2008) have stated that land which was given to beneficiaries, as well as the business plans designed for them by the consultants, did not match their needs, skills and capital, and that the beneficiaries had difficulties in obtaining post-settlement support.

In 2001 the government of South Africa introduced the Re-distribution for Agricultural Development (LRAD) programme to replace the SLAG programme, with the aim of increasing land redistribution (MALA, 2001). The LRAD programme dealt with two different parts, one part being the transfer of land to individuals or groups of people, and the other part dealing with the transfer of land to municipalities or tribal authorities specifically for grazing purposes (MALA, 2001). LRAD programmes provided grants to poor South African citizens, ranging from African, coloured and Indian communities, to gain access to land specifically for agricultural purpose and household food security (MALA, 2001). This programme also focused on people who live in urban and rural areas, very poor, labour tenants, and farm workers, as well as new entrants to agriculture (MALA, 2001).

The amount of the grant was determined by the amount of own contribution of any kind commencing with a minimum of R5000 per participant. This enables people to buy land from white farmers on the “willing buyer willing seller” The land was purchased on the open market (DLA, 1997). Commonage grant enable the municipalities to create commonages for qualifying individuals (Van der Westhuizen, 2005).

The PLAS programme was introduced during the 2005/06 financial year with the purpose of speeding up land redistribution within the “willing buyer willing seller” policy. With this strategy, the department first buys the land from the owner, and beneficiaries are identified at a later stage. The land is made available on a leasehold basis for a period of three years. During the leasing period, beneficiaries

have to demonstrate their farming capacity; the land may be transferred to them permanently, depending on the availability of the distribution grant and subject to approval and other financial resources (DLA, 2007).

1.1.1.2 Land Restitution

The Land Restitution Programme aims at returning land which was lost because of racially discriminating laws and compensating those land owners whose land is affected (DLA, 1997). In this case, the Restitution of Land Rights Act (Act 22 of 1994) provides a legal framework for the transfer of the claimed land (DLA, 1997).

1.1.1.3 Land Tenure Reform Programme

The Land Tenure Reform Programme aims at bringing all people who are occupying land under one legal system of land holding and development policy. This programme is aimed at providing people with secure land tenure. The Land Reform (Labour Tenants) Act of 1996 (Act No 3 of 1996) provides for the protection of the rights of Labour tenants and gives them the right to claim land. The Extension of Security of Tenure Act (ESTA) of 1997 is aimed at protecting people living on land with the consent of the owner against unfair eviction (DLA, 1997).

1.1.2 Sustainable Agricultural Development

Webster (in Hayati, Ranjbar and Karami, 2010: 73-74) stated that “what is defined as sustainability depends on the perspective of the analysts”. Sustainability is a lively concept (Hayati *et al.,* 2010*).* David and Webster (as quoted by Hayati *et al*., 2010) refer to sustainability as a “Social construct” and is yet to be made operational. For this study, sustainability was measured in terms of social indicators, which are access to resources and support services, such as agricultural extension service, training services, and credit services, and the knowledge and skills of farmers. The researcher wanted to determine in detail what might have led to the non-productivity of PLAS projects.

1.2 PROBLEM STATEMENT

During the 2005/06 financial year, the government of South Africa introduced the Proactive Land Acquisition Strategy (PLAS) which aimed at benefiting those households which have limited or no access to land and at accelerating the land acquisition process. The land was acquired for redistribution through PLAS in 2005/06. With this strategy, the land is purchased directly from the willing seller by the authorised officials and is leased to the farmers for a period of three years. Once the beneficiaries demonstrate the capacity to use the land productively, it is transferred to them permanently. The problems are:

- Beneficiaries are unable to use their transferred land productively;
- Beneficiaries have limited access to agricultural extension support for purposes of using their land effectively;
- Failure of the beneficiaries to secure external financing to maintain their farm; and
- Failure of beneficiaries to receive support services from the key stake holders.

When the government of South Africa introduced the Land Reform Programme in 1996, its aim was not only to secure the settlement of previously disadvantaged South Africans on agricultural land, but also to provide support services that would enable them to use their transferred land productively, so that they could live a better life (DLA, 1997). The Land Reform Programme in South Africa is a priority programme, with the intended ultimate outcome that agricultural land should be used productively. Four million hectares of land were transferred to black South Africans in March 2007. Forty-five per cent of this (transferred) land was acquired through restitution, with 55 % provided under different aspects of redistribution (Lahiff, 2008). For the transfer of these farms, the department has spent substantial amounts of money in purchasing farms for the beneficiaries.

It has come as a surprise to realise that 50 per cent of the transferred land specifically for agricultural production was not productive because of the lack of post-settlement support services for the beneficiaries (Terblanche, 2008). According to

Willemse (2007), as cited by Terblanche (2008:60), argues that land reform projects had “not created any economic benefit” for the farmers and have not contributed to poverty alleviation, and as a result, the country was depending on imported food, namely maize, wheat, oilseeds, meat and milk products. These studies show that there are major challenges in the current service delivery systems.

Studies have shown that land reform beneficiaries experience numerous problems regarding access to complementary support services, such as infrastructure support, financial assistance, agricultural inputs, training, extension advice, transport and access to markets for farm outputs, and ploughing services, as well as lack of support for productive and sustainable land use (Hall, 2004; HSRC, 2003; Wegerif, 2004). The lack of such services helps to account for the collapse of many land reform schemes (Attfield, Hattingh & Matshabaphala, 2004).

The study will examine in detail the extent to which the extension support provided to these beneficiaries could have mitigated the failure of the programmes.

1.3 PURPOSE STATEMENT

The main purpose of the study was to investigate the extent of sustainable extension support provided to PLAS beneficiaries in the Nkangala District of Mpumalanga Province, and to determine beneficiaries’ skills, interest and experience in farming.

1.4 RESEARCH OBJECTIVES

The objectives of this study are as follows:

1. To identify the social, technical, financial and technological challenges of PLAS beneficiaries;
2. To determine the PLAS beneficiaries’ skills, experience, interests, commitment and aspirations in farming; and
3. To identify the major challenges of agricultural extension delivery systems to PLAS beneficiaries.

1.5 KEY RESEARCH QUESTIONS

The study attempts to answer the following research questions:

i. What are the social, technical, financial and technological challenges facing PLAS beneficiaries?

ii. What kinds of skills, training and experience, if any, that both land reform beneficiaries and extension officers have? (And, are the beneficiaries committed to farming?)

iii. What kind of the agricultural support did land reform beneficiaries receive and what are the major challenges?

1.6 FOCUS OF THE STUDY

The Nkangala District Municipality (NDP), shown in Figure 1.1 below, is one of three (3) District Municipalities in Mpumalanga Province, with their headquarters in Middelburg (Steve Tshwete Local Municipality) (Nkangala District Municipality, 2013). The District is composed of six (6) Local Municipalities, namely Victor Khanye Local Municipality, Emalahleni Local Municipality, Steve Tshwete Local Municipality, Emakhazeni Local Municipality, Thembisile Hani Local Municipality, and Dr J S Moroka Local Municipality (Nkangala District Municipality, 2013).

Figure 1.1: Mpumalanga Province: Nkangala District

Source: Department of Agriculture, Rural Development and Land Reform. (no date).

The area of the District covers approximately 16 892 square kilometres, with the total population of 1 308 129 (Nkangala District Municipality, 2013). According to Statistics South Africa (2011), as cited by Nkangala District Municipality (2013), the employment rates as reflected in the 2011 census for Mpumalanga Province and Nkangala District Municipality are 68 % and 70.0 %, respectively. The leading sectors in Nkangala District in terms of employment are trade (21.0 %), followed by mining (18.6 %) and lastly by community services (16.1 %). Sectors in terms of percentage contributions to Nkangala District Municipality's economy are mining at 28.8 %, manufacturing at 13.6 %, and community services at 13.5 %. The formal sector in Nkangala was responsible for 53.8 % of total employment in the District in 2011, the informal sector for 21.0 %, agriculture for 5.0 %, and private households for 43.9 % (Nkangala District Municipality, 2013). In 2009, 12.0 % of people 15 years and older had no schooling, 32.5 % had grade 0–9, and 24.1 % of people had an

education level of grade 10–11, while 23.4 % had completed matric and 8 % had matric and post-matric qualifications (Nkangala District Municipality, 2013).

The focus of the study has been directed towards four Local Municipalities in the Nkangala District of Mpumalanga Province where PLAS projects had been implemented, namely Emakhazeni Local Municipality, Steve Tshwete Local Municipality, Emalahleni Local Municipality and Victor Khanye Local Municipality.

1.7 CONTEXT AND UNITS OF ANALYSIS

The units of analysis in the context of the study were 120 PLAS beneficiaries (both men and women). The study included interviews with 14 extension officers, who were servicing PLAS beneficiaries, to determine the kind of the support they were providing for PLAS beneficiaries.

1.8 ACADEMIC VALUE AND INTENDED CONTRIBUTION OF THE STUDY

In terms of reconstruction and development, the National Land Reform programme was seen as being central to, and the driving force of, rural development with its defined aim to contribute to economic development by engaging households in productive land use and by increasing employment opportunities (DLA, 1997). It was envisaged that successful land reform projects would alleviate poverty, increasing employment opportunities and contribute to the economy of South Africa.

As indicated in the background information of the study, it is clear that there is a problem with the current extension support provided to PLAS beneficiaries within South Africa. The study endeavours to:

- Give clear indication of the extent of current extension support provided to PLAS beneficiaries;
- Provide relevant information to identify shortfalls of the extension delivery system;

- Help to determine the sustainability of the current extension service provided to PLAS projects;
- Give clear information on the obstacles that hinder the sustainability of PLAS projects; and
- Give clear information of the beneficiaries' skills, experience and interest in farming.

This will enable the Department of Agriculture, Rural Development and Land Administration in Mpumalanga Province to re-align the support services and to be able to present an excellent service to land reform beneficiaries.

1.9 DELIMITATIONS

The study will firstly be limited to PLAS projects within the Nkangala District. Secondly, the study will focus on extension officers who are working in areas where there are PLAS projects, as they are the functionaries providing extension support to the land reform beneficiaries (including the managers).

1.10 LAY OUT OF THE RESEARCH

- Chapter 1: Provides the background information of the study, the problem statement, purpose statement, hypothesis, the research objectives, research questions, focus of the study, content and unit of analysis, academic value and the intended contribution and limitations of the study.
- Chapter 2: Is a literature review of sustainable extension support on PLAS, the main advantages of the PLAS strategy and implementation frame work, policy of land acquisition and identification of beneficiaries, policy on institutional support services for PLAS projects, post-settlement support services in the context of South African Land Reform, challenges of the post-settlement support in the context of South African Land Reform, sustainable agricultural development, challenges in implementing sustainable agricultural development, programmed extension activities as a way for sustainable

support, guiding principles for sustainable agricultural development, guiding principle for sustainable agricultural development, and extension approaches for sustainable development.

- Chapter 3: Gives the research methodology used for this study – sampling methods, data collection methods and data management.
- Chapter 4: Interpretation of the socio-economic characteristics of the respondents.
- Chapter 5: Institutional support, challenges and aspirations of PLAS beneficiaries in the Proactive Land Acquisition Strategy.
- Chapter 6: Summary, Conclusions and Recommendations.

CHAPTER 2
LITERATURE REVIEW ON THE EXTENT OF SUSTAINABLE EXTENSION SUPPORT ON PLAS

2.1 INTRODUCTION

The PLAS strategy was introduced in the 2005/06 financial year with the purpose of speeding up land acquisition (Stickler, 2012:3). Stickler further states that the PLAS strategy adheres to “the willing buyer, willing seller” policy whereby the state buys land directly from the willing seller. With this strategy, the government first buys the land from the seller without first identifying the beneficiaries and makes land available on leasehold (DLA, 2006b). The strategy in PLAS deals with two possible approaches: a needs-based approach and a supply-led approach (only the state entry point is different), but essentially focusing on the state as the lead driver in land redistribution, rather than the current beneficiary-driven redistribution (DLA, 2007). These approaches have been streamlined into one approach, namely the state-driven Proactive Land Acquisition Strategy (DLA, 2007).

The PLAS approach is seen as being not only the quickest way to acquire land, but also as a good strategy for the identification and selection of beneficiaries, including the planning of land on which people would be settled, thereby ensuring the optimal use of acquired land while simultaneously guarding against escalating land prices (DLA, 2007).

This chapter will clarify the proactive framework of the PLAS strategy, policy framework on land acquisition, identification of beneficiaries, and communication, followed by the main advantages of the PLAS strategy, highlighting the implementation framework. The PLAS programme is hosted under the Department of Land Affairs (DLA), which is the leading department in the implementation of this programme. Collaboration with relevant stakeholders at national, provincial and local level is required in the implementation of PLAS strategy. The relevant stakeholders in this case are the Departments of Agriculture (DoA) and Housing (DoH), with local municipalities being important partners, and the policy on institutional support

services will be clarified. After the projects are settled, post-settlement support is critical for the sustainability of these projects. Support services and challenges of the post-settlement support will be discussed. Proposed operational indicators for measuring agricultural sustainability, sustainable support services, and deliverables of this programme will also be discussed in this chapter.

2.2 THE MAIN ADVANTAGE OF THE PLAS STRATEGY AND IMPLEMENTATION AND IMPLEMENTATION FRAMEWORK

According to the Department of Land Affairs (DLA, 2006b:4-5), the PLAS strategy has the following main advantages:

- Accelerates the land redistribution process;
- Ensures that the DLA can acquire land in the nodal areas and in the identified agricultural corridors and other areas of high agricultural potential to meet the objectives of the Accelerated Shared Growth Initiative;
- Improves the identification and selection of beneficiaries and the planning of land on which people could be settled;
- Ensures maximum productive use of acquired land; and
- Hedges against escalating land prices.

According to the DLA (2009:7), the PLAS Framework consists of the following elements:

- Legislative framework and delegation;
- Target groups;
- Corridor approach, agricultural development within the nodal areas and land for housing;
- Institutional arrangements;
- Financial mechanisms;

- The different Resettlement Models;
- Systems and procedures;
- Communication strategy;
- Skills development strategy; and
- Monitoring and evaluation.

2.3 POLICY ON LAND ACQUISITION AND IDENTIFICATION OF BENEFICIARIES

According to the PLAS strategy, the Department first buys land from the willing seller before identifying the beneficiaries (DLA, 2007). The land is acquired by the state in accordance with Provision of Land and Assistance Act, Act No. 126 of 1993 [Section 10(a)], based on the selling price from the willing seller, or the expropriation or auction price, without attaching beneficiaries to that particular parcel of land (DLA, 2007). The beneficiaries are identified at a later stage (DLA, 2007). The land is made available to the beneficiaries on a leasehold basis (DLA, 2007). The beneficiaries have to demonstrate their farming capacity during the leasing period, after which the land may be transferred to them permanently, depending on the official approval, the availability of a distribution grant, and subject to approval (and other financial resources) (Stickler, 2012).

Lahiff (2012), as cited by Stickler (2012), argues that this approach has added responsibilities to the government of South Africa, as the beneficiaries are no longer responsible for finding land for themselves. He further notes that the state buys land and allocates the land to the beneficiaries. Lahiff and LI (2012), as cited by Stickler (2012), argue that there are some concerns pertaining to the short-term leasehold and fear that long-term ownership of PLAS farms may weaken beneficiaries' access to financial resources, and the ultimate success of redistribution under PLAS. They further state that the ambiguity of long-term ownership will affect the beneficiaries in getting access to financial resources. The requirement that beneficiaries should

demonstrate profitability within 3 to 5 years is widely considered as being improbable and may result in beneficiaries losing access to the land (Stickler, 2012).

Stickler (2012) further states that some of the weakness of this programme were illustrated in a study that was conducted on four projects in Gauteng Province, which shows that the three-year lease agreements had created a continued dependence of beneficiaries on the state, as they were unable to access finances to run their farms from financial institutions. Lahiff (2008) has stated that a potentially worrying trend is for land to be bought by the state without first identifying the intended owners of that land. This means that policy may be swinging from an entirely 'demand-led' approach to one that is increasingly 'supply-led' (Lahiff, 2008:3). He further stated that this implies that prospective beneficiaries may not be directly involved in the purchase decision or in the immediate post-purchase planning for the land, opening up the possibility of a more top-down approach to both project implementation and beneficiary selection.

The PLAS programme targets black people (Africans, coloured people, and Indians), groups that live in communal areas, and black people with the necessary farming skills in urban areas, including people living under insecure tenure rights (DLA, 2007). This approach also targets emerging and commercial farmers (DLA, 2007). According to Stickler (2012), other targeted beneficiaries of this strategy are farm workers, youth, women, and unemployed agricultural graduates. The PLAS strategy approach should be communicated to the various relevant government departments at national, provincial and local levels. Various communication tools would be used, namely road shows, print media, radios stations, etc. (DLA, 2007).

2.4 POLICY ON INSTITUTIONAL SUPPORT SERVICES FOR PLAS PROJECTS

The implementation of the PLAS strategy requires the collaboration of the relevant stakeholders at both the National and Provincial levels (DLA, 2006b:9). The relevant stakeholders are:

National Departments of Land Affairs, Agriculture, Forestry and Fishery and Housing: The monitoring and evaluation role in terms of the PLAS strategy is done by the DLA in collaboration with its national counterparts in the Department of Housing (DoH), Agriculture, Forestry and Fishery (DAFF), and the Department of Provincial and Local Government, as well South African Local Government Associates.

The DLA and DAFF: Will ensure that they put aside adequate budgets for the settlement of agricultural projects and also ensure that systems and procedures are in place for the effective implementation of PLAS projects.

The DLA and DoH: Will ensure that adequate budgets, systems and procedures are in place for the settlement of agricultural projects and the alignment of the housing products and grant instruments with the proactive strategy.

DLA: The DLA, as the leading department, is responsible for identifying the land, needs, beneficiaries and funding assistance for planning and land acquisition. The DLA will also ensure that Memoranda of Understanding are concluded between the DLA and DoA, as well as the DLA and DoH. Other possible actors that are critical to this process, such as municipalities, should also be included.

Local level structures (Municipality/District Council/District Agriculture): To determine land needs, these bodies select appropriate beneficiaries and identify suitable land. Thus, municipalities and other local structures may actively identify land and beneficiaries, and then approach the DLA for funding assistance for planning and land acquisitions. The DLA may also embark on a process (with the Municipality/District Council as lead agents and/or Local/District Agriculture) of actively identifying the needs, land and beneficiaries.

Service level agreements with farmer unions, associations and organised agriculture can be developed. These institutions can assist in identifying available and suitable land and ensure that the land is made available on the market. Guidelines and criteria for concluding service level agreements are available within the DLA offices.

2.5 POST-SETTLEMENT SUPPORT SERVICES IN THE CONTEXT OF SOUTH AFRICAN LAND REFORM

According to Rungasamy (2011), post-settlement support in the context of Land Leform refers to the government's function and responsibility in assisting beneficiaries of the Land Reform programme after the land has being transferred to them. Van der Elst (2008) has stated that in accordance with Land Reform Policy, post-settlement support refers to the government's function and responsibility in assisting beneficiaries of the land reform programme after they acquire the land.

The DLA's White Paper on South African Land Policy (1997) differentiates between equitable distribution of land and the provision of complementary development support services. Complementary development support services, as stated in the White Paper of 1997, involve support with agricultural production inputs, sustainable land use, infrastructure development, finance, agricultural inputs, and access to markets. Rungasamy (2011) argues that restoring land ownership without additional complementary support services is meaningless.

Jacobs (2003:11-18) points out the functional areas of complementary support services for farmers who are using land for farming as follows:

- **Extension services:** Extension officers provide farming advice and form a critical link between land reform projects and the government agency providing post-settlement support. Extension officers work for the Department of Agriculture or may be "attached" to the Agriculture Research Council (ARC). Lack of capacity appears to be the main factor affecting the frequency of visits by extension officers to projects.

- **Skills development and capacity building:** Three methods to facilitate the skills transfer to land reform beneficiaries are training through agricultural colleges, mentorship, and management programmes. The provincial departments of agriculture are to develop strategic partnerships with the ARC and farmers organisations (AgriSA) to assist with such training. The NDA

must allocate budgets to the provincial departments for training. Training modules must cater for the needs of farmers within their language preference.

- **Financial assistance:** Grant finance, but mainly credit to help with farming activities (or working capital). Sustainable production and income generation depend on access to finance for buying production start-up inputs (seed and fertiliser), and for fixed capital improvement.
- **Infrastructure support:** On-farm infrastructure like irrigation and fencing.
- **Access to markets**: The support should be geared to finding potential markets for land reform beneficiaries ranging from informal local sales of output to marketing arrangements with commodity organisations. Assistance for accessing such markets is limited.

Jacobs (2003) states that the application for complementary development support services, based on a demand-led approach to post-transfer support, threatens the sustainability of land reform projects, even though post-transfer needs are clearly identified in the business and development plans of these projects. The author further identifies the kind of support that land reform beneficiaries will require, namely in areas of agricultural production, infrastructure, finance and access to markets. According to Jacobs (2003), government, private sector and civil society organisations are some of the major stakeholders that can intervene during this critical phase of land and agrarian reform. He also states that agricultural extension services need to respond to the livelihood needs and land-use patterns in land reform beneficiary communities and that capacity building programmes need to be regular, with flexible exit strategies, and tailored to the language and educational background of beneficiaries.

Rungasamy (2011) argues that the attainment of sustainable development outcomes also depends on the provision of settlement support, which should not be added at the end of the land reform process, but should form an integral part of the entire process of land reform through the planning, transfer and post-transfer phases in an integrated manner, involving all role-players (land reform beneficiaries, government departments, private sector partners, etc.) natural, financial and human resources.

2.6 CHALLENGES OF POST-SETTLEMENT SUPPORT IN THE CONTEXT OF SOUTH AFRICAN LAND REFORM

Studies have shown that land reform beneficiaries experience numerous problems regarding post-settlement support services, such as credit, training, agricultural inputs, extension advice, access to markets, ploughing and transport service, veterinary services and infrastructure support (HSRC, 2003; Hall, 2004a; Wegerif, 2004; Bradstock, 2005). The findings from a survey which was done on behalf of the Parliament of the Republic of South Africa (2013) revealed that deficiencies in critical support services, such as poor access to services, inferior extension advice, lack of access to credit, high cost of inputs, poor access to market, lack of infrastructure and project management training, were recognised as being important to rectify for the sustainability of land reform projects.

Jacobs (2003) argues that land reform in South Africa since its inception has helped rural poor people to gain access to land for a range of purposes. Most of the land reform beneficiaries are using their land for agricultural production. Land-based livelihood strategies and support after land transfer have been neglected by the state. Jacobs further notes that the state has failed to develop a clear and coherent policy and post-transfer support. Vink and Kirsten (2003) argue that land reform beneficiaries and small-scale farmers have been left alone, struggling with access to services, while commercial farmers have access to a range of services. Van Rooyen and Njobe-Mbuli (1996) argue that different groups of farmers have different needs. Hall (2003) identifies farm workers and women as marginal groups of farmers, adding that the lack of post-settlement support has led to serious problems for the new owners of land who are unable to use their land productively.

Different academics have argued that the challenge for land reform in South Africa is the absence of a clear and coherent strategy on post-transfer support (Hall, 2003; Jacobs, 2003; Lahiff, 2000; Wegerif, 2004). According to Manenzhe (2007), the absence of post-settlement strategy has resulted in the government getting private companies to assist communities to manage their farms in the name of strategic partners. Derman *et al*. (2006), as cited by Manenzhe (2007), argue that strategic

partnership arrangements constitute, in simple terms, the privatisation of post-settlement support.

According to Jacobs (2003), the general failure of post-settlement support derived from a failure to conceptualise land reform beyond the land transfer stage, and poor communication between the national Department of Land Affairs and the nine Provincial Departments of Agriculture (responsible for state services to farmers). This lack of coordination with the key Department of Agriculture and Land Affairs is compounded by poor communication with other key institutions, such as the Department of Housing and the Department of Water Affairs and Forestry, as well as local government structures (Hall, Isaacs, and Saruchera, 2004). Poor coordination between the key departments, DoA and DLA, results in poor communication with other key institutions, such as Department of Housing and Department of Water Affairs and Forestry, as well as local government structures (Hall *et al*., 2004). Hall (2003) has added that the absence of post-settlement support has led to serious problems for the new owners of land in being unable to use land as a basis for their livelihoods. Hall (2003) further identified institutional support to legal entities as another key area of support for land reform beneficiaries.

Land reform can be structured as a package of institutional arrangements aimed at creating access to services such as extension, training, research, financial support and marketing. It is argued that improved services could lead to increased renting of farm land to acquire secured title to the land (Kirsten, Van Rooyen and Ngqangweni 1996). Andrew, Ainslie and Shackleton (2003) argue that weak institutional capacity and conflicts have a direct, debilitating impact on the ability of beneficiary groups to develop and implement land use management strategies and to make productive use of their resources, such as the acquired land. Support services, such as credit facilities and advice systems, are certainly necessary, and could be supplied if proper planning were put in place. The lack of such services helps to account for the collapse of many land reform schemes (Attfield *et al*., 2004).

2.7 PROPOSED OPERATIONAL INDICATORS FOR MEASURING AGRICULTURAL SUSTAINABILITY

Lal (1991:74) defines sustainability as “the system’s productive performance over time, which means meeting the needs of present while sustaining the future potential”. Sustainable development is the development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1997). Webster, in Hayati *et al*. (2010), has stated that what is defined as sustainability depends on the perception of the analysts. Hayati *et al.* (2010) argue that sustainability is an active rather than a motionless concept. Tisdell (1996), as cited by Zhen and Routray (2003), states that sustainability comprises three autonomous but interrelated components, namely ecological, economic and social. Based on these three components of agricultural sustainability, Zhen and Routray (2003) proposed indicators for measuring agricultural sustainability. These indicators are presented in Figure 2.1 below.

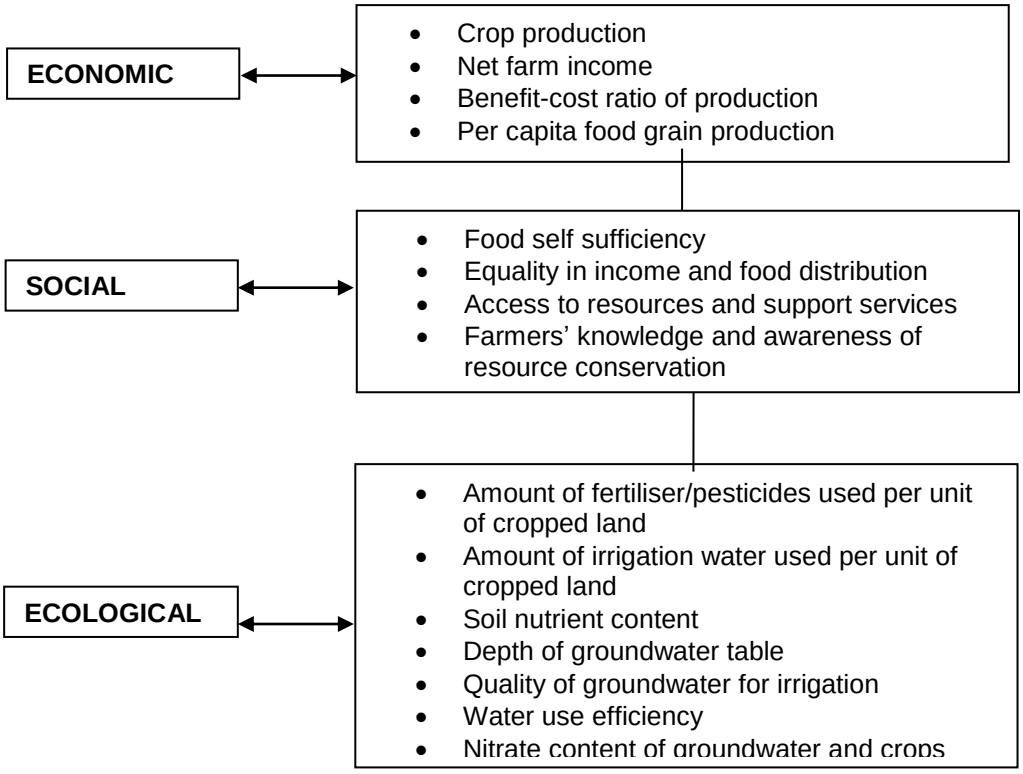

Figure 2.1: Proposed operational indicators for measuring agricultural sustainability in developing countries

Source: Zhen and Routray (2003: 43)

According to Figure 2.1, economic indicators comprise crop productivity, net farm income, benefit–cost ratio of production, and per capita food grain production, and social indicators include food self-sufficiency, equality in income and food distribution, and access to resources and support services. Zhen and Routray (2003) have stated that the mechanisms to gain access to resources, such as per capita availability of arable land, and to support services, such as extension and training services, and marketing and credit services, by farmers are considered as fundamental factors ensuring sustainability. According to Adesoji, Farinde and Ajayi (2006), the skills knowledge of farmers contributes to the success of the farming enterprise, which can be achieved through the right type of training support which should be informed by the project's needs (Antwi & Nxumalo, 2014). Mohammad (2009) argues that extension could play a critical role through its educational programmes in ensuring sustainability, but there is a concern that traditional extension models have not been sufficiently effective in promoting the adoption of sustainable agricultural practices. Magoro and Hlungwani (2014) highlighted the point that agriculture extension service is the foundation of agricultural growth;

however, the development of the sector cannot be achieved without an efficient and effective extension system.

Inappropriate land policies, land management practices and regulations can undermine the efforts of the rural poor to improve their situation, as well as causing inefficiencies in land use for farmers of all income strata (Norton, 2004). Swanepoel and De Beer (2006:15) indicate three reasons that lead people to abuse land, namely (i) farmers' decisions are the direct result of government policy which determines the pricing policy; (ii) inequitable access to land is a constraint because farmers access small pieces of marginal land only, which they cannot afford to let lie fallow for the time necessary for it to recover its strength naturally – when they do not have enough money to buy inputs to improve the quality of soil, the soil will deteriorate rapidly; and (iii) political and economic processes.

For this study, sustainability was measured in terms of the social indicators which are access to resources and support services such as agricultural extension service, training services, credit services and knowledge and skill of farmers. The researcher wanted to determine in detail what might have led to the non-productivity of PLAS projects.

2.8 PROGRAMMED EXTENSION ACTIVITIES AS A WAY TOWARDS SUSTAINABLE SUPPORT

Terblanche (2004) states that applying programmed extension delivery can establish a sustainable extension support service. He uses Bennet's model to increase accountability and effective coordination in extension programmes, as follows:

Level 1 – Inputs provided by the extension officer (personnel, equipment, expertise and finance);

Level 2 – Activities (methods of delivery or methods which are going to be used by the extension officer);

Level 3 – People involvement; the programme should ensure participation of people, who are the farmers;

Level 4 – Reaction; the response of the targeted farmers with regard to method used;

Level 5 – KASA (knowledge, aspiration, skills and attitude) change;

Level 6 – Practice change: have farmers adopted and applied the knowledge and skills; and

Level 7 – End result.

2.9 GUIDING PRINCIPLES FOR SUSTAINABLE AGRICULTURAL DEVELOPMENT

According to the DoA (2005:4-5), the extension support and advisory services will facilitate the implementation of government priority programmes, guided by the following principles:

• **Demand-driven:** Extension must respond to entrepreneurs'/farmers' needs, while simultaneously maintaining professional standards.

• **Relevant:** The appropriate advice and technologies must be applicable within the opportunity realm of resources and market environment of clients.

• **Pluralistic, flexible and coordinated extension:** Service providers should be encouraged to become involved and to contribute towards agricultural development. Proper coordination to prevent negative impacts on the welfare of clients is needed, as well as to prevent duplication or working at cross-purposes. Extension and advisory services must be sufficiently flexible to respond to the miscellaneous and ever-changing needs occasioned by a changing socio-economic environment.

• **Equity:** Agricultural extension and advisory services must go to those who really need them, especially the subsistence, small-scale farmers, women and the disabled, in order to promote equity, though not necessarily excluding commercial farmers.

• **Sound governance:** Agricultural extension and advisory services projects/programmes and structures must have competent personnel with clear planning, implementation, monitoring, evaluation and financial accountability procedures.

• **Effective monitoring and evaluation**: The projects/activities must be results-oriented and problem solving, with monitoring and evaluation built in, and must consider social, economic and environmental impacts.

• **Human and social capital development:** Extension and advisory services must build the capacity of farmers and stakeholders. Emphasis must be placed on developing targeted and comprehensive capacity towards problem solving, ownership and sustainability of clients.

• **Participatory:** Beneficiaries must be involved in the planning, implementation and evaluation of their projects in a manner that promotes ownership and empowerment.

• **Sustainability: E**xtension and advisory services must provide advice and information that meets the criteria of sustainability, namely (a) productivity, (b) risks reduction, (c) protection of the environment, (d) economic viability, (e) social acceptability, (f) technical feasibility, and (g) commercial feasibility.

• **Cooperative governance:** Extension and advisory services are concurrent functions to be regulated and controlled under the framework of cooperative governance. Operational authority and responsibility are allocated to national, provincial and local levels of government, consistent with organisational competences and efficient use of resources.

• **Priority focused:** Extension service should be guided by government's strategic priorities.

• **Accountability:** There should be a system of communication with, and evaluation by, clients on agreed deliverables by extension and advisory services and other service providers. The provision of extension and advisory services must be customer focused.

• **High quality advisory service:** Extension and advisory service must provide high quality service by incorporating innovations and entrepreneurship into its programmes.

• **Batho-Pele:** There must be compliance with the eight Batho-Pele principles in dealing with clients and execution of development efforts.

2.10 EXTENSION APPROACHES FOR SUSTAINABLE AGRICULTURAL DEVELOPMENT (DOA, 2005)

2.10.1 Technology transfer

The ARC, Provincial Departments of Agriculture, development institutes, academic institutions and the private sector have a responsibility not only to develop innovations, but also to diffuse them. The following broad guidelines are promoted by DOA:

- Collaborative analysis of farmers' situations and their needs should be the basis on which to set priorities and planning research;
- Training of extension officers to increase their ability to transfer relevant technology; and
- Training of farmers to speed up adoption of new technology and practices.

2.10.2 Participatory approach

The participatory approach builds on farmers' own capacities and the ability to organise them into groups to identify needs and priorities, plan extension programmes/projects, implementation and evaluation. The broad principles are as follows:

- Community participation and involvement;
- Needs-based development;

- Institutional linkages and structures for participatory extension;
- Coordinated extension and advisory services; and
- Monitoring, evaluation and accountability.

2.10.3 Advisory approach

The advisory approach is easily achievable in the highly commercial farming sector where farmers have achieved a high level of competence, are able to identify their own problems, and are innovators. The private sector is encouraged to offer this advisory service because of its resources availability and efficient service delivery processes. Provincial Departments of Agriculture will offer facilitate the provision of specialised advisory services on financial planning, marketing and research areas.

2.10.4 Project approach

The approach of 'Managing by Projects' is a powerful instrument whereby planned, targeted extension actions are introduced. All the funded projects have to be registered with clear objectives, implementation plans, deliverables, timelines, key performance indicators, resource assignments and execution responsibilities. Within these broad approaches, provincial offices should develop their situation-specific implementation strategies in conformation with norms and standards of extension and advisory services. The diversity of farming practices and systems should be considered in developing appropriate implementation strategies at provincial level. These will need to be aligned with the Integrated Development Plans (IDPs) of the municipalities and priorities, at both district and local levels.

Terblanche (2008:74-75) indicates the following concepts that could play a role in improving extension delivery, namely:

- Technical competency: The extension officer must at least be an expert in one field of technical agriculture, be able to communicate in agriculture, and be technically empowered in order to deliver a service of excellence.

- Communication skills: The extension officer must be able and confident to exchange agricultural information and ideas in a clear manner appropriate to the audiences in order to explain, persuade, convince and influence others to achieve the desired outcomes.
- Group facilitation: Effective negotiation and conflict resolution plays a critical role in group functioning.
- Extension management: The essential skills/knowledge needed is as follows: (i) Strategic planning and management; (ii) Corporate policy and capacity building; (iii) Organisational and systems theory; (iv) Functions of management; (v) Motivational theory; (vi) Networking, linkages and coordination; (vii) Programme development and planning; (viii) Programme implementation and management; (ix) Evaluation of extension inputs and outputs; (x) Extension practice quality management systems – accountability; and (xi) Ethics (motivational, commitment, etc.).

2.10 Achievements of the PLAS programme

Tables 2.1 and 2.2 below describe PLAS deliverables in the different provinces.

Table 2.1: PLAS Deliverables in 2008-2009

Province	Hectares	Number of Projects
Eastern Cape	32603	33
Free State	55514	73
Gauteng	2554	16
KwaZulu-Natal	6010	20
Limpopo	2392	3
Mpumalanga	37025	48
Northern Cape	44247	8
North West	46636	16
Western Cape	0	0
Totals	**226986**	**217**

Source: Department of Land Affairs (2009)

Table 2.2: PLAS Deliverables in 2009-2010

Province	Hectares	Number of Projects
Eastern Cape	24533	33
Free State	12390	11
Gauteng	1366	13
KwaZulu-Natal	1679	4
Limpopo	5743	6
Mpumalanga	17423	19
Northern Cape	27386	5
North West	5183	5
Western Cape	3725	2
Totals	**99433**	**98**

Source: Department of Rural Development and Land Reform (2010)

According to Table 2.1, from April 2008 to March 2009, 226 986 hectares (ha) were acquired through PLAS and redistributed to 217 PLAS projects. According to the Mpumalanga Provincial Land Reform Office (MPLRO), a total of 37 025 hectares were acquired through PLAS and delivered to 48 projects (DLA, 2009). During the 2009–2010 financial year, a total of 99 433 hectares were delivered to a total of 98 projects. For Mpumalanga, a total of 17 423 hectares were acquired through PLAS and transferred to 19 projects (DRDLR, 2010).

CHAPTER 3
RESEARCH METHODOLOGY

3.1 INTRODUCTION

The researcher used a qualitative research methodology in order to be in a position to analyse the problem in depth. In this chapter, the sampling method, data collection methods and data management will be explained.

3.2 SAMPLING

Sampling is defined as the process of selecting units (for example, people and organisations) from a population of interest so that by studying the sample, we may fairly generalise results back to the population from which they were chosen (Mouton, 2006). Sampling is the process by which a sample is drawn from the population. Leedy and Ormrod (2010) explained that qualitative researchers are purposely non-random in their choice of data sources. Instead, their sampling is purposeful, meaning that they select those individuals that will yield the most information about the topic under investigation.

The population size must be representative enough for generalisation of the results (De Vos, Strydom, Fouche & Delport, 2011). Literature advises, and the researcher observed, the ethical aspects of research, as well as the types of instrument to be used to collect the information. Prior (2003) states that various factors influence the choice of data collection method, depending on the questions which the researcher wants to investigate from the resources available, as do the timelines. Inaccurate data collection can affect the results of a study and ultimately lead to invalid results.

A purposive sample is a non-probability sample that conforms to certain criteria that the researcher wishes to study (Leedy & Ormrod, 2010). For this study, the researcher used a Purposive Non-Probability sample technique to select the relevant individuals or objects that would yield the most information about the topic under investigation, so that the researcher could achieve the objectives of the study. The reason for the researcher using this method is that PLAS projects are not

represented in all the municipalities in the District. Only four local municipalities hosted PLAS projects during the research process, namely Emakhazeni, Steve Tshwete, Emalahleni and Victor Khanye Local Municipalities. The researcher collected data concerning the approved PLAS projects from the DLA. A total of thirty-three projects, identified from various records and files of DARDLA and DLA, which had already been approved at the end of 2011, were purposively selected for the study. From those projects, a total of 120 farmers and 14 extension officers who were providing extension support to farmers were purposefully selected and interviewed.

3.1.1 LIST OF PLAS PROJECTS IN NKANGALA DISTRICT

Table 3.1: PLAS projects per Municipality

No	Project Name	Location/Farm Name	Municipality	Total Ha	Total Beneficiaries	Active members
1	Timthok cooperation	Schonoord 164JS	Steve Tshwete	436	7	3
3	Indumiso Investment	Doornkop, 246JS	Steve Tshwete	482	5	2
4	Agrissy cc	Goedehope, Portion 10, 224JS	Steve Tshwete	436	1	1
5	Vukuzenzele	Leeupoortjie Portion 3,6 &9 267 JS	Steve Tshwete	980	6	2
6	MposaAgric consultant	Wonderhoek Portion 10, 376 JS	Steve Tshwete	586	2	2
7	Rietvlei farm	Rietvlei 375 JS	Emakhazeni	451	2	2
8	Silwanendlalaezwenilethu	Doornhoek 341 JS	Emakhazeni	598	18	8
9	De Suikerboschkop portion 13	De Suikerboschkop 361 JS	Emakhazeni	95	2	7
10	Kunene co-op	Zwarkopies 316 JS	Emakhazeni	150	8	3
11	Sithole family	Welgevonden 215 JS	Emakhazeni	178	8	3
12	Ntuli family	Kontardanskloof 223 JS	Emakhazeni	341	5	5
13	Khethile co-op	Hartebeeslaaghte	Emalahleni	567	6	6
14	Bitline cc	Weldevreden	Emalahleni	453	5	5
15	Remor PTY LTD	Weldevreden	Emalahleni	536	2	2
16	Mhlokonyo cc	Eenzaamheid ptn 4	Emalahleni	364	4	4
17	Tomtheo cc	Eenzaamheid ptn 9	Emalahleni	163	5	5
18	Mabhena family	Eenzaamheid ptn 8	Emalahleni	363	5	5
19	Emacusi Co-op	Eenzaamheid ptn 15	Emalahleni	15	5	5
20	Masenka co-op	Klipoort	Emalahleni	230	7	4
21	Coka & stemer	Hartebeeespruit	Emalahleni	617	4	4
22	Geluk PLAS	Geluk	Emalahleni	1618	11	1
23	Kleinwater PLAS	Kleinwater	Emalahleni	1546	2	5
24	Kalabasfontein PLAS	Kalabasfontein	Emalahleni	1104	3	3
25	Klipport PLAS	Klipport	Emalahleni	378	2	2
26	Labour Tenants	Weldevreden	Emalahleni	100	8	4
27	Klipspruit Farm	Klipspruit 199 IR Portion 5	Victor Khanye	212	29	6
28	IsithebeAgric Coop	Klipspruit 199 IR	Victor Khanye	312	6	6
29	Waaikraal Farm	Waaikraal 556 IR	Victor Khanye	430	1	1
30	XitunguluAgric Coop	Strafontein	Victor Khanye	75	12	2
31	Bauba Le MoroaswiTemong	Klipspruit 199 IR Portion 7 of Portion 4	Victor Khanye	74	10	4
32	Klipfontein Farm	Klipfontein 551 IR	Victor Khanye	60	2	2
33	Syferfontein Farm	Syferfontein 228 IR	Victor Khanye	160	12	6
Totals				**14110**	**205**	**120**

3.1.2 DATA COLLECTION METHODS

The researcher was seeking to gain a complete understanding concerning the extension support that was provided to PLAS projects that would have led to the unsustainability of many PLAS Projects in the Nkangala District. It was also an attempt to get a clear understanding of the skills and the interests of land reform beneficiaries in agriculture. A qualitative research approach was used by the researcher to undertake the study. Connaway and Powell (2010) defined qualitative research as using methods centred on observing proceedings from the perspective of those involved and then endeavouring to understand why individuals behave as they do.

According to Welman and Kruger (1994), a qualitative research method is aimed at establishing the socially constructed nature of reality, subjectively, as produced within the minds of the respondents. In this study, the researcher attempted to evaluate the perceptions of the research subjects. To obtain data concerning the PLAS projects, the researcher collected the files of the PLAS projects from DARDLA and DLA in Nkangala District, dating from the inception of the project until the 2010/11 financial year.

Two questionnaires for the farmers and extension officers were designed to cover the following aspects: demography of the respondents, socio-economic characteristics, farm operations, household characteristics, farmers' involvement in farming, respondents' assets, nature of support and extension services, the nature of associations, production challenges, farm activities, farmers' farming aspirations, training received, and the impact of training.

3.2.1 Interviews

Interviews are useful for getting to the story behind the participant's experiences, and so guide positive/constructive follow-up.

3.1.2.1 Semi-structured interviews

The researcher conducted **face-to-face,** personal interviews with respondents at their homes, as well as using **semi structured and closed questionnaires** with field and agricultural officers. The advantages of face-to-face interviews are that the interviewer talks directly with the respondents, has an opportunity to explain questions to the respondents, and observes and studies the situation. The disadvantage of face-to-face interviews is that they are more expensive and time consuming. Face-to-face interviews were conducted with 120 farmers and 14 extension officers.

Before the interviews were conducted, the interviewer introduced herself, explained the purpose of the interview to the respondents and that confidentiality was guaranteed, and also explained the duration of the interviews. Follow-ups were done telephonically. In some cases, responses were recorded by using cell phone devices and permission to record was given. During the interviewing processes, the interviewer wrote down what the respondents were saying. The researcher was personally involved in data collection, together with two trained assistants.

3.3 Data Management

In qualitative studies, the researcher starts with a large body of information and must, through inductive reasoning, sort and categorise it and gradually boil it down to a small set of abstract, underlying themes (Leedy & Ormrod, 2010). The data was sorted in accordance with the research questions. The researcher compared and contrasted the collected data in order to discover similarities and differences.

The Statistical Package Social Sciences (version SPSS 20.0) was used for entering, coding and analysing data. Descriptive statistics were used, since most of the data was qualitative. Tables, Graphs, Descriptive Analyses, Frequencies, Means, the Mann-Whitney U Test, and Fisher's Exact Tests were used to analyse the data. Data was analysed by the Department of Statistics in the University of Pretoria.

CHAPTER 4

INTERPRETATION OF THE SOCIO-ECONOMIC CHARACTERISTICS OF THE RESPONDENTS

4.1 INTRODUCTION

Chapter 4 outlines the analysis of data collected from farmers (PLAS beneficiaries) and extension officers in the Nkangala District and in the Local Municipalities of Emakhazeni, Steve Tshwete, Emalahleni and Victor Khanye. These analyses will indicate the main challenges faced by farmers, which result in farmers being unable to utilise their land productively.

4.2 DEMOGRAPHY OF THE RESPONDENTS

4.2.1 Age and gender of the respondents

The mean ages of the farmers (PLAS beneficiaries) and the extension officers, grouped within specific age categories are presented in Tables 4.1 and 4.2 below. This information was used to calculate mean ages of the respondents, both male and female.

Table 4.1: Mean ages of farmers and extension officers in years

Respondents	Frequency	Mean	Minimum	Maximum
Farmers	120	47	23	82
Extension officers	14	43	28	57
Total	**134**	**-**	**-**	**-**

Table 4.2: Farmer and extension officers age categories

Respondents	Age Category	N	%
Farmers	<=39	34	28
	40-49	33	28
	50-59	34	28
	>=60	19	16
Extension officers	<=39	5	36
	40-49	6	43
	>=50	3	21

Table 4.1 shows that the mean age of the farmer respondents (in years) is 47, and 43 for extension officers. The ages range (in years) from 23 (the youngest) to 82 (the oldest) for farmers, and 28 (the youngest) to 57 (the oldest) for extension officers. Table 4.2 indicates that 28 % of farmers are in the age category of 50–59 and youth category (<=39), followed by 28 % in the age category of 40–49, and 16 % in the age category of >=60. A total of six (43 %) of the extension officers range within the age category of 40–49, followed by 36 % within the age category of <=39. This is an indication that most of the PLAS projects in the Nkangala District of Mpumalanga Province are owned by people who are still strong enough to farm.

4.2.2 Respondents mean age by gender and marital status

Age, gender and the marital status of farmers and extension officers are presented in Table 4.3 below. By looking at the age, gender and the marital status of the respondents, the researcher wanted to determine which group involved in farming is the largest, according to gender, and to determine the marital status by the respective age groups of the respondents.

Table 4.3: Respondents age by gender and marital status

Farmers (N=120)	**Gender**	**n**	**%**	**Mean age (years)**
	Male	73	61	47
	Female	47	39	48
Extension officers (N=14)				
	Male	7	50	46
	Female	7	50	40
	Marital status			
Farmers (N=120)	Married	64	53	51
	Divorced	5	4	54
	Living together	13	11	43
	Widowed	13	11	52
	Single	25	21	37
Extension officers (N=14)	Married	7	50	47
	Divorced	1	7	57
	Living together	1	7	36
	Widowed	0	0	0
	Single	5	36	35

In terms of the mean age and gender, Table 4.3 above illustrates that there are more male farmers, i.e. 73 (61 %) with a mean age of 47 years, compared with 47 (39 %) female farmers with a mean age of 48 years. According to the above Table, it is clear that males dominate in PLAS projects. The above Table also indicates that within the Nkangala District, there is a good gender balance in terms of employment equity regarding the number of female (50 %) and male (50 %) extension officers. Table 4.3 above also indicates that the mean age for male extension officers is 46 years (50 %), compared with the mean age of females, which is 40 years (50 %). In terms of marital status, Table 4.3 indicates that 64 (53 %) of farmer respondents are married with a mean age of 51years, against seven (50 %) married extension officers with the mean age of 47 years, followed by 25 (21 %) single farmers with a mean age of 37 years, and by five (36 %) single extension officers with a mean age of 35 years. The Table above indicates that the majority of farmers and extension officers are family people with possible family responsibilities.

4.2.3 Marital status by gender of the respondents

Marital status by gender of farmers and extension officers is presented in Tables 4.4 and 4.5 below. The aim is to determine whether there is any difference between the males and the females in terms of the marital status of the respondent categories.

Table 4.4: Farmers' marital status by gender (N=120)

Marital status	**Gender**		
	Male	**Female**	**Total**
Married	n 43	21	64
	% 36	18	53
Divorced	n 1	4	5
	% 1	3	4
Living together	n 8	5	13
	% 7	4	11
Widowed	n 4	9	13
	% 3	7	11
Single	n 17	8	25
	% 14	7	21
Total	n 73	47	120
	% 61	39	100

According to Table 4.4, 36 % of male farmers are married, as against 18 % of female farmers, which make a total of 53 % of farmer respondents who are married. This figure is followed by 14 % single males, compared with 7 % single females, which make a total of 21 %.

Table 4.5: Extension officers marital status by gender (N=14)

Marital	**Gender**		**Totals**
	Male	**Gender**	
Married	n 4	3	7
	% 29	21	50
Divorced	n 1	0	1
	% 7	0	7
Living together	n 0	1	1
	% 0	7	7
Single	n 2	3	5
	% 14	21	36
Total	**n 7**	**7**	**14**
	% 50	**50**	**100**

According to Table 4.5, 50 % of the extension officer respondents are married, 29 % being males and 22 % females, while 36 % are single, with 21 % females and 14 % males. This means that 50 % of the extension officers are family people with possible family responsibilities.

4.2.4 Highest Level of Education of the Respondents by Gender

The highest levels of education by gender for both the farmers and the extension officers are presented in Tables 4.6 and 4.7, respectively, below.

Table 4.6: Farmers' highest level of education, by gender

	Gender (number of respondents)			
Level of education	**Male**		**Female**	**Total**
Grade 1-5	n	10	7	17
	%	8	6	14
Grade 6-11	n	35	14	49
	%	29	12	41
Grade 12	n	16	13	29
	%	14	11	24
Certificate	n	5	1	6
	%	4	1	5
Diploma	n	3	8	11
	%	3	6	9
Degree	n	4	4	8
	%	3	3	7
Total	n	73	47	120
	%		39	100
	61			

Table 4.6 indicates that the highest level of education of 41 % of farmer respondents is between Grades 6 and 11, with the majority of the respondents being males (35; 29 %), compared with only 14 (12 %) females. A total of 24 % of the farmer respondents obtained a senior certificate (grade 12), with 14 % males compared with 11 % of females. This is an indication that the majority of farmer respondents in Nkangala District can read and write (Grade 6-12 and above levels of education).

Table 4.7: Extension officers' level of education, by gender (N=14)

Level of education	**Gender (Number of respondents)**			
		Male	**Female**	**Total**
1 Certificate/Diploma	n	1	0	1
	%	7	0	7
2 Advanced Diploma	n	2	0	2
	%	14	0	14
3 B Tech	n	3	4	7
	%	21	29	50
5 BSc Agric. (4yrs)	n	0	2	2
	%	0	14	14
7 Masters	n	1	1	2
	%	7	7	14
Total	n	7	7	14
	%	50 %	50 %	100 %

There are approximately 14 Extension Officers serving the PLAS beneficiaries in the Nkangala District. In terms of gender and education, 50 % do have a B Tech degree, of whom 29 % are female and 21 % are male. Only two (14 %) of the male extension officers are in a possession of an Advanced Diploma, while the same number of females are four-year BSc Agric. graduates. Only one female and one male extension officer possess Master's degrees, and generally speaking, female respondents are slightly better qualified than their male counterparts are.

4.3 SOCIO-ECONOMIC CHARACTERISTICS OF THE RESPONDENTS

4.3.1 Farmers' Source of Income

Farmers' sources of income were sorted by mean rank, i.e. from the biggest contributor to the smallest. The findings are presented in Table 4.8 below. The researcher used the rankings to determine the main source of income. Agriculture is supposed to be their main source of income and in this regard, farmers are expected to be available for farming activities on a fulltime basis.

Table 4.8: Farmers' source of income, sorted by mean and median rank (N=120)

Sources of income	N	Median	Mean
Other	15	1	1.4
Additional employment	56	1	2.1
Government social grant	46	2	2.1
Farming	109	2	2.1
Old age pension	29	3	3

Sorted by median rank i.e. from biggest contributor to smallest contributor

1=Biggest contributor

2= Smallest contributor

Table 4.8 reflects other sources of income (gratuities and remittances) with a mean of one and median of one. These the biggest contributors to farmer income, followed by government social grants. Actual farming is a relatively small contributor to income, but is indicated as an income by the vast majority of farmers. Old age pension grants are the least contributor to income. This means that some of the

farmers are employed elsewhere, which stands in their way of being available fulltime and becoming fully committed to farming. The worrying factor is that farming is a relatively small contributor to their income.

4.3.2 Farmer respondents' farming experience and extension officers' work experience

The farming experience of farmers and the work experience of extension officers are outlined in Table 4.9 below.

Table 4.9: Farmers' and extension officers' work experiences

Field of farming	Farmer respondents (n=120)		Male respondents		Female respondents	
	n	Mean years	n	Mean years	n	Mean years
Total months crop production	94	8.5	56	10.0	38	5.4
Total months vegetable production	71	7.9	38	9.7	33	5.7
Total months beef cattle production	60	8.0	46	8.6	14	6.7
Total months dairy production	15	6.0	11	6.0	4	6.3
Extensions official's years of experience **(n=14)**	14	14.9				

According to Table 4.9, the farmer respondents indicated 8.5 mean years of experience in field crop production, 7.9 mean years of experience in vegetable production, 8 mean years of livestock production (beef cattle) experience and six mean years of experience in livestock production (dairy farming).

The study also revealed that extension officers indicated a mean average of 14.9 mean years of work experience in providing extension services.

4.3.3 Farm Size

Farm size and summary statistics by gender and by experience are presented in Table 4.10 below. The Mann-Whitney U Test was used to compare the two independent samples (farm size and gender). Farm size was used to determine

whether male and female farmers differ significantly in this respect. Table 4.11 below clarifies this point.

Table 4.10: Farmers' farm size and summary statistic by Gender (N=120)

Farm size	**Farmers respondents**		**Male respondents**		**Female respondents**	
	n	**Mean ha**	**n**	**Mean ha**	**n**	**Mean ha**
Size of farm dry land	110	174.23	66	170.24	44	180.22
Size of farm grazing land	108	230.29	66	266.41	42	173.54
Size of farm irrigated land	36	89.80	23	122.96	13	31.15
Size of farm (total)	120	394.48	73	432.32	47	336.73

Table 4.10 indicates that the mean size of grazing land is 230 hectares for all farmers, followed by 174 hectares of dry land and 90 ha of irrigated land. The mean total farm size for all farmers is 394 hectares. The mean size of the farm for males is 432 hectares, and 336 hectares for females. This indicates that farmers use the greatest area of their farms for grazing, and that males occupy more land, compared with females.

Table 4.11: Farmers' farm size and summary statistics by gender and experience (N=120)

Mann-Whitney U Test Marked tests are significant at p <.05000	Rank Sum Male	Rank Sum Female	Valid N Male	Valid N Female	2*1sided exact p
Size of the farm	4629	2631	73	47	0.25
Field crop Production	2957	1508	56	38	0.02
Vegetable Production	1442	1114	38	33	0.40
Livestock production: Beef cattle	1476	352	46	14	0.19
Livestock production: Dairy	86	35	11	4	1

According to Table 4.11 above, the Mann-Whitney U Test indicates a p-value of < 0.05 (0.02), which means that there is a statistically significance difference in farm size between males and females, namely that males hold more hectares of land, compared with females. Crop production experience differs significantly between males and females, with a (p=0.02) in favour of the male respondents.

4.4 FARM OPERATIONS

4.4.1 Farm business plan

The projects with farm business plans and the perception of stakeholders involved in assisting the farmers in the development of their farm business plan are presented in Tables 4.12 and 4.13 below (reflecting perceptions of extension officers and the farmer respondents).

Table 4.12: Extension officers' perception of projects with a farm business plan (N=14)

Projects	Frequency (n)	Percentage (%)
All of them	1	7
Some of them	6	43
None of them	2	14
I am not certain	5	36

According to Table 4.12, 43 % of respondents indicated that only some of the projects do have farm business plans. Only one respondent indicated that all the projects had plans. The worrying factor is that five extension officers (36 %) do not know how many projects have business plans.

4.4.2 Main components and stakeholders involved in the development of farm business plans

The main component of a business plan, as well as the stakeholders involved in assisting the farmers in the development of a farm business plan, is presented in Table 4.13 below (reflecting perceptions of the extension officers and the farmer respondents).

Table 4.13: Main components of a farm business plan and the stakeholders involved, as perceived by both categories of respondents

Farm business plan: Main components	Farmers (N=120)		Extension officers (N=14)	
	n	%	n	%
We do not have a plan	34	28	0	0
I don't know	18	15	0	0
Infrastructure development plan	55	46	7	50
Acquiring machinery/equipment	39	33	0	0
Production plan	57	48	2	14
Financial plan	46	38	4	29
Marketing plan	43	36	3	21
Risk plan	35	29	2	14
Human resource plan	30	25	1	7
Stakeholders involved in developing the farm plan	**Farmers**		**Extension officers**	
	n	**%**	**n**	**%**
DARDLA	48	40	2	14
DLA	1	1	1	7
DAFF	2	2	0	0
I did it	6	5	5	36
Private consultant	24	20	1	7
Mentor	7	6	4	29

As indicated in Table 4.13, the main components of farm business plans, according to farmer respondents, are: i. Production plans (48 %), ii. Infrastructure development (46 %), iii. Financial planning (38 %), iv. Marketing plans (36 %), v. Acquiring machinery/equipment (32 %), vi. risk planning (29 %) and vii. Human resource plan (25 %). However, 28 % of farmer respondents indicated that they had no plan, and 15 % of extension officer respondents indicated that they did not know of any plans. Further, the main components of a farm business, according to the extension officers, are: i. Infrastructure development (50 %), ii. financial planning (29 %), iii. Marketing planning (21 %), iv. Production and Risk planning with equal numbers of respondents (14 %), and v. Human resource planning (7 %).

According to Table 4.13 above, DARDLA is perceived as being the most involved stakeholder in developing the farm business plans by as many as 40 % of farmer respondents. This is followed by Private consultants (20 %). According to extension officer respondents, 36 % indicated that the business plans were developed by the extension officers themselves, followed by Mentors (29 %).

4.4.3 The implementation of the farm business plans

The extent to which the farm business plans were implemented, as perceived by the extension officers, is indicated in Table 4.14 below.

Table 4.14: Extension officers' perceptions of the implementation of the farm business plan (N=14)

Farm business plan implementation	n	%
Yes	6	43
No	5	36
I don't know	3	21

According to Table 4.14, 43 % of the extension officers are of the opinion that projects were implemented according to farm business plans, while 36 % indicated that the plans were not implemented, and 21 % indicated that they did not know whether the business plans were implemented or not.

4.4.4 The main reasons why farm business plans were not implemented (according to the farmer respondents)

The main reasons why farm business plans were not implemented (according to the farmer respondents) are presented in Table 4:15 below.

Table 4.15: The main reasons a farm business plan was not implemented, according to the farmer respondents (N=120)

Reasons	n	%
I do not know	17	14
Do not have the skill/knowledge to implement it	16	13
No funds to implement it	51	43
No equipment to implement it	3	3

Only 73 % of the 120 farmer respondents responded.

According to Table 4.15, 43 % farmer respondents indicated that they did not have funds to implement farm business plans, while 14 % did not suggest any reasons. It is notable that 13 % indicated that they did not have the skills and knowledge to implement the plans. This is an indication that the extension officers and the farmers do not agree, and it is clear that many projects do not have a plan, and those that do

have a plan, do not implement it due to the reasons indicated in Table 4.15 above, namely lack of funds, lack of skills and knowledge, and so on. A total of 33 farmer respondent (28 %) did not answer the question, and this might be because they did not have a farm business plan or that they did not know that they had such a plan.

4.4.5 Registration of farmer projects as a legal entity

Registration of farmer projects as a legal entity, and the reasons for not registering as a legal entity, are presented in Table 4.16 below. Registration of farmer projects as a legal entity is an important factor, as it makes it easier for farmers to gain access to finance and farming information needed to operate their farms.

Table 4.16: Farmers' registration as a legal entity, as perceived by farmer respondents (N=120)

Legal Entity	N	%
Not registered	35	29
CPA	1	1
Trust	6	5
Cooperative	58	48
Other	19	16
No answer	1	1

One respondent was excluded due to no response being given.

Table 4.16 illustrates that 48 % of the PLAS projects are registered as cooperatives, followed by 29 % that are not registered. The fact that 29 % are not registered as a legal entity is a problem, because it makes it difficult for the project to access financial assistance, which is not available for a non-registered entity.

4.5 HOUSEHOLDS

4.5.1 Households and the household's adult members involved in farming

The household and a household's adult members involved in farming are presented in Table 4.17 below.

Table 4.17: Households and the household adult members involved in farming, as perceived by farmer respondents (N=120)

	n	Mean
Number of households	118	4.39
Adult members involved	118	2.25

Two respondents were excluded due to no responses being given.

The contents of Table 4.17 indicate that the mean number of households per project is 4.39 and the mean number of adult members involved in farming per household is 2.25. It is clearly apparent that some household members are not interested or committed to farming. Two respondents did not answer the question. This could be because they do not know the number of households and adult members involved in farming.

4.5.2 The reasons for household members not being involved in farming activities

The reasons why household members are not involved in the household's farming activities are presented in Table 4.18 below. Their reasons are rated from the highest to lowest 'Yes' frequencies and percentages.

Table 4.18: The reasons for household members not being involved in the farming activities, as perceived by farmer respondents (N=120)

		Yes	No	No answer
Work full time	n	72	38	10
	%	*60*	*32*	*8*
Live elsewhere	n	59	44	17
	%	*49*	*37*	*14*
Not interested	n	46	59	15
	%	*38*	*49*	*13*
Too old	n	36	67	17
	%	*30*	*56*	*14*
Do not know	n	9	93	18
	%	*8*	*77*	*15*
Other	n	4	9	107
	%	*3*	*8*	*89*

Table 4.18 above indicates the reasons for the majority of the household members not being involved in farming activities as: 60 % of the household members are

working fulltime; 49 % live elsewhere; 38 % of the household's members are not interested in farming; and 30 % of the household members are too old to be involved in farming.

4.6 FARMER INVOLVEMENT IN FARMING

4.6.1 Farmers availability on farms

Farmer availability on the farms is presented in Table 4.19 below.

Table 4.19: Farmer availability on the farm, according to farmer respondents (N: 120)

Availability on farm	Farmers		Male		Female	
	N	%	n	%	n	%
Full time	65	54	46	63	19	41
Once a week	22	18	15	20	7	15
Once in two weeks	18	15	7	10	11	23
Once in a month	6	5	2	3	4	9
Once two months	4	3	2	3	2	4
Once in three months	4	3	1	1	3	6
Once in six months	1	1	0	0	1	2

A total of 54 % of farmers indicated that they were on the farm full time, with 63 % of males, versus 41 % of female farmers, farming full time. A total of 19 % farmers were only available once a week, and 15 % were available only once in two weeks. It is a worrying factor that 46 % of the farmers were not engaged on a full-time basis on their farms. Farmers under Land Reform projects are expected to be on their farms on a full-time basis, working the land and being available for the day-to-day management responsibilities. With an average farm size of close on 400 ha per farmer (Table 4.10 above), this requires hands-on attention.

4.7 RESPONDENTS ASSETS

4.7.1 Extension officers' operational equipment and communication facilities

The operating equipment and communicating facilities of extension officers are presented in Table 4.20 below. Items are ranked from the highest to the lowest frequencies. Percentages indicate the relative distribution of equipment amongst Extension officers.

Table 4.20: Availability of operational equipment and communication facilities, according to extension officer respondents (N=14)

	n	%
Transport	14	100
Cell Phone	14	100
Computer	13	93
Internet	12	86
Office furniture	12	86
Stationery	11	79
Printer	11	79
Presentation Manuals	8	57
Training and demonstration tools	7	50
Audio-visual facilities	2	14

According Table 4.20, all extension officers have transport and a cell phone to perform their duties, followed by 93 % with computers, and 86 % who have access to internet and office furniture.

4.7.2 Computer usage for work purposes by extension officer respondents

Computer usage for work purposes by extension officers is presented in Table 4.21 below.

Table 4.21: Computer usage for work purposes by extension officer respondents (N=14)

Computer usage	Extension officers		Male		Female	
	n	%	n	%	n	%
Yes	12	43	5	36	7	50
No	2	7	2	14	7	14
Every day	12	43	5	36	7	50
Twice per week	0	0	0	0	0	0
Once a week	1	4	1	4	0	0
Once every second week	1	4	1	4	0	0
Once per month	0	0	0	0	0	0
Less than once per month	0	0	0	0	0	0

Almost all the extension officers (12) indicated that they were using computers for work purposes, with only two indicating that they were not using their computers effectively. All of the seven female extension officers utilised their computers for work purposes. They did so every day, while only five male extension officers utilised their computers on a daily basis.

4.7.3 Implements/machinery on the farm

The state of repair of implements and items of machinery, as found on the farm at the time of acquisition of the farm, is presented in the Table 4.22 below. The researcher asked questions concerning the state of equipment/machinery that was found on the farm at the time of acquisition of the farm. Responses to this question were considered as being important, as the state of repair of farm machinery and equipment has a direct bearing on the prospective farmers' ability to produce.

Table 4.22: State of equipment/machinery found on the farm at the time of acquisition of the farm, according to the farmers respondents (N=120)

Implement	None		Poor		Acceptable		Very good		Totals
	n	%	n	%	n	%	n	%	
Pumping machine/boreholes	3	3	60	55	39	36	7	6	109
Tractor	17	39	5	11	22	50	0	-	44
Planter	17	40	7	17	18	43	0	-	42
Harvester	17	63	3	11	6	22	1	4	27
Plough	17	42	14	34	10	24	0	-	41
Sprayer	17	50	9	26	8	24	0	-	34
Ripper	18	81	1	5	2	9	1	5	22
Trailer	17	52	14	42	2	6	0	-	33
Irrigation equipment	17	50	8	23	8	24	1	3	34
Drinking trough	14	20	10	14	43	63	2	3	69
Poultry equipment	14	39	18	50	3	8	1	3	36

A total of 109 respondents answered the question on the state of the pumping machinery/boreholes, of which only six per cent indicated that the equipment was in a very good state of repair. Some 36 % indicated this equipment to be in an acceptable state, and 55 % responded that it was in a poor state. According to 50 % of respondents, the tractors were in an acceptable state. A total of 50 % of the respondents indicated that the poultry equipment was in a poor condition, while 63 % indicated that the drinking troughs were in an acceptable condition.

4.7.4 State of infrastructure found on the farm

Table 4.23 below indicates the condition of infrastructure on the farm at the time of acquisition of the farm.

Table 4.23: State of infrastructure found on the farm, as perceived by farmer respondents (N=120)

Infrastructure	None		Poor		Acceptable		Very good		Totals
	n	%	n	%	n	%	n	%	
House	0	0	45	41	54	49	11	10	110
Farm shed	3	3	41	47	39	45	4	5	87
Overnight facilities for small stock	17	27	26	41	18	29	2	3	63
Poultry houses	19	45	20	48	3	7	0	0	42
Piggery structure	19	70	4	15	3	11	1	4	27
Dams	7	8	26	32	41	51	7	9	81
Fencing	8	7	77	69	26	23	1	1	112
Roads	1	1	63	56	43	39	5	4	112
Dip tank	1	1	63	56	43	39	5	4	112
Other	16	73	1	5	5	22	0	0	22

A total of 49 % of respondents indicated that the house was in an acceptable condition, while only 10 % indicated the house as being in a very good condition, and 41 % indicated that the house was in a poor condition. The latter figure could have led to the fact that farmers did not want to stay on the farm. A total of 56 % indicated that the roads on the farm were in poor condition, which could have made it difficult for the farmers and extension officers to have access to those farms. There are also those who indicated that infrastructure, such as the farm sheds, overnight facilities for small stock, poultry houses, piggery structures, and dams, were in poor condition, while 69 % indicated that the fencing was in a poor condition. This could have made it somewhat frustrating to farm effectively with livestock.

CHAPTER 5
INSTITUTIONAL SUPPORT CHALLENGES AND ASPIRATIONS OF PLAS BENEFICIARIES WITHIN THE PROACTIVE LAND ACQUISITION STRATEGY

5.1 INTRODUCTION

This chapter focuses on support services which government departments provide to farmers including project meetings held, sourcing of agricultural information, farmers' associations, and training initiatives, as well as on production challenges, farm activities and respondents' farming aspirations.

5.2 SUPPORT SERVICES

Support services which government departments provided to farmers include institutional support, access to finance, stakeholder assistance, and extension services.

5.2.1 Institutional support services

5.2.1.1 Stakeholders support to farmers in obtaining farms

Table 5.1 below indicates the stakeholders which have supported farmers in obtaining farms. Their contribution, or degrees of involvement, are rated from 1, being most involved, to 3, being least involved. Frequencies and percentages have been indicated.

Table 5.1: The degree of involvement of stakeholders supporting farmers in obtaining farms, according to farmer respondents (N=120)

Stake holder	Most Involved(1)		Involved (2)		Least Involved (3)		Totals	
	(n)	%	n	%	n	%	n	%
DLA	89	86	13	13	1	1	103	46
DAFF	2	22	3	33	4	45	9	4
DARDLA	15	28	22	42	16	30	53	24
Previous owner	13	39	13	39	7	22	33	15
Self-acquisition	4	18	8	36	10	46	22	10
Other	0	-	1	50	1	50	2	1
Total	**123**	**n/a**	**60**	**n/a**	**39**	**n/a**	**222**	**100**

Table 5.1 shows that 89 of the 123 respondents (72 %) indicated that the DLA was mostly involved in supporting them to obtain farms, followed by DARDLA at 12 %, and previous farm owners at 11 %. A meagre 3 % indicated that they had acquired their farms themselves, without any assistance from any institution.

5.2.1.2 Reasons why it took more than six months to move to the farm after the farm was transferred

It is informative to know the reasons why it took a prospective farmer more than six months to move to their farms after the farms had been transferred. The reasons are presented in Table 5.2 below.

Table 5.2: Reasons why it took more than six months to move to the farm after the farm was transferred, according to farmer respondents (N=120)

Reasons	Yes(1)		No(2)		Totals	
	n	%	n	%	n	%
Lack of funds	37	32	20	13	57	22
Infighting amongst beneficiaries	17	15	33	22	50	19
Full time employed somewhere else	16	14	35	24	51	19
Social challenges	28	25	21	14	49	19
Delays from the previous owner	14	12	33	22	47	18
Other	2	2	7	5	9	3
Totals	**114**	**100**	**149**	**100**	**263**	**100**

According to Table 5.2, the two most important reasons for the delays were lack of funds (32 %) and social challenges (25 %). The excessive delays could have led to farms being vandalised. What is significant to note is that 149 (57 %) of responses (out of a total of 263) indicated that they had experienced no relocation problems.

5.2.1.3 Access to finance and financial institutions

Table 5.3 below identifies the financial institutions from which farmers received funds as operational money/support. The financial institutions are rated from most involved to the least involved.

Table 5.3: The involvement of financial institutions from which farmers received operational funds, according to farmer respondents (N=120)

Institution	Most involved		Involved		Least involved	
	n	%	n	%	n	%
Did not receive any financial assistance	76	63	0	0	0	0
Grants (government)	24	20	6	5	0	0
MAFISA	1	1	3	3	1	1
Commercial Banks	8	7	1	1	3	3
Stokvel	1	1	3	3	3	3
Land Bank	6	5	9	8	6	2
Other	0	0	0	0	0	0

Table 5.3 indicates that the majority of farmer respondents (76 = 63 %) did not receive any financial assistance to operate their farms. Government grants (20 %), commercial banks (7 %), and the Land Bank (5 %) were rated as being the most involved financial institutions in terms of providing operational financial assistance. On the other hand, other respondents noted that stokvels (3 %) and the Land Bank (2 %) were rated as being the least involved.

5.2.1.4 Stakeholders supporting farmers in the process of accessing the funds

The stakeholders which supported farmers in the process of accessing funds are shown in Table 5.4 below. The stakeholders are rated from the most important to the least important.

Table 5.4: Stakeholders supporting farmers in the process of accessing funds, according to farmer respondents (N=120)

Stakeholder	Most important		Important		Least important	
	n	%	n	%	n	%
National Department of Agriculture(DAFF)	4	3	7	5	0	0
Provincial Department of Agriculture (DARDLA)	31	26	5	4	1	1
Department of Land Affairs (DLA)	24	20	3	3	1	1
Mentor	5	4	0	0	1	1
Strategic Partner	2	2	1	1	2	2
Previous farm owner	1	1	2	1	1	1
I did it myself	9	8	3	2	1	1

Table 5.4 indicates that DARDLA, at 26 %, was rated as the most involved stakeholder in supporting farmers in getting funds to operate their farms, followed by DLA at 20 %. An important aspect is that 8 % of respondents indicated that they did it all by themselves. For farmers today to be successful, they must do more by themselves.

5.2.1.5 The purpose money was used for

The purpose for which the money loaned was used is shown in Table 5.5 below. The purpose is ranked from most important to the least important.

Table 5.5: The purpose money was used for, as indicated by farmer respondents and according to gender (N=120)

Purpose money was used for	Most important			Least important			Totals	Totals
	Gender			Gender			Male	Female
	Male	Female	Totals	Male	Female	Totals		
Buying production inputs	n 25 % 96	18 82	43	1 4	4 18	5	26	22
Buying equipment and machinery	n 10 % 63	10 67	20	6 37	5 33	11	16	15
Infrastructure development	n 13 % 72	14 78	27	5 28	4 22	9	18	18

Buying production inputs: p=0.1649; buying equipment and machinery: p=1 and infrastructure development: p=1

According to the data contained in Table 5.5, 43 farmers (96 % males and 82 % females) indicated that it was important for them to use the money to buy production inputs. This number is followed by 27 farmers (72 % males and 78 % females) who used the money for infrastructure development, and 20 farmers (63 % males and 67 % females) who indicated that it was important for them to use the money to buy equipment and machinery. The results in Table 5.5 show that the p-values for buying production inputs is p=0.1649; buying equipment and machinery is p=1; and infrastructure development is p=1. These values are greater than 0.05, which means that there are no statistically significant differences between males and females in terms of the usage of money to buy production inputs and equipment/machinery, and for infrastructure development.

5.2.2 Extension services

5.2.2.1 Extension officers assigned to farms

Figure 5.1 below indicates the deployment of extension officers to farms to provide extension services, according to the perceptions of farmer respondents.

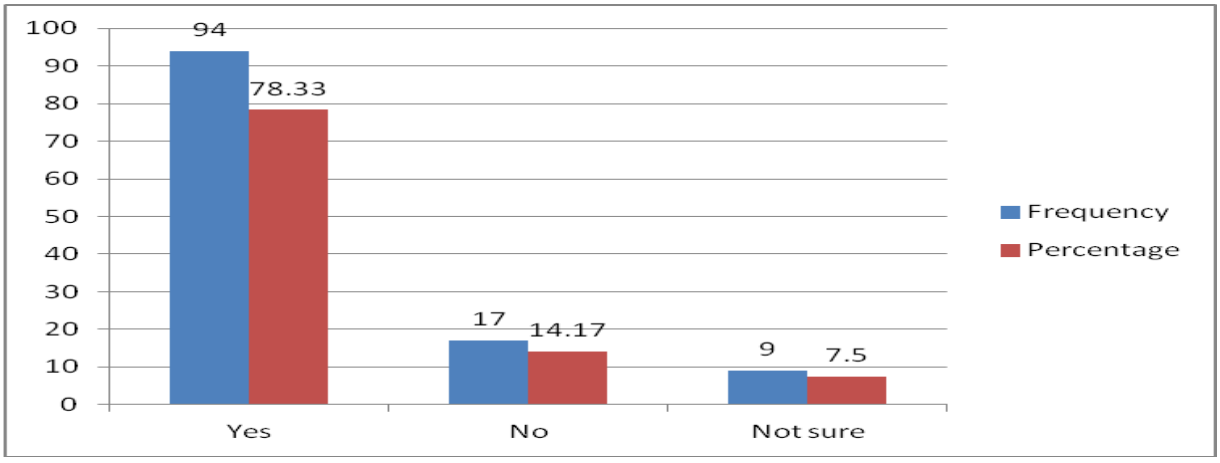

Figure 5.1: Extension officers assigned to the farms, according to the perceptions of farmer respondents

According to Figure 5.1, 94 farmers (the majority at 78 %) indicated that they do have an extension officer assigned to them. A worrying factor is that a total of 17 farmers (14 %) do not have an extension officer assigned to their farms, while 9 (7.5 %)

indicated that they are not sure whether they do have an extension officer assigned to them, or not.

5.2.2.2 The timing when the extension officer is assigned to the farm

Table 5.6 below indicates the time when an extension officer was assigned to a project, according to the farmer respondents by gender (frequencies and percentages are used).The timing of an extension officer being assigned to a farm is crucial, as extension care service for a farmer after moving on to a farm is very important for PLAS projects.

Table 5.6: The timing when the extension officer was assigned to the farm, according to farmer respondents by gender (N=120)

Time when the extension officer was assigned to the farm	Farmers			
	Male	Female	Totals	%
Before occupation of the farm	n 4 % 7	1 3	5	5
Immediately after the occupation of the farm	n 16 % 29	15 38	31	32
Between 1 to 6 months after occupation of the farm	n 19 % 34	19 48	38	40
>6 months after occupation of the farm	n 17 % 30	5 13	22	23
Totals	**56**	**40**	**96**	**100**

(Fisher's Exact Test p=0.1157)

According to Table 5.6, only five farmers (5 %) indicated that an extension officer was assigned to them before the occupation of the farm (7 % being males and 3 % being females), and 31 farmers (32 %) indicated that an extension officer was assigned to them immediately after occupation of the farm (29 % males and 38 % being females). The worrying factor is that the majority of 38 farmers (40 %) indicated that an extension officer was assigned to them between one to six months after occupation of the farm (48 % females, against 34 % males). It is also of concern that 22 farmers (23 %) indicated that an extension officer was assigned to them more than 6 months after they had occupied the farm (30 % males and 13 % females).

According to the Fishers Exact Test, p= 0.1157. A p-value >0.05 indicates no statistically significant association/relationship between males and females in terms of the waiting period for an extension officer to be assigned to the farm. The worrying factor is that 63 % of extension officers arrived on the farm to support the farmers between one to even more than 6 months after the farmers had occupy the farm.

5.2.2.3 Project visits by an extension officer

The frequency of project visits by extension officers is presented in Table 5.7 below.

Table 5.7: Project visits by extension officers, as perceived by both respondent categories

Frequency of project visits by extension officers	Farmers			Extension officers		
	Male	Female	Total	Male	Female	Total
Once in two weeks	29 (48)	16 (39)	45	6 (86)	4 (57)	10
Monthly	20 (33)	18 (44)	38	1 (14)	2 (29)	3
Longer than once a month	11 (18)	7 (17)	18	0 0	1 (14)	1
Total	60	41	101	7	7	14

Fisher's Exact Test: Farmers p=0.5747; Extension officers p=0.3392

According to Table 5.7, 45 farmers (48 % males and 39 % females) and 10 extension officers (86 % male and 57 % female) indicated that the projects were visited once every two weeks, while 38 farmers (44 % females 33 % males) and three extension officers (14 % males and 29 % females) indicated that an extension officer visited their projects on a monthly basis. Only18 farmers (18 % male and 17 % female) and one female extension officer (14 %) indicated that an extension officer took longer than a month to visit their projects.

The Fisher's Exact Test for farmers indicate p-value>0.05 for both the farmers and the extension officers in terms of project visits by the extension officers. This means that there is no statistically significant association/relationship between male and female farmer respondents in terms of project visits by extension officers. A worrying

factor is that there are still extension officers who visit their projects only on a monthly or even longer basis. Post-settlement support is critical for the success of PLAS projects, and project visits by extension officers is a key component of this.

5.2.2.4 Most important service offered by the extension officers when visiting farms

The three most important services offered by extension officers, as viewed by both the farmer and the extension officer respondents, are presented in Table 5.8 below. The services are ranked from 1 being the most important service, to 3 indicating the least important service.

Table 5.8: The three most important services offered by extension officers when visiting farms, according to both respondent categories

Extension service	Most important		Important		Least important	
	n	%	n	%	n	%
Farmers (N=120)						
Technical advice	66	55	9	8	7	6
Training	6	5	22	18	20	17
Attending farmers meetings	4	3	23	19	14	12
Demonstrations	14	12	15	13	22	18
No service offered	14	12	0	0	0	0
Extension officers (N=14)						
Technical advice	13	93	0	0	0	0
Training	0	0	4	29	0	0
Attending farmers meetings	0	0	1	7	2	14
Demonstrations	1	7	6	43	0	0
No service offered	0	0	0	0	0	0

Table 5.8 illustrates that 55 % of farmers rated the technical advice they received as being an important service offered by extension officers when visiting their farms, against 93 % of extension officers. On the other hand, 43 % of extension officers indicated demonstrations as being an important service, against only 12 % of the farmers. An alarming 12 % of farmer respondents indicated that no service was offered.

5.2.2.5 Improvement of extension services, according to farmer respondents

Table 5.9 below indicates how farmer respondents consider that extension services can be improved.

Table 5.9: How to improve extension services, as perceived by farmer respondents (N=120)

How can extension services be improved	Fully agree		Agree		Disagree		Totally disagree		Totals	
	n	%	n	%	n	%	n	%	n	%
Retraining the extension officers	40	35	41	36	27	23	7	6	115	16
Providing working tools for extension officers	60	51	43	36	14	12	1	1	118	17
Close monitoring of extension officers by their supervisors	40	34	36	31	32	28	8	7	116	17
Introducing mentorship programme to both the extension officers and the farmers	47	39	50	43	18	15	4	3	119	17
Extension officers must be a good communicators	71	61	42	37	1	1	1	1	115	16
Extension officers to visit projects more often	70	59	42	36	5	4	1	1	118	17

According to the content of Table 5.9, 61 % of farmer respondents fully agreed with the statement that an extension officer must be a good communicator, followed by 59 % who were of the opinion that an extension officer needs to visit projects more often. It is interesting to note that 51 % of farmer respondents agreed with the statement that extension officers must be provided with the necessary working tools.

5.3 PROJECT MEETINGS

5.3.1 Projects meetings, as perceived by both respondent categories

Table 5.10 below indicates how often farmers hold project meetings, who calls or organises the meeting, whether minutes are kept of all proceedings of the meetings, how often the attendance registers are completed, and whether records of apologies for absences from the project meetings are kept.

Table 5.10: Projects meetings, as perceived by both respondent categories

Frequency of holding project meetings	Farmers (N=120)		Extension officers (N=14)	
	n	%	n	%
Once a week	10	8	0	0
Once in two weeks	1	1	0	0
Once a month	48	40	4	29
Once in two months	32	26	7	50
Once in three months	14	12	2	14
Once in six months	3	3	1	7
Once in a year	2	2	0	0
Not at all	9	8	0	0
Who call the meetings				
Chairperson	43	32	9	38
Secretary	26	19	3	13
Chairperson and the secretary	33	24	2	8
Extension officer	16	12	10	41
Mentor	7	5	0	0
Strategic partner	3	2	0	0
Other	8	6	0	0
Minutes				
Yes	72	65	14	100
No	12	11	0	0
I don't know	27	24	0	0
Attendance register				
Never	18	16	0	0
Sometimes	34	31	2	14
Always	59	53	12	86
Apologies				
Never	23	20	1	7
Sometimes	44	40	2	14
Always	44	40	11	79

According to Table 5.10, 50 % of the extension officers indicated that farmers held their meetings once in every two months, against 40 % of the farmers who indicated that they held their projects meetings once a month. Only 7 % of farmer respondents indicated that they did not hold project meetings at all. It is clear that a major proportion of project meetings are called by a chairperson, as indicated by 38 % of extension officers and 32 % of farmers. A total of 41 % of extension officers indicated that most of the project meetings were called by the extension officer themselves, against only 12 % indicated as such by farmer respondents. This is an indication that farmers are not committed to their projects and/or do not take ownership of their projects.

All extension officers, against 65 % of farmer respondents, indicated that they keep minutes of all proceedings of project meetings. An alarming factor is that 24 % of farmer respondents do not know whether minutes are kept or not, together with the

11 % who indicated that they did not keep minutes. A total of 86 % of extension officers indicated that attendance registers were completed regularly by all project members, against 53 % of farmers, followed by 31 % indicating sometimes, and 16 % never. A total of 79 % of extension officers, against 40 % of farmers, indicated that apologies for absence from the projects meetings were always recorded. A worrying factor is that 40 % indicated 'sometimes', and 20 % 'never'.

5.3.2 Percentage of project members attending the meetings

The percentages of farmers attending project meetings are presented in Table 5.11 below.

Table 5.11: Percentages of project members attend project meetings, as perceived by both respondent categories

Percentage members attend project meetings	Farmers (N=120)		Extension officers (N=14)	
	n	%	n	%
No answer	11	9	0	0
20	3	3	0	0
30	1	1	0	0
40	4	2	1	7
45	1	1	0	0
46	1	1	0	0
50	16	13	2	14
55	2	2	1	7
56	1	1	0	0
60	24	20	3	22
65	1	1	0	0
70	13	11	2	14
75	1	1		
80	11	9	2	14
85	1	1	0	0
88	1	1	0	0
90	18	15	3	22
95	3	2	0	0
96	1	1	0	0
100	6	5	0	0
Total	**120**	**100**	**14**	**100**

The average attendance of project meetings by farmers is 62 %, as indicated by farmer respondents, and 68 % according to extension officers. There is a serious need to increase the percentage of farmers attending project meetings.

5.4 AGRICULTURAL INFORMATION SOURCE

5.4.1 Information sources, as indicated by both categories of respondents

The use of information sources, as indicated by both respondent categories, is presented in Tables 5.12 and 5.13 below.

Table 5.12: Source of agricultural information by farmer respondents (N=120)

Source of agricultural information	Farmers						
	P-value	More often			less often		
		Males	Females	Totals	Males	Females	Total
Cell phones	0.4213	42 58	30 42	72	26 67	13 33	39
Internet	0.7936	12 67	6 33	18	55 62	34 38	89
Newspapers/magazines	0.8036	12 57	9 43	21	55 63	33 37	88
Emails	0.2621	6 67	3 33	9	58 60	39 40	97
Extension officers	0.2371	40 68	19 32	59	28 56	22 44	50
Watch Agric programmes on Television	0.0922	16 48	17 52	33	53 66	27 34	80
Reading agricultural magazines/news papers	0.1573	25 60	17 40	42	42 60	28 40	70
Research (ARC)	0.4294	9 53	8 47	17	55 63	32 37	87
NGOs	0.2757	12 75	4 25	16	51 59	35 41	86
Community organisations	0.6419	14 58	10 42	24	54 63	31 37	85

According to Table 5.12, a total of 72 farmer respondents (58 % males and 42 % females) indicated that they use a cell phone more often for receiving agricultural information, followed by 59 (68 % males and 32 % females) who rely on extension officers more often (regularly) for agricultural information. It is noted that 42 Farmers (60 % males and 40 % females) rely on reading agricultural magazines. The worrying factor is that most of the farmers do not use, or do not have access to, the internet, television or research stations, such as the ARC, to access information. Only 24 farmers indicated that they use community organisations quite often as an information source. According to the p-value, there is no significant difference

between male and female farmer respondents in terms of sourcing of agricultural information.

Table 5.13: Source of agricultural information by extension officer respondents (N=14)

Source of agricultural information	Extension officers						
	P-Value	More often			less often		
		Male	Females	Totals	Male	Female	Total
Cell phones	0.4038	5 45	6 55	11	2 67	1 33	3
Internet	0.3671	3 60	2 40	5	4 44	5 56	9
Newspapers/magazines	0.4038	1 33	2 67	3	6 55	5 45	11
Emails	0.5921	3 38	5 62	8	4 67	2 33	6
Fellow extension officers	1	5 50	5 50	10	2 50	2 50	4
Watch Agric programmes on Television	0.05	1 100	0 0	1	6 46	7 54	13
Reading agricultural magazines/news papers	0.5594	1 33	2 67	3	6 60	4 40	10
Research (ARC)	0.1632	4 80	1 20	5	3 38	5 62	8
NGOs	0.5385	1 100	0 0	1	6 50	6 50	12
Community organisations	0.6419	0 0	0	0	7 54	6 46	13

According to Table 5.13, extension officers (11) most often make use of a cell phone as a source of agricultural information, followed by emails (five), the internet (five), and the ARC (five). According to Fishers Exact Test P-value> 0.05, no significant difference could be found between male and female extension respondents in terms of how they receive agricultural information.

5.5 FARMERS' PARTICIPATION AND MEMBERSHIP OF ORGANISATIONS

5.5.1 Farmer organisations

Farmer organisations to which farmers belong are presented in Table 5.14 below. The aim is to determine whether the farmers participate in the commercialised agribusiness sector.

Table 5.14: Membership of farmer organisations, according to farmer respondents (N=120)

Farming organisation	Member				Management structure			
	Yes		No		Yes		No	
	n	%	n	%	n	%	n	%
I do not belong to any organisation	2	2	6	5	0	0	7	6
Farming Cooperatives	58	48	10	8	16	13	47	39
Community Organisations	16	13	36	30	4	3	27	23
Grain SA	25	21	31	26	2	2	33	28
AgricSA	6	5	46	39	1	1	21	18
AFASA	28	23	31	26	3	3	32	27
NAFU	18	15	37	31	1	1	28	23
Poultry Association	14	12	40	33	1	1	26	22
Other	2	2	2	2	1	1	4	3

A total of 48 % farmers are members of farming cooperatives, while only 13 % are part of the management structures, 23 % are members of AFASA and only three per cent part of the management structure. 21 % Farmers are members of Grain SA and only 2 % are part of management. A total of 43 % of farmers are members of farmer organisations, namely AgriSA, AFASA and NAFU.

5.5.2 Community organisations

The details of membership of community organisations, according to farmer respondents, are presented in Table 5.15 below.

Table 5.15: Membership of community organisations, according to farmer respondents (N=120)

Organisation	Member				Management structure			
	Yes		No		Yes		No	
	n	%	n	%	n	%	N	%
Church	97	81	22	18	18	15	87	73
School	26	22	780	67	7	6	43	36
Stokvel	20	17	88	73	5	4	42	35
Burial society	74	62	38	32	16	13	71	59
Social club	21	18	84	70	6	5	40	33
Study groups	17	14	89	73	5	4	38	32
Other	3	3	14	12	1	1	8	7

The majority of the farmers are members of a church organisation (81 %), of which only 15 % form part of the organisation's management, followed by 62 % who belong to a burial society (with only 13 % serving as management). Study group membership (17) is down to a low 14 %.

5.6 PRODUCTION CHALLENGES

The extent to which agricultural production challenges encountered by farmers on their farms, and which have been addressed, (as perceived by farmer respondents) is indicated in Table 5.16 below.

Table 5.16: The extent to which agricultural production challenges encountered by farmers have been addressed, as perceived by farmer respondents (N=120)

Agricultural challenges	Not at all		Some what		Fully addressed		Totals	
	n	%	n	%	n	%	N	%
Diseases	9	8	66	55	7	6	82	69
Water	30	25	37	31	16	13	83	69
Drought	52	43	24	20	10	8	86	71
Flood	83	28	20	17	7	6	110	51
Finance	69	58	28	23	5	4	102	85
Veld fires	56	47	16	13	23	19	95	79
Livestock mortality	36	30	38	32	7	6	81	68

According to the Table 5.16, of the 120 interviewed farmers, 69 (58 %) indicated finance as being a challenge that was not addressed at all. Only five (4 %) indicated that financial problems were fully addressed, 56 (47 %) indicated that the problem of veld fires were not addressed at all, while 23 (19 %) indicated that this was fully addressed. A total of 66 (55 %) indicated disease as being a challenge that was somewhat addressed, and a total of 52 (43 %) indicated that drought (as a challenge) was not addressed at all.

5.7 FARMERS' FARMING ASPIRATIONS

5.7.1 The most important sectors to improve production over the next five years

The most important sectors of production that farmers aspire to improve over the next five years are shown in Table 5.17 below.

Table 5.17: The most important sectors to improve production, as aspired to by farmer respondents (N=120)

Sector of production	Frequency	Percentage
Field crop production	88	73
Vegetable production	58	48
Livestock production: Beef	60	50
Small stock production	10	8
Livestock production: Dairy	3	3
Poultry production	22	18
Other	0	0

According to Table 5.17, the two most important sectors of production that farmers envisage themselves improving over the next five years are field crop production 73 % and livestock production, at 50 %. This is an indication that most of the farmers in Nkangala District are involved with livestock and field crop production. However, 48 % also indicated improvement in vegetable production as being important.

5.7.2 Factors contributing to production

Contributing factors to stimulate production (according to farmer respondents) are shown in Table 5.18 below. Respondents were merely asked if they agree or not.

Table 5.18: Factors contributing to production, as perceived by male and female farmer respondents (N=120)

Contributing factors	Agree				Disagree		
	P-Value	Male	Female	Totals	Male	Females	Totals
Getting financial assistance	0.6083	n 72	47	119	1	0	1
		% 61	39	99	1	0	
Capacity building	0.4422	n 70	44	114	2	1	3
		% 61	39	95	3	2	
Full time commitment in farm activities	0.3528	n 70	45	115	3	2	5
		% 61	39	96	4	4	
Getting a mentor	0.898	n 63	37	100	9	10	19
		% 63	37	83	13	21	
Getting a strategic partner	0.0584	n 31	14	45	39	31	70
		% 69	31	38	56	68	
Buying additional land	0.1517	43	29	72	28	18	46
		60	40	60	39	38	
Buying additional inputs	0.0755	65	46	111	5	0	5
		58	42	93	7	0	

P-value>0.05

Table 5.18 above indicates that getting financial assistance (99 % of farmers) and being committed full-time to the farm (96 %) are the two most important factors contributing to production, as perceived by the farmer respondents. According to the p-value (>0.05), there is no statistic significant difference between male and female farmers in terms of 'agree' or 'disagree' with most of the factors contributing to production. There is, however, an indication of a significant difference (p=0.0584) between male and female respondents about securing a strategic partner. Significantly more male than females respondents are in favour of getting a strategic partner.

5.7.3 Rating of the farm as an enterprise

The rating of the farm as an enterprise, as perceived by farmers, is shown in Table 5.19 below.

Table 5.19: Rating of the farm as an enterprise, according to farmer respondents (N=120)

Farm rating categories	Frequency	Percentages
Very poor	14	12
Poor	29	24
Good	71	59
Very good	6	5
Totals	**120**	**100**

A total of 59 % (71) of farmers rated their farm enterprise as good, and very good by 5 %. However, 24 % rated their enterprise as poor, and 12 % as very poor.

5.8 TRAINING ATTENDED AND TRAINING INSTITUTIONS PROVIDING TRAINING TO FARMERS

5.8.1 Rating of the dry land crop production courses

The ratings of the dry land crop production courses, presented by different service providers, as perceived by both farmers and extension officers are presented in Table 5.20 below. A scale of 3 = good; 2 = fair and 1 = poor was used.

Table 5.20: The rating of the crop production dry land courses by both respondent categories

Service provider	Rating							
	Farmers (N=120)				Extension officers (N=14)			
	3 Good	2 Fair	1 Poor	Totals	3 Good	2 Fair	1 Poor	Totals
1 DARDLA	4	10	5	19	0	0	0	0
2 DAFF	0	0	0	0	0	0	0	0
3 DLA	0	0	0	0	0	0	0	0
4 AgriSETA	2	0	0	2	1	0	0	1
5 Universities	0	0	0	0	1	0	0	1
6 Private Company	20	14	0	34	0	1	0	1
7 Land Bank	0	0	0	0	0	0	0	0
8 Agricultural Colleges	0	0	0	0	0	0	0	0
9 ARC	1	1	0	2	0	0	0	0
10 DEDET	0	0	0	0	0	0	0	0
Totals	**27**	**25**	**5**	**57**	**2**	**1**	**0**	**3**

Not all farmers and extension officers rated the courses.

According to Table 5.20, only 57 (48 %) farmers and 3 (21 %) extension officers received training on crop production under dry land conditions. The training initiatives were attended as follows: a total of 34 farmers and 1 extension officer received training offered by the Private Company, of which attendees 20 farmers rated the training as good, 14 rated it as fair, and the 1 extension officer rated it as fair. A further 19 farmers received training offered by DARDLA, of which 10 farmers rated the training as fair, 4 as good and 5 as poor. Only 2 farmers attended the training offered by ARC, with 1 rating the training as good, and 1 rating it as fair. A training course offered by a university was rated as good by the extension officer who attended the training. Training offered by the AgriSETA was rated as good by 2 farmers and 1 extension officer. From Table 5.20, it is suggested that the Private Company and AgriSETA offered better the training to farmers on crop production (under dry land). There remains, however, a serious need for training of PLAS beneficiaries and extension officers.

5.8.2 Rating of the crop production course for irrigated land

The ratings of the crop production courses for irrigated land, by both farmer and extension officer respondents, are presented in Table 5.21 below. A scale of 3 = good, 2 = fair and 1 = poor was used.

Table 5.21: Rating of the crop production course for irrigated land by the farmer and extension officer respondents.

Service provider	Rating							
	Farmers (N=120)				Extension officers (N=14)			
	3 Good	2 Fair	1 Poor	Totals	3 Good	2 Fair	1 Poor	Totals
1 DARDLA	0	0	1	1	0	0	0	0
2 DAFF	0	0	1	1	0	0	0	0
3 DLA	0	0	0	0	0	0	0	0
4 AgriSETA	2	0	0	2	1	0	0	1
5 Universities	0	0	0	0	1	0	0	1
6 Private Company	9	8	0	17	1	0	0	1
7 Land Bank	0	0	0	0	0	0	0	0
8 Agricultural Colleges	0	0	0	0	0	0	0	0
9 ARC	0	1	0	1	0	0	0	0
10 DEDET	0	0	0	0	0	0	0	0
Totals	**11**	**9**	**2**	**22**	**3**	**0**	**0**	**3**

Not all farmers and extension officers rated the courses.

According to the data in Table 5.21, only 22 (18 %) of the farmers and 3 (21 %) of the extension officers attended training on crop production on irrigated land, offered by six independent institutions. These courses were rated as follows by respondents: a total of 17 farmers and 1 extension officer attended training sessions provided by a Private Company. Nine farmer respondents rated the training as good, eight as fair and one extension officer rated it as good. Two farmers and one extension officer attended training provided by AgriSETA and both the farmer and the one extension officer respondents rated the training as good. Only one farmer attended training offered by the ARC, and another one the training offered by DAFF, and both rated the training as fair. Training offered by a university was attended by only one extension officer, who rated the training as good.

5.8.3 Rating of large stock animal production course

The ratings of large stock animal production courses, as perceived by both respondent categories, are presented in Table 5.22 below. A scale of 3 = good, 2 = fair and 1 = poor was used.

Table 5.22: Rating of large stock animal production courses by farmer and extension officer respondents

Service provider	Rating							
	Farmers (N=120)				Extension officers (N=14)			
	3 Good	2 Fair	1 Poor	Totals	3 Good	2 Fair	1 Poor	Totals
1 DARDLA	5	15	1	21	0	0	0	0
2 DAFF	0	0	1	1	0	0	0	0
3 DLA	0	2	0	2	0	0	0	0
4 AgriSETA	2	0	0	2	0	0	0	0
5 Universities	0	0	0	0	0	1	0	1
6 Private Company	4	0	1	5	2	0	0	2
7 Land Bank	0	0	0	0	0	0	0	0
8 Agricultural Colleges	0	0	0	0	0	0	0	0
9 ARC	16	5	0	21	1	0	0	1
10 DEDET	0	0	0	0	0	0	0	0
Totals	**27**	**22**	**3**	**52**	**3**	**1**	**0**	**4**

Not all farmers and extension officers rated the courses.

Table 5.22 shows that a total of 52 (43 %) farmer and four (29 %) extension officer respondents attended training courses on large stock animal production. The training offered by DARDLA was attended by 21 farmers and the training was rated as fair by 15 farmers, good by 5 farmers and poor by 1 farmer. A total 21 farmers and 1 extension officer attended training courses offered by ARC, and 16 farmers and 1 extension officer rated the training as good, while 5 farmers rated it as fair. The course provided by the Private Company was rated as good by 4 farmers and by 2 extension officers. More farmers rated the course provided by ARC (16) and the Private Company (4) as good, than they did the course offered by DARDLA.

5.8.4 Rating of small stock animal production training courses

The ratings of small stock animal production courses, by farmers and extension officer respondents, are presented in Table 5.23 below. A scale of 3 = good, 2 = fair and 1 = poor was used.

Table 5.23: Ratings of small stock animal production courses, as perceived by the farmer and extension officer respondents

Service provider	Rating							
	Farmers (N=120)				Extension officers (N=14)			
	3 Good	2 Fair	1 Poor	Totals	3 Good	2 Fair	1 Poor	Totals
1 DARDLA	0	1	0	1	0	0	0	0
2 DAFF	0	0	0	0	0	0	0	0
3 DLA	0	0	0	0	0	0	0	0
4 AgriSETA	2	0	0	2	0	0	0	0
5 Universities	0	0	0	0	0	1	0	1
6 Private Company	0	1	0	1	1	1	0	2
7 Land Bank	0	0	0	0	0	0	0	0
8 Agricultural Colleges	0	0	0	0	0	0	0	0
9 ARC	5	10	0	15	0	0	0	0
10 DEDET	0	0	0	0	0	0	0	0
Totals	**7**	**12**	**0**	**19**	**1**	**2**	**0**	**3**

Not all farmers and extension officers rated the courses.

Table 5.23 indicates that a total of 19 (16 %) farmers and 3 (21 %) extension officers attended a selection courses of small stock animal production. A training course provided by ARC was attended by 15 farmers, of who 5 rated the course as good, while 10 rated it as fair. Only 2 farmers attended the training course offered by the AgriSETA, and both rated the course as good. The course offered by the Private Company was attended by 1 farmer and 2 extension officers, of whom 1 extension officer and the 1 farmer rated the course as fair. One extension officer rated it as good. The course offered by DARDLA was attended by only 1 farmer, who rated it as fair.

5.8.5 Rating of vegetable production courses

The quality of vegetable production courses, as rated by both respondent categories, is presented in Table 5.24 below. A scale of 3 = good, 2 = fair and 1 = poor was used.

Table 5.24: Rating of vegetable production courses, as rated by the farmer and extension officer respondents

Service provider	Rating							
	Farmers (N=120)				Extension officers (N=14)			
	3 Good	2 Fair	1 poor	Totals	3 Good	2 Fair	1 Poor	Totals
1 DARDLA	15	3	1	19	0	0	0	0
2 DAFF	0	0	0	0	0	0	0	0
3 DLA	0	0	0	0	0	0	0	0
4 Agri SETA	3	0	0	3	0	0	0	0
5 Universities	0	0	0	0	1	0	0	1
6 Private Company	7	7	0	14	0	0	0	0
7 Land Bank	0	0	0	0	0	0	0	0
8 Agricultural Colleges	0	0	0	0	0	1	0	1
9 ARC	0	1	0	1	0	0	0	0
10 DEDET	0	0	0	0	0	0	0	0
Totals	**25**	**11**	**1**	**37**	**1**	**1**	**0**	**2**

Not all farmers and extension officers rated the courses.

The data in Table 5.24 indicates that a total of 37 (31 %) farmers, and only two (14 %) extension officers, attended the scheduled vegetable production training courses. The training was offered by four institutions. A total of 19 farmer respondents attended the training course offered by DARDLA, of whom 15 rated it as good, 3 rated it as fair, and 1 as poor. A total of 14 farmers attended the training course offered by the Private Company, and 7 rated the training as good, while a further 7 rated it as fair. Three farmers attended the course offered by AgriSETA and rated the training as good. Only 1 farmer respondent attended the training course offered by the ARC and rated the training as fair. The training course offered by the university was attended by 1 extension officer, who rated it as good. Training offered by AgriSETA was rated as good by the 3 farmers attending the course.

5.8.6 Rating of poultry broiler production training courses

The evaluation of broiler production training courses, as rated by both respondent categories, is presented in the Table 5.25 below. A scale of 3 = good, 2 = fair and 1 = poor was used.

Table 5.25: Rating of broiler production training course by both respondent categories

Service provider	Rating							
	Farmers (N=120)				Extension officers (N=14)			
	3 Good	2 Fair	1 poor	Totals	3 Good	2 Fair	1 Poor	Totals
1 DARDLA	4	1	0	5	0	0	0	0
2 DAFF	0	0	0	0	0	0	0	0
3 DLA	1	1	0	2	0	0	0	0
4 AgriSETA	1	1	0	2	0	0	0	0
5 Universities	0	0	0	0	0	0	0	0
6 Private Company	4	1	0	5	3	0	0	3
7 Land Bank	0	0	0	0	0	0	0	0
8 Agricultural Colleges	0	0	0	0	0	1	0	1
9 ARC	17	2	0	19	0	0	0	0
10 DEDET	0	0	0	0	0	0	0	0
Totals	**27**	**6**	**0**	**33**	**3**	**1**	**0**	**4**

Not all farmers and extension officers rated the courses.

The contents of Table 5.25 indicates that 33 (28 %) farmers and 4 (29 %) extension officers attended scheduled training courses on broiler production. The majority (19) of farmers attended training offered by the ARC, of who 17 rated the training as good, and 2 as fair. Only 5 farmer respondents attended the training course offered by a Private Company, of who four rated the training as good and only 1 rated it as fair. The training offered by AgriSETA was attended by 2 farmers, of whom 1 rated it as good and the other as fair. The training course offered by DLA was attended by 2 farmers, of whom 1 rated it as good and the other as fair. A total of 3 extension officers attended the training course offered by the Private Company and all rated the training as good. Only 1 extension officer attended the broiler production course presented by Agricultural Colleges and rated it as fair.

Judging by the ratings of farmers and extension officers, it is clear that the DARDLA, ARC and Private Sectors offered good courses on broiler production. The DARDLA should be encouraged to send farmers and extension officers for training on broiler production to the ARC and the Private Company. Academic institutions, such as universities and agricultural colleges, should similarly be involved in providing broiler production courses to both farmers and extension officers.

5.8.7 Rating of farm management training

The evaluation of farm management courses, as rated by both respondent categories, is presented in Table 5.26 below. A scale of 3 = good, 2 = fair and 1 = poor was used.

Table 5.26: Rating of farm management courses by the farmer and extension officer respondents

Service provider	Rating							
	Farmers(N=120)				Extension officers (N=14)			
	3 Good	3Fair	1 poor	Totals	4Good	2 Fair	1 Poor	Totals
1 DARDLA	6	8	0	14	1	0	0	1
2 DAFF	0	0	0	0	0	0	0	0
3 DLA	0	0	0	0	0	0	0	0
4 AgriSETA	1	0	0	1	0	0	0	0
5 Universities	1	0	0	1	0	0	0	0
6 Private Company	4	8	0	12	0	0	0	0
7 Land Bank	0	0	0	0	0	0	0	0
8 Agricultural Colleges	0	0	0	0	0	0	0	0
9 ARC	2	1	0	3	0	0	0	0
10 DEDET	1	0	0	1	0	0	0	0
Totals	**15**	**17**	**0**	**32**	**1**	**0**	**0**	**1**

Not all farmers and extension officers rated the courses.

The data in Table 5.26 indicates that 32 (27 %) farmers and 1 extension officer (7 %) attended the training courses on farm management. The training course offered by DARDLA was attended by 14 farmers. The training was rated as good by 6 farmers and 1 extension officer, and fair by 8 farmers. A total of 12 farmers attended the

training course offered by the Private Company, of who 4 rated the course as good and 8 as fair. The training course offered by the university was rated as good by the 1 farmer who attended it. It is clear that farmers were not satisfied with the training offered to them by the above institutions. The department should consider other institutions, such as universities and agricultural colleges for the training of farmers on farm management.

5.8.8 Rating of pest management courses

The evaluation of pest management training, as rated by both respondent categories, is presented in Table 5.27 below. A scale of 3 = good, 2 = fair and 1 = poor was used.

Table 5.27: Rating of pest management courses by both respondents categories

Service provider	Rating							
	Farmers (n=120)				Extension officers (n=14)			
	3 Good	2 Fair	1 poor	Totals	3 Good	2 Fair	1 Poor	Totals
1 DARDLA	2	5	0	7	0	0	0	0
2 DAFF	0	0	0	0	1	0	0	1
3 DLA	0	0	0	0	0	0	0	0
4 AgriSETA	1	0	0	1	0	0	0	0
5 Universities	0	0	0	0	1	0	0	1
6 Private Company	5	13	0	18	0	2	0	2
7 Land Bank	0	0	0	0	0	0	0	0
8 Agricultural Colleges	0	0	0	0	0	0	0	0
9 ARC	1	0	0	1	0	0	0	0
10 DEDET	0	0	0	0	0	0	0	0
Totals	**9**	**18**	**0**	**27**	**2**	**2**	**0**	**4**

Not all farmers and extension officers rated the courses.

According to the data presented in Table 5.27, 27 (23 %) farmers and 4 (29 %) extension respondents attended a pest management course. A total of 18 farmers attended the training offered by a Private Company, of who 5 rated the training as good, while 13 farmers and 2 extension officers rated it as fair. Seven farmer

respondents attended a course offered by DARDLA, of whom five rated the training as fair, and only two as good. Only 1 farmer attended the training course offered by ARC and rated it as good. AgriSETA also presented a course on pest management. Only 1 farmer attended it and rated the course as good. Only 1 extension officer attended the course on pest management offered by a university and rated the course as good. One extension officer attended the course offered by DAFF and rated the course as good.

5.8.9 Rating of record keeping training course

The evaluation of record keeping courses, as perceived by both respondent categories, is presented in the Table 5.28 below. A scale of 3 = good, 2 = fair and 1 = poor was used.

Table 5.28: Rating of record keeping course offered, as perceived by both respondent categories

Service provider	Rating							
	Farmers (N=120)				Extension officers (N=14)			
	3 Good	2 Fair	1 poor	Totals	3 Good	2 Fair	1 Poor	Totals
1 DARDLA	5	6	0	11	0	0	0	0
2 DAFF	0	0	0	0	0	0	0	0
3 DLA	0	0	0	0	0	0	0	0
4 AgriSETA	2	0	0	2	0	0	0	0
5 Universities	0	0	0	0	0	0	0	0
6 Private Company	2	6	0	8	0	0	0	0
7 Land Bank	0	0	0	0	0	0	0	0
8 Agricultural Colleges	0	0	0	0	1	0	0	1
9 ARC	1	2	0	3	0	0	0	0
10 DEDET	1	0	0	1	0	0	0	0
Totals	**11**	**14**	**0**	**25**	**1**	**0**	**0**	**1**

Not all farmers and extension officers rated the courses.

According to the data in Table 5.28, 25 (21 %) farmers and one (7 %) extension officer respondent attended the scheduled record keeping training course provided

by DARDLA. Five of the attending farmers rated the training course, as good while six rated it as fair. Only 8 farmers attended the course offered by a Private Company, and 2 rated the training course as good and 6 rated it as fair. Only 2 farmers attended the course offered by AgriSETA and both rated the training course as good. One farmer attended the training course offered by DEDET and rated the training course as good. The course presented by the agricultural colleges was attended by 1 extension officer who rated it as good. From the above, it is clear that there exists a serious skills shortage in terms of record keeping, among the extension officers and the farmers.

5.8.10 Rating of financial management training course

The rating of the financial management training courses, by both respondent categories, is presented in Table 5.29 below. A scale of 3 = good, 2 = fair and 1 = poor was used.

Table 5.29: Rating of financial management training by both respondent categories

Service provider	Rating							
	Farmers(N=120)				Extension officers (N=14)			
	3 Good	2 Fair	1 poor	Totals	3 Good	2 Fair	1 Poor	Totals
1. DARDLA	3	5	0	8	1	0	0	1
2. DAFF	0	0	0	0	0	0	0	0
3. DLA	0	1	0	1	0	0	0	0
4. AgriSETA	1	0	0	1	0	0	0	0
5. Universities	1	0	0	1	1	0	0	1
6. Private Company	3	6	0	9	0	0	0	0
7. Land Bank	0	0	0	0	0	0	0	0
8. Agricultural Colleges	0	0	0	0	0	0	0	0
9. ARC	0	2	0	2	0	0	0	0
10. DEDET	2	0	0	2	0	0	0	0
Totals	**10**	**14**	**0**	**24**	**2**	**0**	**0**	**2**

Not all farmers and extension officers rated the courses.

The contents of Table 5.29 shows that 24 (20 %) farmers and 2 (14 %) extension officers attended training courses on financial management. The training was rated as follows: a course offered by a Private Company was attended by 9 farmers, with 3 rating the course as good, while 6 rating it as fair. The training course offered by DARDLA was attended by 8 farmers and 1 extension officer, with 3 farmers and 1 extension officer rating the course as good, and 5 farmers rating it as fair. The training course offered by ARC was attended by 2 farmers and both rated the course as fair. The training course offered by DEDET was rated as good by 2 farmers, and the course offered by the university was rated as good by 1 farmer and 1 extension officer.

5.8.11 Rating of marketing training course

The evaluation of marketing training courses, as rated both respondent categories, is presented in Table 5.30 below. A scale of 3 = good, 2 = fair and 1 = poor was used.

Table 5.30: Rating of marketing training by both respondent categories

Service provider	Rating							
	Farmers (N=120)				Extension officers (N=14)			
	3 Good	2 Fair	1 poor	Totals	3 Good	2 Fair	1 Poor	Totals
1. DARDLA	0	7	0	7	0	0	0	0
2. DAFF	0	0	0	0	0	0	0	0
3. DLA	0	0	0	0	0	0	0	0
4. AgriSETA	2	0	0	2	0	0	0	0
5. Universities	1	0	0	1	1	0	0	1
6. Private Company	5	4	0	9	0	0	0	0
7. Land Bank	0	0	0	0	0	0	0	0
8. Agricultural Colleges	0	0	0	0	0	0	0	0
9 ARC	0	1	0	1	0	0	0	0
10 DEDET	0	1	0	1	0	0	0	0
Totals	**8**	**13**	**0**	**21**	**0**	**0**	**0**	**1**

Not all farmers and extension officers rated the courses.

The data contained in Table 5.30 shows that only 21 (18 %) farmers and 1 (7 %) extension officer attended the marketing training course. The training course was rated as follows: the course offered by the Private Company was attended by 9 farmers, of whom 5 rated it as good and 4 as fair. The course offered by DARDLA was attended by 7 farmers, all rating the course as fair. The AgriSETA course was rated as good by both farmers who attended, and the course offered by university was rated as good by the farmer respondent who attended.

5.8.12 Rating of poultry layer production courses

The rating of poultry layer production courses, as perceived by farmers and extension officers, is presented in Table 5.31 below. A scale of 3 = good, 2 = fair and 1 = poor was used.

Table 5.31: Rating of poultry layer production training courses by farmer and extension officer respondents

Service provider	Rating							
	Farmers (n=120)				Extension officers (n=14)			
	3 Good	2 Fair	1 poor	Totals	3 Good	2 Fair	1 Poor	Totals
1. DARDLA	0	1	0	1	0	0	0	0
2. DAFF	0	0	0	0	0	0	0	0
3. DLA	0	2	0	2	0	0	0	0
4.AgriSETA	0	0	0	0	0	0	0	0
5. Universities	0	0	0	0	0	0	0	0
6. Private Company	2	2	0	4	0	0	0	0
7. Land Bank	0	0	0	0	0	0	0	0
8. Agricultural Colleges	0	0	0	0	0	0	0	0
9. ARC	7	5	0	12	0	0	0	0
10. DEDET	0	0	0	0	0	0	0	0
Totals	**9**	**10**	**0**	**19**	**0**	**0**	**0**	**0**

Not all farmers and extension officers rated the courses.

According to the data contained in Table 5.31, a total of 19 (16 %) farmer respondents attended the courses on poultry layer production, of which farmers 12

attended the training course offered by ARC. Seven respondents rated this course as good, while five rated it as fair. The training course offered by a Private Company was attended by 4 farmers, 2 of whom rated the course as good, while 2 rated it as fair. Only 9 farmers rated the courses presented by the other 4 service providers as good, while 10 rated them as fair. The department should seriously identify alternative service providers for the training of farmers and extension officers in poultry layer production.

5.8.13 Rating of risk management training courses

The ratings of the risk management training courses by farmers and extension officers are presented in Table 5.32 below. A scale of 3 = good, 2 = fair and 1 = poor was used.

Table 5.32: Rating of risk management training courses by farmer and extension officer respondents

Service provider	Rating							
	Farmers (N=120)				Extension officers (N=14)			
	3 Good	2 Fair	1 poor	Totals	3 Good	2 Fair	1 Poor	Totals
1 DARDLA	1	4	1	6	0	0	0	0
2 DAFF	0	0	0	0	0	0	0	0
3 DLA	0	0	0	0	0	0	0	0
4 AgriSETA	1	0	0	1	0	0	0	0
5 Universities	0	0	0	0	0	0	0	0
6 Private Company	1	7	0	8	0	0	0	0
7 Land Bank	0	0	0	0	0	0	0	0
8 Agricultural Colleges	0	0	0	0	0	0	0	0
9 ARC	0	1	0	1	0	0	0	0
10 DEDET	0	0	0	0	0	0	0	0
Totals	**3**	**12**	**1**	**16**	**0**	**0**	**0**	**0**

Not all farmers and extension officers rated the courses.

According to the contents of Table 5.32, only 16 (13 %) farmers attended the training course in risk management. The training course offered by the Private Company was attended by 8 farmers, with 1 rating the course as good and 7 rating it as fair. A total of 6 farmers attended the training provided by DARDLA, of whom only 1 rated the training as good, while 4 rated it as fair, and 1 as poor.

5.9 REASONS FOR NOT ATTENDING COURSES, AS IDENTIFIED BY FARMER AND EXTENSION OFFICER RESPONDENTS

5.9.1 Reasons for not attending a course by farmer respondents

The reasons why farmers did not attend courses are presented in Table 5.33 below.

Table 5.33: Reasons for not attending courses, as indicated by farmer respondents

Reasons	Risk management	Marketing	Financial management	Record keeping	Farm management	Crop production irrigated	Animal production small	Pest management	Poultry layers production	Animal production large	Poultry broiler production	Vegetable production	Crop production dry	No training received	Totals	Percentage
Too expensive	1	1	1	1	1	2		1	1			1	1		11	2
Lack transport	1		1	1	3					3		3			12	2
Not interested	2	3	1	0	1		4	1	3	6		3	1		25	4
Commitments	6	6	6	9	5	4	3	4	3	8	2	3			59	11
Not applicable	2	2	2	1	2	19	21	4	27	3	22	6	2		113	20
Not selected	16	18	17	24	18		3	7	1	6	1	2	3		116	21
None organised	29	23	23	14	15	20	11	25	6	8	8	15	15	8	220	40
Totals	57	53	51	50	45	45	42	42	41	34	33	33	22	8	556	100

According to Table 5.33, 40 % of farmer respondents indicated that no training courses were organised for them to attend. A total of 21 % of farmers indicated that they were not selected to attend training courses, and 20 % indicated that the training courses were not applicable to them. Only 11 % of farmers indicated that they did not attend training courses because they were committed to some other activities, while 4 % were not interested in attending the training course organised for them. Finally, 2 % of farmers indicated a lack of transport and 2 % that the training course was too expensive.

5.9.2 Reasons for not attending courses, as indicated by extension officer respondents

The reasons why extension officers did not attend courses are presented in Table 5.34 below.

Table 5.34: Reasons for not attending a course, according to extension officer respondents

Reasons	Poultry production layers	Farm management	Financial management	Record keeping	Marketing	Crop production (irrigated land)	Vegetable production	Large stock	Small stock	Crop production (dry land)	Poultry production Broiler	Pest management	Project management	Computer literacy	Totals	Percentage
Other activities	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Not interested	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1
Not applicable	1	0	0	1	1	0	0	2	1	0	1	0	1	0	8	6
Not selected	0	0	3	2	2	0	0	0	0	0	0	0	2	0	10	7
Not organised	12	12	9	9	9	11	11	8	9	9	8	9	4	2	122	85
Totals	**13**	**12**	**12**	**12**	**12**	**11**	**11**	**10**	**10**	**10**	**9**	**9**	**8**	**4**	**143**	**100**

Table 5.34 indicates that 85 % of extension officer respondents were of the opinion that training courses were not organised for them to attend. Only 7 % indicated that they were not selected to attend any training courses while 6% indicated that training courses were not applicable to them. Only 1 % were not interested in attending training courses.

5.10 IMPACT OF TRAINING TO IMPROVE KNOWLEDGE, AS PERCEIVED BY FARMER RESPONDENTS

The impact of training to improve knowledge, as perceived by farmer respondents, is presented in the Table 5.35 below.

Table 5.35: Impact of training to improve knowledge, as perceived by farmer respondents (N=120)

	Farmers

	N	%
Not at all	5	4
To some extent	11	9
To a moderate extent	35	29
To a great extent	32	27
Missing frequency	37	31

According to Table 5.25, 31 % of farmer respondents were not involved at all, while 29 % indicated that training contributed to a moderate extent to improve their knowledge. A further 27 % of farmers indicated that the training courses did improve their knowledge to any great extent. The worrying factor is that 4 % indicated that the training course did not improve their knowledge at all, whereas 9 % noted an improvement at 'only to some extent'.

5.11 SUMMARY OF FINDINGS (AS PERCENTAGES) OF FARMER RESPONDENTS ATTENDING TRAINING

A summary (of percentages) of farmer respondents who attended training courses is presented in Table 5.36 below.

Table 5.36: Summary (of percentages) of farmer respondents who attended training courses

Training	Percentage
Crop production on dry land	48 %
Crop production on irrigated land	18 %
Large stock animal production	43 %
Small stock animal production	16 %
Vegetable production	31 %
Poultry broiler production	28 %
Farm management	27 %
Pests management	23 %
Record keeping	21 %
Financial management	20 %
Marketing	18 %

Poultry layer production	16 %
Risk management	13 %
Average	**24.76 %**

According to the findings as reflected in Table 5.36, the average attendance figure came out at 24.76 %. This figure is disappointingly low.

CHAPTER 6

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter summarises the results of Chapters 4 and 5 of the study, including the study objectives and the findings, and formulates a conclusion and recommendations.

6.2 MAIN OBJECTIVES OF THE STUDY

The main objective of the study was to investigate the sustainability of the extension support provided to PLAS beneficiaries and to determine the skills, interests and experience in farming of beneficiaries.

The specific objectives of this study were as follows:

1. To identify the social, technical, financial and technological challenges of PLAS beneficiaries;
2. To determine the PLAS beneficiaries' skills, experience, interests, commitment and aspirations towards farming; and
3. To identify the major challenges of agricultural extension delivery systems to PLAS beneficiaries.

6.3 THE STUDY FINDINGS AND CONCLUSIONS, BY OBJECTIVES

6.3.1 Objective one: To identify the social, technical, financial and technological challenges of PLAS beneficiaries

To analyse the demography of the respondents, mean procedures were used to determine the mean age of the respondents, the difference between males and females in terms of age and marital status. Frequency procedures were used to determine age categories of respondents, as well as their marital status (by gender), educational levels (by gender), years of experience (by gender) and extension operational equipment (by gender) in order to get information on the obstacles that hinder the sustainability of PLAS projects.

6.3.1.1 Age and gender in balance

The findings show that the mean ages of the farmer respondents are 47 and 43 years respectively for male and female extension officer respondents. It was also ascertained that 56 % of the farmers are in the age categories of 40–59 years, while 36 % of the extension officers were in the age category 40–49 years. This indicates that most of the PLAS projects in the Nkangala District of Mpumalanga are owned by middle aged (40–49) and older (50–59) people who are still muscularly strong enough to farm. People in these age categories are mature people, who can display discipline and commitment to their projects. They have children to support and other family responsibilities to take care of. Youth is not well represented, but should also be motivated to participate in agricultural activities. This can be done by implementing projects that would attract the youth.

It is clear that males (61 %) are dominant and that females (39 %) are not well represented in the PLAS projects of the Nkangala District. The reason could be that women are left at home to take care of the activities of their households and their children. It should be noted that men often have no other source income except farming, which limits their freedom of choice.

6.3.1.2 Level of education

A total of 41 % of farmer respondents indicated their highest levels of education as being between Grades 6–11, with the majority of the respondents (29 %) being males. A total of 45 % of the farmer respondents indicated Grade 12 (24 %) and higher qualifications (21 %).

6.3.1.3 Unequal distribution of land

There is an unequally distribution of land between males and females. The study indicates that male farmers occupy more hectares, on average, of land (432.20 ha), compared with female farmers (335.73 ha). This should be taken into consideration during land application and land approval procedures.

6.3.1.4 Technology challenge

Although almost all extension officers have transport providing easy access to farmers and the relevant communicating facilities, computer illiteracy is still a problem, especially for the older extension officers. Computer literacy courses should be organised for extension officers to enable them to improve service delivery.

6.3.1.5 Lack of financial support

The study revealed that many farmers (63 %) did not receive any financial assistance in the form of loans and/ or grants to buy production inputs, equipment/machinery, and for infrastructure development. Without this financial assistance, farmers are unable to operate their farms effectively.

6.3.1.6 Farmers' sources of income

Gratuities and remittances are the biggest contributors to farmers' income, followed by government social grants. Farming is, in fact, the smallest contributor to farmers' income. Old age pension grants comprise the lowest contributor to their income. This

means that some farmers are employed elsewhere than on the farm, which prevents them from being available on a fulltime basis. The worrying factor is that farming is their smallest contributor to their income.

6.3.2 Objective two: To determine the PLAS beneficiaries' skills, experience, interests, commitment and aspirations in farming

6.3.2.1 Lack of farming experience

The data indicates that farmers have experience in farming, indicated as 10 years for males, against 6 years for females. The experience they have is limited, however, to the farmworker level. Extension officers have more years of experience (15 years) with providing extension services, but they do experience challenges in providing effective (relevant) services to the farmers. There is a dire need for in-service training. It is crucial that the department budgets for training farmers towards achieving a commercial level of farming.

6.3.2.2 Lack of training and capacity building

The lack of skills and knowledge in project management is demonstrated in this study. In some of the projects, it is not clear who calls the project meetings, as it varies between chairperson, secretary and extension officer. Minutes are not taken or kept in all the proceedings of the meetings (60 % 'yes' against 23 % 'do not know'), attendance registers are not completed, and apologies for not attending meetings are not recorded. This might be because they lack necessary skills and knowledge in project management. Appropriate training courses should be provided to farmers.

The study also revealed that 72 of the farmers used cell phones the most often for accessing agricultural information. Only 3 farmers read agricultural magazines/newspapers more often, 1 farmer watched agricultural programmes on the TV, and only 5 used the Internet. Only 5 involved research stations, such as the ARC, more often. The majority (59) relied on extension officers to provide them with agricultural information.

Inquiries were made to determine farmers' farming aspirations. The results revealed livestock (50 %) and field crop production (73 %) as being the two most important sectors of production that farmers would like to improve in. There is a serious need for finance (99 %); for enabling farmers to become fully committed to farming activities (96 %); and for capacity building (95 %).

It is clear that limited training was offered to farmers. Only 25 % of PLAS beneficiaries indicated that they had attended training initiatives. The majority (40 %) indicated that no training was organised and the remainder (60 %) indicated the following reasons: not being selected to attend the training courses (21 %), being committed elsewhere on other activities (11 %), and not being interested (5 %). Training for farmers' is critical for project sustainably. The department should budget for training and enter into service level agreements with training institutions to offer farmer training at minimum or no cost to the beneficiaries. Training should be offered at venues not too far from the relevant farms.

The study also revealed that the Private Company and AgriSETA offer good courses in crop production. The ARC provides commendable courses on large and small stock production, and DARDLA on vegetable production. The department should consider other/additional training institutions, such as universities and agricultural colleges, for inclusion in training programmes.

The analysis indicates that there is a skills shortage for both farmers and extension officers in record keeping, farm management, marketing, financial management and risk management (only few farmers attended these courses). The department should organise courses in these subjects for both the extension officers and the farmers.

6.3.2.3 Lack of committed interest in farming

A lack of commitment and interest in farming by farmers is demonstrated. The findings show that the reasons for some of the household members not being involved in farming activities is that the majority of the household members are working full-time. They also indicated other reasons such as being too old or living

elsewhere, while other household members are not interested in farming, although they are beneficiaries.

Only 54 % are present on the farm on a full-time basis; 18 % are available once a week, 15 % once in two weeks; 5 % once a month; and 3 %, once in two to three months. This indicates that proper selection of PLAS beneficiaries must be done during selection processes by DLA and DARDLA.

The study also reveals that farmers take a long time to organise project meetings. An alarming factor is that in some projects the beneficiaries do not meet at all. It can, therefore, be suggested that some farmers are not fully committed to their farming. The average attendance at the project meetings by farmers is 62 %, as indicated by farmer respondents, and 68 % according to extension officers. There is a serious need to increase the percentage of farmers attending project meetings.

6.3.3 Objective three: To identify the major challenges of agricultural extension delivery systems to PLAS beneficiaries

6.3.3.1 Lack of farm infrastructure support

Inquiries were made to determine the condition of infrastructure and equipment found on the farm when the farm was acquired. The findings reveal that various items of infrastructure found on the farm when the farm was acquired, such as the farm house, farm sheds, overnight facilities for small stock, poultry houses, piggery structures, dams, fencing, roads, dip tanks, boreholes and equipment/machinery, were generally in a poor condition. Most of the farms were left unattended after they were acquired. Some of the farmers indicated that they had moved to the farms six months after the farm had been acquired. Initial support is crucial for the success of PLAS projects.

Poor road access to the farms makes it difficult for both the farmers and extension officers to access the farms. Fencing on the farms is dilapidated. This results in farmers not being able to farm effectively because of the poor condition of the infrastructure and equipment/machinery, and the lack of water for irrigation and

domestic purposes. Due to the poor condition of some of the houses, this might have resulted in the farmers not staying on the farms, but rather travelling to and from the farm. The lack of infrastructure support could result in the collapse of many of the projects.

6.3.3.2 Poor extension support

Findings show that gratuities/remittances and additional employment are the biggest contributors to the farmers' sources of income. This resulted in PLAS beneficiaries not farming on a full-time basis. Absence from meetings and not being able to attend the training courses organised for them indicates that the farmers are not committed in their farming activities. Effective extension services are needed for their projects to be sustainable.

The kind of extension support farmers get from the extension officers was evaluated. The results reveal that not all the projects do have extension officers assigned to their project (78 % have an extension officer) and some members (9 %) are not sure if they do have extension officers or not. The alarming factor is that in some of the projects, 40 % of the farmer respondents indicated that the extension officer had been assigned to their projects between one to six months after their occupation of the farm. Farming challenges were thus not observed (nor responded upon) by the extension officer at an early stage.

The ability of extension officers to provide extension support differs between extension officers and between projects. In some projects, extension officers do visit their projects on a monthly basis, while in others they take longer than a month to do so. Challenges faced by the farmers are not identified by the extension officer at an early stage. During projects visits, technical advice (55 %) was indicated as being the most important service offered to farmers. Some farmers (12 %) indicated that no service was offered by the extension officer during project visits.

6.3.3.3 Relevant stakeholders working in isolation

The results of the study revealed that the relevant stakeholders providing support to PLAS projects are working in isolation. The extension officer should identify the

relevant stakeholders and ensure that they participate according to their identified roles.

6.3.3.4 No business plan in place

According to the study, 28 % of farmers are managing their farms without a farm business plan. Some of those with plans do not know the content of their plans (15 %). Production plans (48 %) and farm infrastructure (46 %) were indicated as being the main focal points within their farm business plans. Evidence from the study indicates that almost all projects with a business plan are not operating according to their respective plan. Business plans are not being implemented. This could be because farmers were not involved in the drafting of the farm business plan by the stakeholders that assisted them, and because they possibly do not have the skills and knowledge to manage their farm business plan. Detailed business plan should be put in place, beneficiaries should be involved in the compilation of their farm business plans, and the farm business plan should be implemented.

The study indicates that some of the projects (29 %) were not registered as legal entities, making it difficult for those projects to get financial assistance.

6.4 RECOMMENDATIONS

6.4.1 PLAS beneficiaries

- Equal distribution of land between males and females
- The department should assign an extension officer to relevant projects immediately after the project farming lands are transferred or during the land acquisition process;
- All PLAS projects must have detailed farm business plans to use as operational guideline. The farm business plan makes it possible to access funding from funding institutions in the form of loans or grants;

- PLAS projects participants should be encouraged and assisted to register as legal entities to enable them to access financial assistance;
- The youth should be encouraged to participate in agriculture. This can be done by implementing projects/programmes that would attract the youth. Funding should be made available towards this end;
- Adult basic education programmes should be made available and beneficiaries should be encouraged to study;
- Infrastructure development support is crucial to the sustainability of a project;
- Because of a lack of capacity building for both respondent categories, training courses should be budgeted for. The department should also engage with formal training institutions, such as universities and agricultural colleges, to provide appropriate courses ;
- The study revealed that the Private Sector and AgriSETA offer good courses on crop production. The ARC provides good courses on large and small stock production and DARDLA on vegetable production; and
- It is recommended that the department should make efforts to send both farmers and extension officers to attend appropriate courses.

6.4.2 Extension officers

- Computer literacy courses should be organised for extension officers to enable them to utilise their electronic aids effectively and to thereby improve service delivery;
- It is important that the relevant stakeholders work together to provide both pre- and post-settlement support toward securing the sustainability of PLAS projects according to their responsible roles; and

- Extension officers must give full support to farmers and visit the farms as regularly as required so that they can in the early stages identify the challenges facing farmers and address them.

The implementation of the above recommendations will assist in securing the sustainability of extension support to beneficiaries of PLAS projects.

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ANNEXURE A:

Research Questionnaire for farmers

The extent of sustainable extension support to beneficiaries in the Proactive Land Acquisition Strategy, Nkangala District, Mpumalanga, South Africa

Respondent Number: _____ V0 ☐
Date of interview: _____
Local Municipality: _____
Name of the respondent: _____
Name of the project: _____

Instructions to the research participants (questionnaires for farmers)

Answer all the questions by marking with a X in the appropriate box or writing an answer where applicable

1. What was your age at last birthday ?_____ V1 ☐

2. What is your gender? V2 ☐

Male	1
Female	2

3. What is your marital status? V3 ☐

Married	Divorced	Living together	Widow/Widower	Single
1	2	3	4	5

4. Do you have any disability? V4 ☐

Yes	1
No	2

5. What is your highest level of education obtained? V5 ☐

Highest level of education	
Grade 105	1
Grade 6 – 11	2
Grade 12	3
Certificate	4
Diploma	5
Degree	6

6. Please indicate your income source(s) and rank them from **1= Biggest contributor to 5= smallest contributor** to your income.(Indicate all that are applicable)

Income source			
1.Government social grant		V6.1	
2.Old age pension		V6.2	
3.Additional employment		V6.3	
4.Farming		V6.4	
5.Other (specify)		V6.5	

7. Please indicate the farming experience you have?(You may mark more than one)

Farming experience	**Years**	**Months**			
1.Field crop Production			V7.1		
2.Vegetable Production			V7.2		
3.Livestock production: Beef cattle			V7.3		
4.Livestock production: Dairy			V7.4		
5.Small stock production goats/sheep			V7.5		
6.Poultry Production			V7.6		
7.Mixed farming			V7.7		
8.Other (specify)			V7.8		

8. What is the size of the farm? (indicate the number of hectares where applicable)

Divisions	**ha**		
1.Dry land		V8.1	
2.Grazing Land		V8.2	
3.Irrigated Land		V8.3	
4.Other (specify)		V8.4	
5.Total		V8.5	

9. Is your project registered as a legal entity?(Please indicate by using the table below) V9 ☐

Not registered as a legal entity	1
CPA	2
Trust	3
Cooperative	4
Other (Please specify)	5

10. If your project is not registered as a legal entity why not? (Please indicate "Yes" or "No" In the table below)

Reasons not registered	Yes(1)	No(2)		
1.Do not have an idea what a legal entity is all about			V10.1	
2.Do not know how to register as a legal entity			V10.2	
3.Members not willing to register as a legal entity			V10.3	
4.Members want to change the executive first			V10.4	
5.Members are not interested in paying tax			V10.5	
6.Other (specify)			V10.6	
7.			V10.7	

11. How many households are in this project? _____ V11 ☐
12. How many adult members of your household are involved in this project?__ V12 ☐
13. If members of your household are not involved what are the reasons? (Please indicate "Yes" or "No" In the Table below)

Reasons	Yes (1)	No(2)		
1. They live elsewhere			V13.1	
2. They work full time			V13.2	
3. Not interested in farming			V13.3	
4. I don't know			V13.4	
5. They are too old			V13.5	
6. Other (specify)			V13.6	

14. How often are you available on the farm? (Please indicate by using the scale below) V14 ☐

Availability on the farm	
Full time	1
Once a week	2
Once in two weeks	3
Once in a month	4
Once in two months	5
Once in three months	6
Once in six months	7
Once in a year	8

15. When did you apply for the farm (indicate a year and month) _____ V15 ☐☐

16. When was the farm obtained? (indicate a year and month) _____ V16 ☐☐

17. After the farm was obtained, how long did it take you to move to the farm?

(Please indicate a year and the months)_____ V17 ☐☐

18. What was your contribution when the farm was purchased?

No contribution	1	V18.1 ☐
Financial	2	V18.2 ☐
Labour	3	V18.3 ☐
Loose assets	4	V18.4 ☐
Other (please specify)	5	V18.5 ☐

19. Who assisted you in the whole process of obtaining a farm? If more than one, rate them from 1=Most involved in assisting to 3 least involved in assisting

	RATING	
DLA		V19.1 ☐
DAFF		V19.2 ☐
DARDLA		V19.3 ☐
Previous farm owner		V19.4 ☐
Self acquisition		V19.5 ☐
Other (specify)		V19.6 ☐

20. If it took you more than six months to move to the farm, Please indicate “Yes” or “No” In the table below

Reasons	Yes(1)	No(2)		
Lack of funds			V20.1	
Infighting amongst beneficiaries			V20.2	
Full time employed somewhere else			V20.3	
Social challenges			V20.4	
Delays from previous owner			V20.5	
Other (specify)			V20.6	

21. Using the table below, please indicate the state of implements/machinery you found on the farm at the time you acquired the farm (Please indicate where applicable)

Type of Implement/ machinery	None	Poor	Acceptable	Very good		
1. Pumping machine	0	1	2	3	V21.1	
2. Tractor	0	1	2	3	V21.2	
3. Planter	0	1	2	3	V21.3	
4. Harvester	0	1	2	3	V21.4	
5. Plough	0	1	2	3	V21.5	
6. Sprayer	0	1	2	3	V21.6	
7. Ripper	0	1	2	3	V21.7	
8. Trailer	0	1	2	3	V21.8	
9. Irrigation equipment	0	1	2	3	V21.9	
10. Drinking troughs	0	1	2	3	V21.10	
11. Poultry equipment	0	1	2	3	V21.11	
12. Other(please indicate)	0	1	2	3	V21.12	
13.	0	1	2	3	V21.13	

22. Using the table below, please indicate the state of infrastructure you found on the farm by the time you acquired the farm (Please indicate where applicable)

Type of infrastructure	None	Poor	Acceptance	Very good		
1.House	0	1	2	3	V22.1	
2.Farm shed	0	1	2	3	V22.2	
3.Overnight facilities for small stock	0	1	2	3	V22.3	
4.Poultry houses	0	1	2	3	V22.4	
5.Piggery structure	0	1	2	3	V22.5	
6.Dams	0	1	2	3	V22.6	
7.Fencing	0	1	2	3	V22.7	
8.Roads	0	1	2	3	V22.8	
9.Dip tank	0	1	2	3	V22.9	
10.Other (specify)	0	1	2	3	V22.10	
11.					V22.11	

23. If the state of the implement /machinery or infrastructure was poor, was the problem reported to the DAFF /DARDLA/DLA?

The problem was not reported	1	V23.1	
Didn't know where to report to	2	V23.2	
Did not see any necessity to report	3	V23.3	
Afraid to report	4	V23.4	
Other (please specify)	5	V23.5	

24. What are the main components of your farm business plan?

We do not have a plan	1	V24.1	
I don't know	2	V24.2	
Infrastructure development plan	3	V24.3	
Acquiring Machinery/equipment	4	V24.4	
Production plan	5	V24.5	
Financial plan	6	V24.6	
Marketing plan	7	V24.7	
Risk plan	8	V24.8	
Human Resource plan	9	V24.9	

25. Who developed your farm business plan? V25

DARDLA	1
DLA	2
DAFF	3
I did it	4
Private consultant	5
Other (please specify)	6

26. If you have a farm business plan and it is not implemented,

state the main reason? V26 ☐

I do not know	1
Do not have the skills/knowledge to implement it	2
No funds to implement it	3
No equipment to implement it	4

27. Do you have an extension officer assigned to your farm? V27 ☐

Yes: what is his/her name	1
No	2
Not sure	3

28. When was extension officer assigned to your project? V28 ☐

Before occupation of the farm	1
Immediately after occupation of farm	2
Between 1 to 6 months after occupation of the farm	3
More than 6 months after occupation of the farm	4

29. How often does the extension officer visit your farm? V29 ☐

Every day	1
Once a week	2
Once in two weeks	3
Once a month	4
Once in two months	5
Once in three months	6
Once in six months	7
Once in a year	8
Not at all	9

30. What was the last date on which the extension officer visited you? V30 ☐☐☐

(Please indicate the day/month/year)

31. Which are the three most important services that extension officer provide when visiting your PLAS projects ,rank them from 1=most important services to 3= least important services

Possible services	**Rank**	
1.Technical advice		V31.1 ☐
2.Training		V31.2 ☐
3.Attending farmers meetings		V31.3 ☐
4.Demonstrations		V31.4 ☐
5. No services offered.		V31.5 ☐

32. Could you please rate the extension delivery services by using the Following:1=Fullyagree,2=Agree,3=disagree,4=totally disagree

V32.1 ☐

V32.2 ☐

1.Extension officers address all our farming challenges	
2. Extension delivery system should be improved	

33. How can the extension services be improved? Use the following: 1= Fully agree, 2=Agree,3=Disagree,4=Totally disagree

1.Retraining the extension officers		V33.1 ☐
2.Providing working tools for extension officers		V33.2 ☐
3.Close monitoring of extension officers by their supervisors		V33.3 ☐
4.Introducing mentorship programmes to both the extension officers and the farmers		V33.4 ☐
5.Extension officers must be a good communicators		V33.5 ☐
6.Extension officer to visit projects more often		V33.6 ☐

34. To what extent does the extension officer contribute towards improving your knowledge? (Mark only one)

V33 ☐

Not at all	1
To some extent	2
To a moderate extent	3
To a great extent	4

35. What method was used to contact the extension officer for advice during the past 6 months. Rate the following according to the following scale, 1=most important method,2=somewhat important,3=not important,4 =not important at all

	Preferred method	**Most Frequently used method**		
1. Did not contact the extension officer			V35.1	☐ ☐
2. Telephonically			V35.2	☐ ☐
3. Email			V35.3	☐ ☐
4. Visiting the office			V35.4	☐ ☐
5.Extension officer visiting us at the farm at my request			V35.5	☐ ☐

36 If you did not contact the extension officer. Indicate “Yes” or “No” in the below table

	Yes(1)	No(2)		
1. I don’t have his contact details			V36.1	
2. I don’t know their offices			V36.2	
3. I don’t have access to contact facilities			V36.3	
4. Out of reach			V36.4	
5. Lack finance			V36.5	

37 From which institution did you receive financial assistance to operate the farm? If more than one prioritise from, 1= Most important to 3=Least important

	RANK		
1. Did not receive any financial assistance		V37.1	
2. Grants (government)		V37.2	
3. MAFISA		V37.3	
4. LAND BANK		V37.4	
5. Commercial bank		V37.5	
6. Stockvel		V37.6	
7. Other (Please specify)		V37.7	

38 Who assisted you in the whole process of getting the funds? Rate from 1=most important to 7=least important.

1. National Department of Agriculture(DAFF)		V38.1	
2. Provincial Department of Agriculture (DARDLA)		V38.2	
3. Department of land affairs (DLA)		V38.3	
4. Mentor		V38.4	
5. Strategic Partner		V38.5	
6. Previous farm owner		V38.6	
7. I did it myself		V38.7	

39 What was the money used for? Use the following scale to indicate importance.
1=Absolutely importance, 2= Somewhat important, 3= Not so important,
4= Not important at all

40 W

	RATING		
a1. Buying production inputs		V39.1	
t 2. Buying Equipment and Machinery		V39.2	
3. Infrastructure developments		V39.3	

are the current farming activities on the farm? Please indicate where applicable and rate according to the following scale. 1=most important to 6= least important

41 Did you attend any training related to farming , if the answer is “Yes” please rate your satisfaction about the training using the scale from 1 to 4,where 1= very poor, 2=poor,3=fair,4=good, and indicate the service provider to.
(You may mark more than one)

Farm activities	Rating		
1. There are no current farming activities on the farm		V40.1	
2. Crop production: Dry land		V40.2	
3. Crop production: Irrigated land		V40.3	
4. Animal Production: Large stock		V40.4	
5. Animal Production: Small stock		V40.5	
6. Poultry production: Broiler		V40.6	
7. Poultry Production: Layers		V40.7	
8. Vegetable production		V40.8	

Possible service providers

1. Department of Agriculture, Rural Development and Land Administration
2. Department of Agriculture, Fisheries and Forestry
3. Department of Land Affairs
4. Agri SETA
5. Universities
6. Private company
7. Land Bank
8. Agricultural Colleges
9. Other (Specify)

Possible reasons for not attending training

1. No training was organised
2. Not interested in attending training
3. Committed to other activities
4. Not selected to attend
5. Lack of transport to the venue
6. Training is too expensive
7. Not applicable

Possible trainings provided	Service	Rating	Reasons

	Provider		for not attending training			
1. Did not receive any training				V41.1		
2. Animal Production: large stock				V41.2		
3. Animal Production: Small stock				V41.3		
4. Crop Production: Dry land				V41.4		
5. Crop Production: Irrigated land				V41.5		
6. Poultry Production: Broiler production				V41.6		
7. Poultry Production: Layers				V41.7		
8. Vegetable production				V41.8		
9. Pests management				V41.9		
10. Farm management				V41.10		
11. Financial Management				V42.11		
12. Marketing				V41.12		
13. Risk management				V41.13		
14. Record keeping				V41.14		

42 To what extent did the training in general contribute to improve your knowledge? V42

Not at all	1
To some extent	2
To a moderate extent	3
To a great extent	4

43 How often do you hold project meetings? V43

Once a week	1
Once in two weeks	2
Once a month	3
Once in two months	4
Once in three months	5
Once in six months	6
Once in a year	7
Not at all	8

44 Who organises/calls these meetings?

Chairperson	1	V44.1
Secretary	2	V44.2
Chairperson and Secretary	3	V44.3
Extension officer	4	V44.4
Mentor	5	V44.5
Strategic partner	6	V44.6
Other (specify)	7	V44.7

45 Are minutes kept of all proceedings during your meetings? V45

Yes	1
No	2
I don't know	3

46 How often is an attendance register completed at meetings by all project members? V46

Never	1
Sometimes	2
Always	3

47 Are apologies for absence from the project meetings recorded? V47

Never	1
Sometimes	2
Always	3

48 What percentage of the project members attends these meetings?____% V48

49 How do you receive agricultural information? Please indicate those that are applicable and rate the information using the following scale. 1= Always,2= From time to time, 3= Very seldom, 4= Not at all

	Rating	
1.Cell phone		V49.1
2.Internet		V49.2
3.News papers/Magazine		V49.3
4.Emails		V49.4
5.Fellow extension officers		V49.5
6.Watch Agric programmes on TV		V49.6
7. Reading agricultural magazines/ news paper		V49.7
8.From research (ARC)		V49.8
9.NGO'S		V49.9
9.Community organisation		V49.10
10. Other farmers		V49.11

50 To which farming organisation do you belong and indicate if you are part of the management structure.

Organisation	Member Yes(1)No(2)	Management structure Yes(1)No(2)			
1. I do not belong to any farming organisation			V50.1		
2. Farming cooperatives			V50.2		
3. Commodity organisation			V50.3		
4. Grain SA			V50.4		
5.AGRISA			V50.5		
6. AFASA			V50.6		
7. NAFU			V50.7		
8. Poultry Associations			V50.8		
9. Other (specify)			V50.9		

51 Do you belong to any other organisation in the community and indicate if you are part of the management structure

Organisation	Member Yes(1)No(2)	Management structure Yes(1)No(2)			
1. Church			V51.1		
2. School			V51.2		
3. Stockvel			V51.3		
4. Burial society			V51.4		
5. Social club			V51.5		
6. Study groups			V51.6		
7. Other (specify)			V51.7		

52 What agricultural production challenges have you encountered at your farm and indicate to what extent they were addressed

	Not at all	**Some what**	**Fully addressed**		
1. Diseases	1	2	3	V52.1	
2. Water	1	2	3	V52.2	
3. Drought	1	2	3	V52.3	
4. Flood	1	2	3	V52.4	
5. Finance	1	2	3	V52.5	
6. Veld fires	1	2	3	V52.6	
7. Livestock Mortality	1	2	3	V52.7	
8.Other	1	2	3	V52.8	

53 Which are two most important sectors of your production would you like to improve during the next five years ? (You can mark more than one)

1. Field crop production		V53.1	
2. Vegetable production		V53.2	
3. Livestock production: Beef cattle		V53.3	
4. Small stock production		V53.4	
5. Livestock production: Dairy		V53.5	
6. Poultry production		V53.6	
7. Other(Specify)		V53.7	

54 To what extent do you agree with the statements below as contributing factors to improve production. Rate by using the following scale. 1= Fully agree,2=Agree slightly,3= Disagree,=4 Totally disagree

1. Getting financial assistance		V54.1	
2. Capacity building		V54.2	
3. Full time commitment in farm activities		V54.3	
4. Getting a mentor		V54.4	
5. Getting a strategic partner		V54.5	
6. Buying additional land		V54.6	
7. Buying more production inputs(e.g. fertiliser)		V54.7	

55 How successfully do you rate your farm enterprise, please rate by V55 ☐

using the scale from 1 to 4,where 1= very poor,2= poor, 3= good , 4= very good

Rating	

ANNEXURE B:

Research Questionnaire for extension officers

The extent of sustainable extension support to beneficiaries in the Proactive Land Acquisition Strategy, Nkangala District, Mpumalanga, South Africa

Respondent number:_____ V0 ☐
Date of interview: _____
Local Municipality: _____

Instructions to the research participants (questionnaire for extension officers)
Answer all the questions by marking with an X in the appropriate box or writing an answer where applicable

1. What was your age at last birthday? _____ V1 ☐

2. What is your gender? V2 ☐

Male	1
Female	2

3. What is your marital status? V3 ☐

Married	Divorced	Living together	Widow/ Widower	Single
1	2	3	4	5

4. Do you have a disability? V4 ☐

Yes	1
No	2

5. What is your **highest** educational qualification? V5 ☐☐

Certificate or Diploma	1
Advance Diploma	2
B Tech	3
B Degree (3yrs)	4
BSc Agric (4yrs)	5
BSc. Consumer Science/Home economics	6
Masters	7
PhD	8
Other (Please specify)	9
	10

6. What is your current position? V6 ☐

Agric. Community Development Officer	1
Agric. Dev Officer	2
Agric Advisor	3
Subject Matter Specialist	4
Extension Coordinator	5
Agric. Manager	6

7. How many years of experience do you have as an extension officer?_____ V7 ☐

8. Please indicate the basic operational equipment and communication facilities you have used in the table below. (You may mark more than one)

Possible operational equipment and communication facilities			
Transport	1	V8.1	
Cell Phone	2	V8.2	
Audiovisual aid facilities	3	V8.3	
Internet	4	V8.4	
Tools and equipment for training and demonstrations	5	V8.5	
Production Manuals	6	V8.6	
Stationery	7	V8.7	
Office furniture	8	V8.8	
Computer	9	V8.9	
Printer	10	V8.10	
Other (please specify)	11	V8.11	
	12	V8.12	

9. Do you use your computer for your work? V9 ☐

Yes	1
No	2

10. If the answer to question 9 is “Yes” how frequently do you use your computer? V10 ☐

Frequency of usage	
Every day	1
Twice per week	2
Once a week	3
Once every second week	4
Once per month	5
Less than once per month	6

11. How many PLAS projects do you service?_____ V11 ☐

12. What numbers of PLAS projects that you service have an agricultural farm business plan?

V12 ☐

	No.
1.All of them	
2.Some of them	
3.None of them	
4.I am not certain	

13. Indicate in the table below the number of PLAS farm business plans developed by each role player?

	No.		
DARDLA		V13.1	☐
DLA		V13.2	☐
DAFF		V13.3	☐
I did it		V13.4	☐
Private consultant		V13.5	☐
Other (please specify)		V13.6	☐
		V13.7	☐

14. Are you running the PLAS projects with business plans according to the plans? V14 ☐

Yes	1
No	2
I don't know	3

15. What are the main components of a farm business plan?(You may answer more than one)

		V15.1	☐
		V15.2	☐
		V15.3	☐
		V15.4	☐
		V15.5	☐
		V15.6	☐
		V15.7	☐

16. Have you attended any training related to farming during the past 3 years? indicate the service provider for the training listed below and rate your satisfaction with the training using the scale from 1-5,where 1= very poor,2= poor,3=fair,4=good, 5= very good. (You may mark more than one)

Possible service providers

1. Department of Agriculture, Rural Development and Land Administration
2. Department of Agriculture, Fisheries and Forestry
3. Department of Land Affairs
4. AgriSETA
5. Universities
6. Private company
7. Land Bank
8. Agricultural Colleges
9. Other (Specify)

Possible reasons for not attending training

1. No training was organised
2. Not interested in attending training
3. Committed to other activities
4. Not selected to attend
5. Lack of transport to the venue
6. Training is too expensive
7. Not applicable

Training provided	Service Provider	Rating	Reasons for non attendance				
1.Animal Production: large stock				V16.1			
2.Animal Production: Small stock				V16.2			
3.Crop Production: Dry land				V16.3			
4.Crop Production: Irrigated land				V16.4			
5.Poultry Production: Broiler production				V16.5			
6.Poultry Production: Layers				V16.6			
7.Vegetable Production				V16.7			
8.Pests management				V16.8			
9.Farm management				V16.9			
10.Project management				V16.10			
11.Financial management				V16.11			
12.Record keeping				V16.12			
13.Marketing				V16.13			
14.Computer literacy/advance				V16.14			

17. How often do you visit the PLAS projects?(Mark one) V17 ☐

Every day	1
Once a week	2
Once in two weeks	3
Once a month	4
Once in two months	5
Once in three months	6
Once in six months	7
Once in a year	8
Not at all	9

18. Which are the three most important services you provide when visiting your PLAS projects ,rank them from 1=most important to 3= least important

Possible services	Rank	
1.		V18.1
2.		V18.2
3.		V18.3

19. How do you communicate with your farmers, rank them in order of priority where 1=most important to 5=least important

Telephonically	1	V19.1
SMS	2	V19.2
Emails	3	V19.3
Individual farm visits	4	V19.4
Meetings	5	V19.5

20. How often do you hold project meetings? V20

Once a week	1
Once in two weeks	2
Once a month	3
Once in two months	4
Once in three months	5
Once in six months	6
Once in a year	7
Not at all	8

21. Who organises/calls these meetings? (You can mark more than one)

Chair person	1	
Secretary	2	V21.1
Chair person and Secretary	3	V21.2
I call project meetings	4	V21.3
Mentor	5	V21.4
Strategic partner	6	V21.5
Other (specify)	7	V21.6

22. Are minutes kept of all proceeding during your meetings? V22

Yes	1
No	2
I don't know	3

23. How often is an attendance register completed at meetings by all project members? V23 ☐

Never	1
Sometimes	2
Always	3

24. Are apologies for absence from the project meetings recorded? V24 ☐

Never	1
Sometimes	2
Always	3

25. What percentage of the project members attend those meetings?__ % V25 ☐

26. How do you receive agricultural information? Please indicate those that are applicable and rate the information using the following scale: 1= Always,2= From time to time,3= Very seldom,4= Not at all

1.Cell phone		V26.1	
2.Internet		V26.2	
3.News papers/Magazine		V26.3	
4.Emails		V26.4	
5.Fellow extension officer		V26.5	
6.Watch Agric programmes on TV		V26.6	
7.Reading agricultural magazines/news papers		V26.7	
8.From researcher (ARC)		V26.8	
9.NGOs		V26.9	
10.Community organisations		V26.10	
11. Extension suite on line		V26.11	

27 Do you link closely with the ARC? V27 ☐

Yes	1
No	2

28 Please indicate the community leaders or councillors that you closely liaison with for agricultural development

Tribal Authority	1	V28.1	
Councillors	2	V28.2	
CIVIS	3	V28.3	
Other (specify)	4	V28.4	

CODINGS FOR EXTENSION OFFICERS QUESTIONNAIRES

15. What are the main components of a farm business plan?

Infrastructure development plan	1	V15.1	
Acquiring Machinery/equipment	2	V15.2	
Production plan	3	V15.3	
Financial plan	4	V15.4	
Marketing plan	5	V15.5	
Risk plan	6	V15.6	
Human Resource plan	7	V15.7	

18 Which services do you offer when visiting your projects ,rank them from 1=most important to 6= least important

Possible services	**Rank**		
1.Technical advice		V18.1	
2.Training		V18.2	
3.Attending farmers meetings		V18.3	
4.Demonstrations		V18.4	
5. No services offered.		V18.5	
6.Other (specify)		V18.6	