



INSTITUTE FOR SOCIAL DEVELOPMENT
**FACULTY OF ECONOMIC AND MANAGEMENT
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Investigating institutions and policies shaping smallholder farming in South Africa: A case study of the Nkomazi area, Mpumalanga province

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Abstract

The agricultural sector plays an important role in the economy, globally. For developing countries, particularly rural areas, smallholder farming has become an active livelihood strategy. However, poverty and household food insecurity are still prevalent among smallholder farmers. This study aimed to improve understanding of the state of smallholder farming in South Africa and the institutions and policies shaping smallholder farming in rural areas. The study took place in the Nkomazi area, of the Mpumalanga province in South Africa.

Using the Sustainable Livelihood Approach and the Human Development Approach as a theoretical framework, the researcher employed a qualitative approach, using both primary and secondary data sources. Primary data was telephonically collected through questionnaires and semi-structured interviews. Secondary data sources included academic literature, government policy documents and research reports to inform the study and maximise evidence. A non-random sample was used through purposive sampling to select the specific group of participants from the population. The study participants included 21 smallholder farmers from farming communities in Nkomazi, academics in agricultural research and government officials from the Nkomazi municipality rural development office. It was found that institutions and policies largely neglect the needs and concerns of smallholder farming, due to a bias towards commercial agriculture. Smallholder farmers also deal with systemic disadvantages related to education, land ownership, financing, rural underdevelopment and gender bias. None of the problems is insurmountable but policy and institutional reform are prerequisites for sustainable solutions in the sector.

Keywords: Agriculture, smallholder farming, rural development, development policy, poverty, food security, Sustainable Livelihood Approach.

Declaration

I, Millicent Nhleko, hereby declare that this mini-thesis entitled, *Investigating institutions and policies shaping smallholder farming in South Africa: A case study of the Nkomazi area, Mpumalanga province*, is my own work and has not previously been submitted at any university for a degree or examination. All sources quoted have been indicated and duly acknowledged by means of referencing.

Signed by Millicent Nhleko: *M.L Nhleko*

Date: 15/03/2022

As a research supervisor, I agree to the submission of this dissertation for examination.

Professor Amiena Bayat: *A Bayat*

Date: 15/03/2022



Dedication

I humbly dedicate this mini-thesis to all smallholder farmers in Nkomazi, my loving parents, siblings, friends, colleagues and everyone working tirelessly in the pursuit of their dreams.



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God first and above all. I thank the almighty God for leading my path and granting me the strength to pursue my studies.

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To the village that raised me, from my primary school teachers and again, to my parents, Mgilija and his first lady, my siblings, Lolo my Bethu and choi, from the bottom of my heart, THANK YOU. I am eternally grateful!! God bless you all.

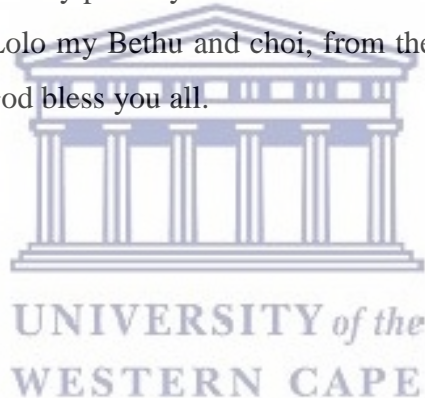


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List of Abbreviations

CASP	Comprehensive Agricultural Support Programme
DAFF	Department of Agriculture, Forestry and Fisheries
DRDLR	Department of Rural Development and Land Reform
DALRRD	Department of Agriculture, Land Reform and Rural Development
FAO	Food and Agriculture Organisation
IFPRI	International Food Policy Research Institute
LRAD	Land Redistribution for Agricultural Development
MAFISA	Micro-Agricultural Financial Institutions of South Africa
NDA	National Department of Agriculture
SLA	Sustainable Livelihoods Approach
SLAG	Settlement/ Land Acquisition Grant
SLF	Sustainable Livelihood Framework
SSA	Sub-Saharan Africa



Chapter 1: Introduction

1.1 Introduction

Smallholder farming has gained recognition as a key avenue for poverty alleviation (Mbanza, 2013). For many people living in rural areas, the smallholder sector serves as the primary livelihood option (Oluwatayo, 2019). Challenges, including lack of access to farming resources, impact directly on the state of the smallholder sector and the people who depend on it for food and income.

Rural smallholder farming has been recognised as an economic driver in developing countries and as the key to achieving the 2030 Sustainable Development Goals through promoting transformation in rural areas and promoting agriculture (FAO, 2011). Smallholder farming should not be excluded from development efforts as it holds enormous potential to contribute to food security and holistic poverty alleviation. However, smallholder farmers' economic capacity is affected by their lack of access to markets, input products, micro-loans, insurance and education (Anim, 2011). For smallholder farming to be effective in reducing poverty, current policies and recommendations need to be assessed and revised (Aliber et al., 2005). Policies should enhance and ensure access to inputs, credit and markets, use of technology, adoption of environmentally sustainable strategies and strengthening land tenure rights of farmers (Aliber et al., 2005).

Chitja and Morojele (2014) argue that the impact of smallholder farming in South Africa is still unclear. There are numerous policies on agriculture but not much is known about the impact of these policies on the lives of smallholder farmers or on improving their livelihoods (Chitja & Morojele, 2014). While there are various factors shaping the outlook of smallholder farming, including education, climate change and economic instability (Von Loeper, Drimie & Blignaut, 2018), this research study will focus on institutions and policies shaping smallholder farming in South Africa.

1.2 Background of the study

To understand the institutions and policies shaping smallholder farming today, it is important to understand the evolution of the dualistic agricultural system prevailing in South Africa. Agriculture is characterised by a large commercial sector dominated by white farmers and large

corporations and a small, under-resourced subsistence sector overwhelmingly occupied by black people (Hendriks, 2013). This system cannot be isolated from South Africa's colonial history of land dispossession, which culminated in the Natives Land Act of 1913 that divided the farming sector by reserving an estimated 8% of land in South Africa for blacks and allocating the remaining land to whites, including commercial farmers (Van Zyl & Kirsten, 1992). The 1951 Bantu Homelands Act cemented this division, although increasing land 'reserved' for blacks to 13%. To fully understand the current demographics and socioeconomic dynamics of South African agriculture it is important to note the following:

- Black people, including farmers, owned land throughout South Africa before their legal dispossession. Ownership took the form of traditional occupation of land by communal consent of a community or the consent of a chief; freehold title obtained through the occupation of vacant, uncontested land; and private ownership through a deed of sale.
- In addition to the above, tenant farming or sharecropping arrangements by black smallholders on land 'owned' by whites was practised throughout South Africa, with a few black farms having successfully transitioned into large commercial operations.

The Natives Land Act specifically prohibited whites from leasing land to black tenants or sharing farming land with blacks in any way. One consequence of this was to instantly turn thousands of experienced smallholder farmers into a labour pool of farm labourers. With no access to arable land, smallholders were forced to sell crops, livestock and machinery. Another consequence was that, with no place for them on the farm, many young men became available to work as cheap labour in the mines.

These Acts shaped the farming sector in South Africa and saw the majority of black people in rural areas become farm labourers working on white commercial farms for survival (Hendriks, 2013), or swell the ranks of the unemployed surviving on social grants.

Agricultural policies in South Africa before 1994 directed almost all development efforts to commercial farming (NDA, 1997). These efforts included start-up funds, agricultural training, access to credit and loans, direct subsidies, protected access to local and export markets and tax relief measures (Vink & Rooyen, 2009). The commercial focus ensured that smallholder farmers were largely unable to develop beyond subsistence farming during apartheid. Responding to the demands of smallholder farmers and landless rural communities, post-1994 restructuring initiated

by the democratic government included land reform and farmer settlement programmes, public works programmes and expansion of access to agricultural inputs and aids (Van Zyl & Kirsten, 2009).

The shift in focus from only commercial farmers to including smallholder farmers has not resulted in much progress. Many smallholder farming households are food insecure because of ineffective policies and institutions that are supposed to be working to improve smallholder farmers' productivity and sustainability (Hendriks, 2013). The incentives that enabled commercial farmers to thrive, including access to credit facilities, are not accessible to smallholder farmers and many of these farmers do not know how to access these benefits (Masuku, Selepe & Ngcobo, 2017). Policies and interventions to enable smallholder farmers to thrive sustainably must include greater land access and sustainable farming measures if they are to impact significantly on poverty alleviation.

1.3 Problem statement

A study by Khoza et al. (2019) shows that only 19% of smallholder farmers in the Gauteng province participate in global industries in the agricultural sector such as agro-processing. The study revealed that factors such as educational level, land tenure, training and information, distance to market and off-farm income negatively influenced the decision to participate in farming while age, household size, farm size and market access have positive influences on the participation of smallholder farmers in the business of farming. Other literature supports the conclusions of the study regarding the plight of many smallholders in South Africa.

The Food and Agriculture Organisation (FAO) maintains that rural households are likely to escape poverty if they remain in rural areas and are actively involved in farming activities (FAO, 2012). This, however, requires policies and interventions designed to support smallholder farming. Institutional structures, processes and policies shape the environment smallholder farmers operate in and institutions and policies influence the performance of farmers (Oluwatayo, 2019). It is therefore important to assess whether those policies and institutions aid efforts toward agricultural development. Although there are numerous strategies directed towards the improvement of agriculture, their success is questionable, given the extent of persistent poverty in rural areas and among smallholder farmers.

It is important to understand what shapes and influences the smallholder farming sector so that these findings can be used to inform future policies and agricultural interventions aimed at improving smallholder farming.

1.4 Objectives

The research question for this mini-thesis is: How do institutions and policies shape smallholder farming in South Africa?

The main objectives of the study are to:

- Understand the socio-economic factors prevalent among smallholder farmers in rural areas.
- Explore and understand the institutions and policies shaping smallholder farming.
- Determine the role and impact of policies and the institutions shaping smallholder farming.
- Discover current gaps in policy and make recommendations.

1.5 Importance of study

Aliber et al. (2006) maintain that smallholder farming is an essential way out of poverty and should be used to achieve improved food security and poverty alleviation. The fact that rural households continue to value the pursuit of farming activities to improve household food security makes smallholder farming the best route to take in working towards the development of South African rural households (Baiphethi & Jacobs, 2009).

According to the FAO (2011), agriculture has the potential to contribute to the alleviation of poverty and the sustenance of rural livelihoods and is the main source of rural livelihoods (FAO, 2011). Agriculture plays a crucial role in socio-economic development in rural areas. According to Ngwamba (2016), the ability of agriculture to not only generate income but to uphold formal generational connections, history and social unity makes it important in holistic development plans. The practice of smallholder farming in rural areas goes beyond income generation but also creates social capital and important working relations within the farming communities.

The duality of a prominent commercial sector and an underperforming smallholder sector in a competitive market is concerning. An enabling environment suitable for both sectors to be productive is possible but requires thoroughly researched and intentional policies, institutions and processes that are designed specifically for the needs of these sectors.

Policies, processes and institutions have the potential to either successfully grow or hinder the functioning of a sector. This study looks at the policies and institutions shaping the smallholder farming sector in South Africa to shed light on the sector and inform the design of future policies to improve smallholder farming. Further, smallholder farming can be a regional source of employment and economic growth. Delgado (1998) referred to smallholder farming as an important tool for promoting human well-being and political stability in Sub-Saharan Africa.

The state of the current smallholder holder farming sector has been shaped by numerous factors. According to (Qin, 2007), institutional structures in the agricultural sector have had a significant influence on the current state of smallholder farming. Van Niekerk (1998) has noted that the performance of smallholder farmers is dependent on the governance, structures and policies directed to the sector. Earlier, Machethe (1990) mentioned the lack of understanding of the specific roles of stakeholders when studying the smallholder farming sector.

Investigating and studying the institutions and policies shaping smallholder farming will serve the agricultural sector and its plans to develop and advance rural economies. Developing the smallholder farming sector will not only slow the pace of in-migration to urban areas but also promote a green economy that goes beyond creating jobs to holistically improve human well-being (Baiphethi & Jacobs, 2009).

Smallholder farmers are thus positioned to contribute towards the alleviation of socio-economic challenges in South Africa.

The findings of this research will improve insights into the institutions and policies that govern smallholder farming in South Africa and inform future policy-makers, governmental and non-governmental stakeholders working to improve smallholder farming outcomes.

1.6 Chapter outline

This research study explores how institutions and policies in the agricultural sector shape smallholder farming in the rural areas of South Africa, with a particular interest in the Nkomazi area in Mpumalanga. The study is presented as a mini-thesis organised into six chapters:

Chapter 1 introduces the study and its importance, highlighting the historical background and current state of the smallholder farming sector and, thereby, the context of the study. The chapter

describes the study in terms of the problem statement, research question and objectives of the study.

Chapter 2 reviews the literature on the smallholder farming sector and the dynamics shaping its current state. It provides an overview of the challenges and successes of the sector, and the factors shaping current and future trends in the sector.

Chapter 3 provides the theoretical and conceptual framework used to guide and support the research study. The chapter presents an overview of the Sustainable Livelihood Framework (SLF) and Human Development and Capability Approach as the frameworks used to support the study. The chapter further presents a conceptual framework with a relational representation of the variables influencing the state of the smallholder sector.

Chapter 4 outlines the research methodology and design used to respond to the aim of the study and the objectives specified. The chapter provides the description and justification of the research design, including the population sampling, data collection and analysis tools used. It further discusses the limitations, research verification and ethical considerations and briefly outlines the setting of the study area to contextualise the research study.

Chapter 5 presents both textual and graphic representations of the findings of the study. The chapter presents the research findings aligned to the set objectives and aims of the study, the guiding frameworks adopted and the literature presented.

Chapter 6 concludes the mini-thesis. It provides the summary of findings and the conclusion to the study and its objectives. The chapter further provides recommendations and reflects on the proceedings and methods used to carry out the study.

Chapter 2: Literature Review

2.1 Introduction

Agriculture has been recognised as the primary source of employment and income in rural areas (Mbanza, 2013). In the practice of agriculture, smallholder farming has been identified as a vehicle through which poverty reduction can be achieved and has been referred to as the backbone of agriculture (Von Braun, 2007).

The DAFF¹ (2012) defines smallholder farmers as farmers owning small plots of land on which they practice subsistence farming, relying mostly on their own resource capability and family labour to grow enough crops for their families and one or two cash crops. According to Abate et al. (2017), the main characteristics of smallholder farming are simple farming technology, low income from returns and profits and seasonal labour in which women are actively involved.

Agriculture continues to be an effective engine for growth, especially in late-developing countries, including in Africa (De Janvry & Sadoulet, 2010). Livingston, Schonberger and Delaney (2011) maintain that Sub-Saharan Africa (SSA) has great potential for agriculture to be the fastest-growing sector and a source of export growth. The SSA rural economy remains strongly based on agriculture compared to other regions. However, for over 40 years, SSA has had a stagnant per capita agricultural productivity while other regions such as Asia have improved and seen transformation in agricultural productivity (Livingston et al., 2011).

Despite being the main source of income and food smallholder agriculture is underperforming in developing countries. According to Sebopetji and Belete (2009), African countries remain poor because most lack technical and economic opportunities to grow. Smith (2004) shared on the challenges faced by smallholder farmers such as lack of access to land; limited access to markets and finance; and lack of knowledge and skills such as marketing and technological skills.

¹ The government ministry responsible for agriculture has been reorganised and renamed several times. In the democratic era, the National Department of Agriculture (NDA) was in the DAFF portfolio until June 2019 when it was split off and merged with the Department of Rural Development and Land Reform (DRDLR). DRDLR was itself formed in 2009 to form the Department of Agriculture, Land Reform and Rural Development (DALRRD). The remainder of DAFF became the Department of Environment, Forestry and Fisheries (DEFF) with the absorption of the Department of Environmental Affairs. In April 2021, DEFF was renamed the Department of Forestry, Fisheries and the Environment (DFFE).

Machete (2004) writes about the different schools of thought acknowledge the role and importance of agriculture in development. According to Machete (2004), one view argues that, since the majority of the poor are in rural areas, agricultural development is more effective in instigating socio-economic improvement. Others concede the importance of agriculture but also highlight the importance of non-farm activities such as social services and enterprise development (Machete, 2004). Agriculture's role in poverty alleviation has yet to be fully understood or quantified.

This chapter discusses literature on the factors shaping smallholder farming, including policies and institutions in the agricultural sector; constraints and opportunities and future policy trends.

2.2 Agriculture in Africa

Africa is a continent vulnerable to stressors such as poverty, youth employment and lack of infrastructure (Obi, Van Schalkwyk and Van Tilburg, 2012). Despite Africa's already established and inherent adaptive capacity, including its wealth in natural resources, indigenous and traditional knowledge systems and sizeable population, work is needed to improve the already available natural resources, social networks, traditional mechanisms and knowledge systems to nurture intentional improvements for the benefit of its people, including livelihood diversification and small-scale enterprise growth (Obi et al., 2012).

African agriculture is largely rain-fed, underdeveloped and mostly indigenous, dominated by poorly resourced small-scale farmers with limited access to farming inputs, funding and extension services (Hazell et al., 2010). African agriculture is further characterised by untrained workers with local knowledge and techniques farming mostly for household consumption (Lipton, 2005).

African farms are mostly operated in smallholder farming systems (Zantsi, Mulanda and Hlakanyane, 2021). Constrained by lack of capital, technologies and markets, the smallholder farming system has had minimal progress as a sector and in assisting poverty alleviation (Kamara et al., 2019). Lipton (2005) identifies mounting pressures on natural resources, HIV/AIDS and growing populations as challenges to the viability and growth of the smallholder sector. However, despite challenges, small farms have proved to be remarkably resilient (Lipton, 2005).

Why then is there minimal progress to such a sector in Africa? According to Smith & Haddad (2000), Africa has struggled to use agriculture as a vehicle for the development of its people, and

the reasons for this include inadequate agricultural extension support, inaccessible markets, disconnected budgeting and resource allocation, and the poor distribution of inputs and subsidies (Balie and Nelgen, 2016).

According to Balie and Nelgen (2016), there is a need for revisiting and reinforcing the context serving *extension services, accessible markets and credit schemes*. According to Dube et al., (2018) the agricultural sector is poor and declining in Africa in relation to the effects of structural adjustments programmes, HIV and AIDS and conflicts. Chibanda et al., (2009) also argued that relevant technologies and techniques should be made accessible to farmers through agricultural extension support and the intentional involvement of all stakeholders.

Access to markets is a crucial component in the smallholder farming sector in South Africa but is constrained, especially for the rural poor. The lack of funding, infrastructure and adequate extension support undermines the ability of smallholder farmers to access markets (Mncina and Agholor, 2021). It would be difficult to achieve set targets in the agricultural sector without well-functioning markets. The trust between actors in the market chain and small-scale producers needs to improve.

Market access by smallholder farmers is related to the issue of *credit schemes* in the agricultural sector. Market failures often occur because it is costly to screen input credit applications (required to reduce the lender's risk) and farmers lack collateral for loans (Sebopetji and Belete, 2009). An efficient input credit system in the smallholder sector could have an important payoff through poverty alleviation (Sebopetji and Belete, 2009).

According to Lipton (2005), agriculture in African countries has fallen behind and is ill-equipped to compete in a global market. Africa has also been one continent vulnerable to the effects of climate change, political challenges, population growth and the rapid rate of urbanisation which has made the African agriculture sector a sector that is in need of well-researched interventions to improve its capacity to respond to stressors and thereafter adapt (Pienaar, 2009).

2.3 Smallholder farming: A vehicle towards development

The practice of agriculture, particularly smallholder farming, has been identified as a vehicle for poverty reduction (Von Braun, 2007). Smallholder farming is the developing world's biggest source of employment that plays an important role in livelihood creation among the rural poor (Chapman & Tripp, 2004). Von Loeper et al. (2018) add that there is ample evidence that smallholder farming can be productive and competitive in markets when provided with the necessary support, with persistent growth and positive influence on food security (Kamara et al., 2019). While smallholder farming has been described as the backbone of agriculture by the International Food Policy Research Institute (IFAD, 2010), it is constrained by lack of capital, technologies and markets.

Smallholder farming allows for increased availability and access to food and therefore impacts the food security of those involved in smallholder farming (Adams, Sibanda and Turner, 1999). According to Gulati and Narayan (2002), smallholder farmers in Africa are highly heterogeneous due to Africa's varying geography, climate, socio-economics and demography. Consequently, the characteristics of smallholder farming differ with changes in context and location. According to Sihlobo and Kirsten (2021), smallholder farming may be defined according to systemic characteristics such as land access, the aid environment, labour, resources and capital, technology and market orientation. This makes the study of smallholder farming multifaceted, dynamic and often complex.

Chambo, Mwangi and Aloo (2008), state that there is ample evidence that smallholder farming can be productive and competitive in markets that are provided with the necessary support. Agricultural investments and interventions contribute to the sustainability of smallholder farming and the income growth, food security and employment opportunities of the rural poor. For example, Louw et al. (2007) reported a study in Limpopo wherein the Spar supermarket group had a partially successful partnership with local smallholders supplying fresh produce. In 2004, approximately 23 smallholder farmers were supplying up to 30% of Spar's fresh produce in Thohoyandou. Performance, however, declined as training and interest-free loans initially provided by Spar were reduced. The study revealed gaps in training farmers in managing product quality, marketing, enabling farmers to comply with delivery schedules, overcoming transport problems and accessing cheaper inputs.

A study reported by Oni, Maliwichi and Obadire (2010) showed that only 20% of homesteads in Thulamela in Limpopo had mixed livelihood strategies while farming unequivocally proved to be a primary livelihood. In a study conducted by Machethe (2004) of 138 smallholder farmers in Limpopo, household income sources were divided into two broad categories of farm and non-farm sources. Farm activities included income derived from the sale of farm produce and non-farm income included old-age pensions, remittances, wages, family businesses and other sources. Farming and old-age pensions proved to be the greatest contributors to household income.

Another study proving the relevance and importance of smallholder farming and confirming the role of agriculture in poverty alleviation was conducted by May, Gilson and Harter (2004). This study involved 1 031 households in KwaZulu-Natal. It concluded that households engaging in agricultural activities tend to be less poor than those not participating. The study further noted that an increase in farming activities was directly proportional to increasing the total household income, strongly suggesting that agriculture remains an important source of income in that province.

These studies indicate that, in South Africa, there is a need to increase the productivity of subsistence smallholder agriculture to ensure long-term food security and rural income. However, this would require a dramatic increase in the use of fertilisers and organic inputs, conservation investments, well-functioning input and output markets and improved transaction costs and risks (Chapman & Tripp, 2004).

The continued population growth and urbanisation have placed a huge demand and pressure on food supplies and agricultural products. Smallholder farming, even with its unrealised and uncultivated potential, has become a global player in meeting the demand for employment and food (Godfray et al., 2010). As mentioned by Machethe (2004), agriculture has a strong and positive impact on hunger and poverty alleviation in both urban and rural areas which is significantly greater than other economic sectors. In addition, small farmers are important to human welfare and promoting political stability in Africa (Machethe, 2004).

2.4 Factors shaping smallholder farming

According to Dorward et al. (2004), success in the agricultural sector is highly dependent on the consideration of local and global conditions and policies and how these conditions shape the

agricultural system. Agricultural interventions should occur in the context of the conditions surrounding the agricultural system.

The past decades have seen a major shift in policy thinking with increasing recognition of state failure, globalisation, a move away from direct state intervention and developing the institutional environment (Von Loeper et al., 2018). This has created an ineffective agricultural environment encompassing market failure, lack of information flow, the unsustainability of farming and the prevailing unsatisfactory development of the smallholder farming sector (Von Loeper et al., 2018).

Agro-climatic conditions are another global challenge that has impacted agriculture. According to (Connolly-Boutin & Smit, 2016), Africa has a high vulnerability to climate change due to the region lying within the warming tropics and having limited resources and capacity to adapt to climate change effects. The long-term changes in weather conditions include drought and floods that directly impact negatively on agriculture. The impact of climatic conditions on agriculture and smallholder farming has been severe as most African smallholder farmers depend on rain-fed crops with little to none water storage capacity (Connolly-Boutin & Smit, 2016).

Human capital also plays an important role in shaping smallholder farming. A study by Khoza et al. (2019) shows that only 19% of smallholder farmers in Gauteng participate in agricultural value-add industries such as agro-processing. The study further revealed that those who participated were the most educated of the 102 participants sampled for the study (Khoza et al., 2019). The study and reviewed literature support the view that the capacity of smallholder farmers to perform depends on factors such as educational level, health or capacity to work, age, training and information, infrastructure, income, household size, farm size and market access (Khoza et al., 2019). As mentioned by Doss et al. (2015), the underperformance of agriculture in most African countries can partially be explained by the marginalisation of women in land ownership. Unresolved issues of land distribution and gender dynamics play a significant role in the state of the smallholder farming sector (Deininger et al., 2017).

The literature shows that agricultural productivity requires more than access to advance inputs, funds and technologies. It also requires a foundation of strengthened human capacity and relationships in the farming community (Chambo, 2009).

2.5 Smallholder farming in South Africa

The end of apartheid was accompanied by spatial shifts where the majority of the South African population moved away from rural or semi-rural areas (Lahiff & Cousins, 2005). Access to land by black people had been limited to the 13% of the land that made up the former homelands that were overcrowded and unsuited to farming (Lahiff & Cousins, 2005). According to Lahiff and Cousins (2005), agricultural activities in these areas tended to be small-scale, making minor contributions to the well-being and sustainability of households.

Leibbrandt, Woolard and Woolard (2009) state that the South African agricultural sector can be seen as comprising three sub-sectors: subsistence farming producing for own consumption; commercial farming (medium or large farms providing employment); and a rural non-farming sector (largely servicing the commercial farming sector). About 78% of the total farms in South Africa are less than two hectares in extent (Wiggins & Keats, 2013). However, it should be understood that using farm size to define smallholder farms is inadequate in divining the full picture of smallholder farming. Most South African smallholders would not consider themselves as farmers as what they grow is more related to survival than a choice of work (Balie et al., 2018). This livelihood strategy is paired with income resources such as social grants and remittances.

For South African smallholder farmers, Aliber et al. (2006) argue that the challenge of accessing markets is worsened by the country's economic status, inequality and dual economy. The first economy is dominated by developed commercial farmers while the second economy is characterised by less developed smallholder farmers with limited resources who are almost disregarded in policies (Hendriks, 2014). According to Hendriks (2014), smallholder farmers operate on the periphery of the farming sector earning just enough income to survive if able to sell. Apart from poor infrastructure and lack of financial muscle, smallholder farmers lack access to information about commercial markets and resources to explore their entrepreneurial abilities (Chibanda et al., 2009). As a result of the lack of access to markets, smallholder farmers are deprived of the opportunity to scale up their production and returns and perpetuate the cycle of poverty in the farming sector (Aliber et al., 2006).

Magadani (2014) noted that most smallholder farmers in South Africa reside in areas with inferior agricultural potential. Many of these areas have low resources, less rainfall and less fertile soils (Magadani, 2014), which seriously constrains the productivity of farmers in these areas. This agro-

climate challenge may be coupled with challenges such as lack of skills in managing surface runoff, drainage, soil degradation, low soil fertility and low technological skills (Obi et al., 2012).

The challenges in smallholder farming are more evident with regard to gender issues (Muzari, 2016). The feminisation of smallholder farming in South Africa is an important and critical dynamic shaping smallholder farming in South Africa (Thamaga-Chitja, 2012). Smallholder farming is dominated by women with over two million women responsible for almost all the productive activities in smallholder farming (Thamaga-Chitja, 2012). According to Nesanvuni, Mpandeli, Tshikolomo and Swanepoel (2016), though women dominate the smallholder farming sector, they are often disadvantaged due to existing inequalities in most African countries. Women do not have equal rights and access to resources as men and where women have access to land they do not usually own the land and title (Muzari, 2016).

The success of the smallholder farming sector will ultimately be determined by creating an enabling environment for smallholder farmers to improve productivity (Ngomane, 2004). Governments' initiatives need to focus on the improvement of all aspects and dynamics related to these farming systems to improve rural livelihoods (Ngomane, 2004).

2.6 Policies and institutions shaping smallholder farming

During the 1960s, African governments paid more attention to large-scale farmers with the encouragement of donors while small farmers were not given attention (NDA, 1998). African governments however gradually prioritised the smallholder sector as it showed potential to produce a surplus for the market (NDA, 1998).

Reardon and Vosti (1992) and Reardon et al. (1995) conceived a useful model conceptualising an overview of the current agricultural sector in Africa in terms of four sets of blocks. The first block involves policy reforms at macro and sectoral levels, structural changes and existing projects. These influence the second block which looks into incentives offered to farmers; the capacity that farm households have to act on changing incentives and community capital and access to information. The third block deals with understanding farmers' choices of technology and product mix, farm households' mix of farm and non-farm activities and, finally, the fourth block concerns the on-farm, off-farm environments. These are important dimensions in studying the policy environment in Africa.

Barret and Carter (1999) differentiates between macro-level policies that tend to have analytical and empirical effects on incentives facing farmers and sectoral policies that include taxes, subsidies and price controls, fertiliser or seed policies, financial services policies and land policies. African governments have intervened in the agricultural sector through a variety of policies (Angelucci & Attanasio, 2013). According to Angelucci and Attanasio (2013), the majority of the policies implemented for the agricultural sector have not achieved their objectives. The authors state that, largely because of challenges in data availability and quality, SSA has seen few studies on agricultural policy and policy monitoring efforts of development projects. Moreover, assessing the effectiveness of policies has been a challenge for developing countries (Angelucci & Attanasio, 2013).

Governments play a central role in creating better conditions for thriving agriculture (Dorward et al., 2009). China, for example, is aiming to make meaningful progress in agriculture and poverty reduction through cocoa production (Cui et al., 2012). According to Ngomane (2004), the challenge for governments is managing political stability to overcome agricultural policies biases, underinvestment and disinvestment and also strengthening governance for the implementation of agricultural policies. Moreover, government policies should not only focus on improving agriculture but also on studying the gaps in the livelihood strategies in rural areas (Ngomane, 2004).

There is further a need to create an African smallholder system that allows farmers the capacity to choose sustainable methods of growth. Evidence shows that where well-researched interventions and policies have resolved structural weaknesses this resulted in farmers benefitting from incentives with the increased capacity to pursue growth (Chambo et al., 2008).

Chambo et al. (2008) argue further that rapid agricultural growth in Africa will be difficult because of its unfavourable politics and governing systems, degraded soils, low population density, poorly functioning markets and competition from the global community. This, however, does not devalue its growth and progress towards being the most dynamic sector in Africa. According to (Tshuma, 2014), the agricultural sector has often led the export sector and in earning foreign exchange with comparative advantages for developing countries.

Governance in African countries remains one of the factors implicated in its underdevelopment (Kisurulia, 2020). According to Kisurulia (2020), poor governance can be ascribed to corruption

and government structures in the education, agriculture and health sectors being controlled by political leaders who are not trained nor skilled to develop the sectors (Kisurulia, 2020). According to Diao et al. (2013), bad political leadership always permeates government departments, which compromises the citizens at the receiving end. Further, the lack of relevant strategies and devotion to African realities by those in governance minimises the impact of the efforts made.

In South Africa, for example, the legacy of apartheid and colonialism includes debt crises, collapsing infrastructure, high rates of HIV/AIDS, low literacy levels and poor grades on development indicators. This reflects on the current development strategies including the strategies aimed at developing the agricultural sector.

2.6.1 Policies and institutions shaping smallholder farming in South Africa

Every country has different institutions, processes and structures for agriculture influenced by many factors, including climatic conditions, governance, land access and human capital such as education and health (Harrison & Freeman, 2004). In South Africa, the relevant institutions and policies have proven to be mostly unfavourable to smallholder farmers.

According to Lipton et al. (1996), the end of apartheid in South Africa coincided with an emerging class of black farmers, including smallholder farmers. Except for those farmers who received support through master-farmer and Bantu Homelands Development Corporation schemes in apartheid, the majority of producers received little or no support (Lipton et al., 1996).

The vast majority of smallholder farmers were thus under-resourced, in the former homelands and elsewhere (Jacobs, 2008). During the democratic transition, new policy imperatives included investments to potentially create 1 million jobs by 2030, expanding commercial agriculture, particularly to include black commercial farmers, putting 1 million hectares of unutilised arable land into production by 2019, supporting 300 000 smallholder producers by 2019, expanding the hectares under irrigation and ensuring food security for all (Pienaar, 2009).

The political change in South Africa post-1994 brought with it a policy and institutional shift impacting the outlook of different sectors, including agriculture, one of the sectors that experienced limited state support (NDA, 1998). The emergent smallholder farmers bore the brunt of the consequences of limited state support (NDA, 1998).

According to Mmbengwa et al. (2011), agricultural policies and institutions in South Africa currently favour commercial agriculture as the main player in economic development. Smallholder farmers however have had limited space in commercial industries, such as agro-processing, despite increasing government efforts directed towards smallholder farmers. Fan, Brzeska and Halsema (2013) state that smallholder farmers are limited to economic participation within the informal sector whereas commercial farmers are located within the formal economy, with access to value chains. This has shaped the current underdeveloped and underperforming smallholder farming sector.

The state of the agricultural system and policy environment is highly influenced by global conditions (Hassen, 2005). Mmbengwa (2011) concurs that agricultural growth in developing countries such as South Africa is impacted by falling world commodity prices, population pressures characterised by high birth and mortality rates, the effects of HIV and AIDs, declining health and employment, urbanisation, technology advances, globalisation and conflicts (Mmbengwa, 2011). These conditions tend to be more severe in poorer countries that have minimal capacity to adapt to the conditions (Mmbengwa, 2011).

Policymakers succeeded in convincing the governing party that the restructuring of the agricultural sector should accommodate small farmers using the mechanisms of service provision and infrastructure (Jacobs, 2008). The commitment to improving the productivity of smallholders included building institutions that could provide financial support, research and extension services, farming inputs and facilitation of markets (Moeti, 2007).

By 2007, the South African government was calling for a modern and competitive smallholder sector (Pienaar, 2009). The strategy was however not implemented meaningfully. Although there were many other reasons, this was mostly a result of an urban-oriented government neglecting to prioritise the sector (Pienaar, 2009). According to Sibanda (2001), the fiscal problems inherited from apartheid reduced available funding for agricultural plans, budgets and structures also hindered the success of agricultural strategies. Pienaar (2009) argues that there was a view that focusing on smallholder farming would limit the development of other economic sectors that could collaborate with the agricultural sector and thereby benefit smallholder farmers.

The South African agricultural sector is shaped by policies and legislation that are nominally transformative (Liebenberg, 2015). The Marketing of Agricultural Products Act (Act 47 of 1996)

sets out the premises for smallholder farmers to operate in agricultural markets (DAFF, 2012). The Act establishes a National Agricultural Marketing Council that must regulate and intervene in the agricultural market through such measures as levies on agricultural products. Clause 4.2.e of the Act specifically requires the Council to have a member or members with practical knowledge and experience in “the production and marketing of agricultural products by small-scale and previously disadvantaged farmers”.

The Agri-BEE Policy of 2003 aims to promote economic transformation to enable meaningful participation of black people in the economy by partnering smallholder farmers who are untrained and poorly resourced with well-resourced established commercial farmers (NDA, 2004). Agri-BEE is a sectional, broad-based black economic empowerment framework intended to support black South Africans in agriculture (DAFF, 2017). According to the DAFF (2017), this policy promotes equitable access and participation of historically marginalised individuals in the agricultural value chain and this includes deracialising ownership of agricultural enterprises, uplifting marginalised, rural communities and increasing their access to economic activities. Activities aimed at achieving these objectives included eliminating illiteracy within farming communities, providing farmers with technical and management skills training, and promoting agriculture as a career (DAFF, 2017).

There is a need for pro-poor institutions and policies if the agricultural sector is to contribute to the development of the country's economy (Chisasa and Makina, 2012). According to the Department of Agriculture (2004) on the implementation of the Comprehensive Agricultural Support Programme (CASP), the introduction of the Comprehensive Agricultural Support Programme (CASP) in 2004/5 responded to the gap resulting from the closure of the Agriculture Credit Board in 1998 that made it nearly impossible for the new land claims beneficiaries to access credit or other means of financial support from the Land Bank and other commercial banks. Without credit, land redistribution beneficiaries were unable to extract value from or add value to their newly acquired land and assets (DoA, 2004). In effect, the lack of access to credit perpetuated the historical gap between small emergent farmers and existing commercial farmers (DoA, 2004). The CASP was meant to support the agricultural development strategy for smallholder farmers. Despite large budgets (R1 billion budgeted for smallholder farming for the 2011/12 year), the impact of the CASP in supporting smallholder farmers is unclear (DAFF, 2012). The

ineffectiveness of this policy may be accounted for by the lack of coordination in its implementation.

As identified by the Industrial Policy Action Plan (IPAP) and the National Development Plan (NDP), agro-processing plays an important role in socio-economic development. According to the National Planning Commission (2012), the IPAP envisages black-owned SMMEs being involved in small-scale milling, malt plants, snack plants, blended foods and incubator farms. The NDP vision mentions small-scale farmers producing one-third of a future food surplus and security of tenure for communal farmers (National Planning Commission, 2012). To its credit, although vague on the details of implementation, the NDP mentions several of the developmental obstacles facing small-scale farming. However, reflecting the dominant government commercial bias, there is an assumption that small-scale farming will not transition to large commercial operations. According to Thindisa (2014), the involvement of smallholder farmers in agro-processing has the potential to contribute significantly to sustainable livelihoods, particularly in agricultural development plans. Hence policies must enable smallholder farmers to participate in such economic industries.

It is important to understand that policies of this nature reflect the priorities and understanding of the factors that shape the agricultural sector in South Africa of the government department that is the implementing agency. For example, the DAFF (2012) stated that various policy interventions and fiscal policy in South Africa regarding smallholder farming are geared towards supporting only emerging farmers, which leaves a gap in support for non-emergent smallholder farmers.

Louw et al. (2007) note that the three most common market destinations for smallholder farmers are South African fresh produce markets, informal markets and supermarket chains (they do not have the capacity to export produce or produce products through agro-processing). The Johannesburg Fresh Produce Market (JFPM) is the largest fresh produce market and the most important outlet for smallholder farmers, especially from Limpopo. The JFPM offer extension officer training programmes to better convey market information such as prices, packaging and storage to farmers. JFPM runs small farmer and informal trader open days and works with various municipalities to build decentralised pack-houses and grading facilities. This assists better integration of small and emerging farmers into fresh produce markets. Aside from directly selling produce to customers or selling to informal middlemen, smallholders have limited access to selling

to supermarket chains, primarily because they cannot produce the volumes or consistent quality demanded by the supermarkets (Louw et al. (2007)).

The post-apartheid state of the agricultural sector is generally characterised by poor levels of inter-departmental coordination and farmer support, poor monitoring and evaluation of support programmes, lack of accountability among stakeholders and a disconnect of skills and training (Chibanda et al., 2009). According to Ton (2008), the intense requirements of business plans to be submitted by farmers seeking support, which is a hindrance for a large number of poorly educated farmers disadvantages agricultural improvement. Moreover, farmers who are able to submit business plans often set unrealistic targets undermining the achievement of success (Ton, 2008). Moeti (2007) explains that another hindrance to the success of the smallholder sector is the lack of consistent reporting on funds allocation and use between both the government and beneficiaries. This further undermines policy implementation and efficiency (Moeti, 2007).

A thriving agricultural sector requires consistency in the development and implementation of policies, strategies and programmes aimed at intentional support of farmers paired with realistic evaluation criteria to assess the implementation of projects.

2.6.1.1 Institutional arrangements

Successful policy implementation depends on the structures and institutional arrangements of implementing stakeholders. According to Dorward et al. (2009), there is a need for better coordination of responsibilities and roles between the governing structures and institutions in the agricultural sector that currently include the national and provincial arms of DALRRD and other departments, provincial governments, state-operated enterprises (SOEs) and local authorities (municipalities). Moreover, there must be constant and thorough monitoring and evaluation of the performance of relevant institutions and implementation agencies (Dorward et al., 2009).

Several institutional stakeholders influence the state of the smallholder sector in South Africa. The DALRRD has a wide-ranging portfolio of responsibilities that includes the elimination of skewed participation and inequity and the maximising of growth, employment and income in agriculture; enhancing the sustainable management of natural agricultural resources, ensuring effective and efficient governance and knowledge and information management (Moeti, 2007). Furthermore, the DALRRD is responsible for land reform, including restitution of land of people dispossessed

during apartheid, and promotion of access to land through acquisition and redistribution (Moeti, 2007).

As part of the institutional arrangements shaping the agricultural sector, Provincial Departments of Agriculture act as implementing agencies and assist farmers in the preparation and implementation of projects, provide evaluation and monitoring of projects within stipulated principles and criteria, provide general agricultural information and resources to beneficiaries, including extension services, and report to the national government on progress as per set objectives (Chibanda et al., 2009).

Banking institutions such as the Land Bank provide financial services to meet the needs of emergent and developing farmers and participants in agro-businesses (Chisasa and Makina, 2012). The Industrial Development Corporation (IDC), the Development Bank of Southern Africa (DBSA) and other banking institutions are mandated to provide access to finance, design support products and strategies, provide financial management training and support, offer financial risk assessment and monitor financial viability of proposed projects (Liebenberg, 2015). Another financial institution is the Micro-Agricultural Financial Institutions of South Africa (MAFISA), a government-supported financial scheme that provides production loans to smallholder farmers. Loans are available for the entire value chain where funds revolve within the intermediaries for the duration of an agreement. MAFISA plays a vital role in contributing to job creation and sustainable rural economic growth and has achieved an increase in farming productivity and agribusiness operations (Gininda, Antwi and Oladele, 2014). According to Oladele and Ward (2017), the scheme is challenged by limited insurance, guarantees of loan repayments and risk of short-term liabilities especially when the production of farmers gets infringed and their incapacity to repay loans is compromised.

The Ilima/Letsema Conditional Grant Framework invests in infrastructure that unlocks production within strategically identified grain, livestock, horticulture and aquaculture production areas (Ramagoshi, 2013). Moreover, the framework aims to reduce poverty through increased food production initiatives by assisting vulnerable South African farming communities (Aries, 2016). According to (Ramagoshi, 2013), the framework has however had limitations, including insufficient audits and monitoring of funds and misalignment of reporting timelines of grants.

District and local councils also play a crucial role in the smallholder sector, to coordinate development efforts, screen development plans and efficiently initiate development projects at the district or local level (Chibanda et al., 2009). Lastly, the beneficiaries of the development strategies themselves play a role in shaping the state of the agricultural sector as they hold the duty to accept responsibility for implementation procedures and management of projects. The beneficiaries further hold the duty to submit necessary applications, business plans and demonstrate cooperation and discipline.

According to Mncina and Agholor (2021), the gaps in the interventions and efforts directed towards the agricultural sector are a reflection of dysfunctional policy designs, implementation processes and structures. A thriving smallholder sector not only requires well-designed policies but well-functioning institutional arrangements for implementation.

2.7 The South African government's promotion of smallholder agriculture

A range of interventions have been made by the South African government, including the Integrated Sustainable Rural Development Programme and the CASP, which have all had a minimal impact and only a small elite (Lahiff & Cousins, 2005). Although most of its interventions proved to be unsustainable, the government has directed efforts in crucial aspects of the agricultural sector such as land reform, agricultural credit and infrastructure (Lahiff & Cousins, 2005).

The government has over the years designed and implemented strategies to translate policy reforms into action and these include the Integrated Sustainable Rural Development Strategy (ISRDS), which aims to integrate rural development in the agricultural sector (Ellis and Biggs, 2001.). According to (Van Schalkwyk, 2015), the government has provided agricultural support services guided by the ISRDS that are inclusive and appropriate to the rural poor and emergent small farmers, especially targeting women, young people and the disabled.

Since 1994, the government has improved land access by means of land tenure reform and land restitution and redistribution (Sibanda, 2001). Since this transition, the Land Redistribution for Agricultural Development (LRAD) strategy developed by the DALRRD aimed to increase access to farming land by black people (Lahiff and Li, 2012). Since its implementation, the government has distributed an estimated 30% of the country's distributable, arable agricultural land. LRAD

further provides grants ranging between R20 000 to R100 000 to the land beneficiaries for agricultural purposes, linked to their own contributions in labour and cash (Dube, Das Nair, Nkhonjera and Tempia, 2018).

The impact of the land distribution efforts is however disadvantaged by little financial capacity after land acquisition and transfer to ensure beneficiaries have access to a full range of support services (Balié and Nelgen, 2016). The mandate of the LRAD is seemingly limited to access to land, without creating enabling conditions for productive land.

The National Land Care Programme is a strategy designed to promote the sustainable use and management of natural resources including water, soil and veld care (Garrity, 2009). This strategy is as vital in promoting a sustainable agricultural sector. The holistic inclusion of development strategies, farmer participation, institutional support structures and improving farming practices are key to the success of the agricultural sector.

2.7.1 Land reform

The new democratic Parliament passed the Restitution of Land Rights Act, 1994 (Act 22 of 1994), providing the principle legal framework for processing claims for land restitution and establishing the Commission on Restitution of Land Rights (CRLR). The broad mandate for land restitution is provided by the Constitution of South Africa Act (Act 108 of 1996) which states that a “person or community dispossessed of property after 19 June 1913 as a result of past racially discriminatory laws or practices is entitled, to the extent provided by an Act of Parliament, either to restitution of that property or to equitable redress” (CRLR, 2021: 7). As stated by Deininger and May (2000), efforts were made since 1995 when the Settlement/ Land Acquisition Grant (SLAG) was launched, to improve access to land for productive purposes. The SLAG however did not live up to its expectations and the government then introduced the Land Redistribution for Agricultural Development (LRAD) strategy in 2000 which has been criticised as ineffective in ensuring access to farmer support services (Moeti, 2007).

Policy priorities shifted in 1999 to meeting the needs of the poor and aspirant black farmers (Cousins, 2016). This included the Communal Land Rights Act passed in 2004. According to Cousins (2016), this Act, which was struck down by the Constitutional Court on procedural grounds, was designed to transfer ownership of land from the state to traditional councils led by

chiefs. Post-2009, policies directed towards land reform and rural development became more of a priority although implementation was slow (Cousins, 2016). As part of the policies directed towards land reform, the Department of Rural Development and Land Reform (DRDLR)² was created in 2009 and the Restitution of Land Rights Amendment Act (Act 15 of 2014) was passed to extend the cut-off date for new land claims from July 2014 to June 2019 (CRLR, 2021: 9). The 2014 Act was declared unconstitutional on 27 July 2016 after the Constitutional Court found that the extension prejudiced the rights of those whose claims before 31 December 1998 had not yet been finalised. Further decisions by the Constitutional Court compelled the CRLR to focus on older claims and effectively freeze the processing of newer claims. After Parliament failed to amend the legislation within two years, as directed by the Constitutional Court, the Court directed that claims received after 1 July 2014 should not be processed until the older claims had been dealt with. Importantly, the Court also assigned judicial oversight of the CRLR to the Land Claims Court (LCC), which compels the CRLR to report its progress in the matter to the LCC (CRLR, 2021: 9). The slowness of the CRLR to process claims and political wrangling over the Expropriation Bill and the issue of expropriation without compensation since 2017 have effectively prevented significant progress with land reform and ensured that the dispossession of smallholder farmers during apartheid has largely not been reversed.

2.7.2 Agricultural credit

Agriculture is a capital-intensive industry. Financing mechanisms are crucial enablers for the coordination and delivery of an efficient agricultural sector (Molapo, Mears and Viljoen, 2008). Policies and institutions in the smallholder should enable increased access to agricultural credit information, agricultural credit stakeholder consultation and networking and the promotion of the participation of locally based and owned credit intermediaries (Balié and Nelgen, 2016). There are numerous established financing mechanisms such as commercial banks dealing with agricultural financing and national development funding institutions (DFIs) such as the Land Bank, Khula, DBSA; provincial DFIs such as Vimba, Mpumalanga Agricultural Development Corporation; agricultural cooperatives; financial services cooperatives, National African Farmers Union (NAFU) and AgriSA. While many farmers were reached by these institutions, a majority of the

² DRDLR became the Department of Agriculture, Land Reform and Rural Development (DALRRD) in 2019.

farmers still don't have access to credit, primarily because they lack assets to use as collateral to secure loan financing³.

2.6.3 Infrastructure

The lack of infrastructure in rural areas remains an obstacle to smallholder farming growth in South Africa by preventing farmers from efficiently farming their land or distributing the produce (Mazibuko, Antwi and Rubhara, 2020). According to Balie et al., (2018), agricultural infrastructure can be grouped as:

- resource management infrastructure;
- production infrastructure;
- mechanisation,
- water storage infrastructure and
- marketing infrastructure.

Resource management infrastructure prioritises water runoff control, irrigation systems, drainage, veld management, fences, drought and flood assistance. *Production infrastructure* includes farm layouts, access roads, sheds and stock handling equipment. *Mechanisation* includes tractors, transport, harvesting and packaging machinery. *Water storage infrastructure* encompasses rainwater harvesting tools, rainwater tanks, underground water storage tanks and water-holding ponds and dams. Finally, *marketing infrastructure* deals with product preparation facilities such as sorting, cleaning, packaging, storage and delivery to market. There is a visible lack of infrastructure which shapes the current state of the agricultural sector and inevitably that of smallholder farming (Mazibuko et al., 2020).

Although with limited impact on the rural poor, the government has implemented programmes such as community-based public works, consolidated municipal infrastructure programmes and

³ The standard land redistribution arrangement is a form of tenancy, where the government provides a long-term lease to the beneficiary farmer, rather than transferring ownership. Since the farmer does not own the land, it cannot be used to secure a loan. By contrast, land *restitution* usually involves the legal transfer of ownership to the beneficiary.

poverty relief, and an infrastructure investment fund in response to the need for better infrastructure (Everatt & Zulu, 2001).

2.8 Constraints and opportunities for smallholder farming

The Millennium Ecosystem Assessment (2005) states that agriculture has been the most dynamic economic sector in Africa with annual growth rates of 3.7% exceeding non-agricultural sectors on the continent. According to Aliber et al. (2005), an estimated four million people engage in smallholder farming in South Africa alone with farming seen as a livelihood strategy, a communal norm and a beneficial way of living.

Although it progressively contributes to economic development, smallholder farming has reportedly progressed slowly. The challenges of farming input, technology and machinery constraints and opening market channels for farmers remain complex (Dorward et al., 2004). According to Dorward et al. (2004), poor health and education services in Sub-Saharan Africa further limit farming productivity and the possibility of other livelihood strategies. The sector is further challenged by changing climatic conditions, soils and crop suitability (Connolly-Boutin & Smit, 2016). In addition, agriculture has major effects on natural resources, such as water depletion, agrochemical pollution, soil exhaustion, and loss of biodiversity through deforestation (Millennium Ecosystem Assessment, 2005). This undermines the basis for future agricultural production and increases farmers' vulnerability to risk.

The general increase in the human population has resulted in people prioritising land for housing, limiting land availability for food production (Anim, 2011). The shortage of arable land affects the contribution of agriculture to food production and food access. In most African countries, customary laws and policies result in women not accessing land, another reason for agriculture underperforming in African countries (Lipton & Saghai, 2017). Where women are intensely involved in agriculture they tend to be marginalised and face challenges in accessing productive resources, such as land (Doss et al., 2015). The unresolved issue of uneven land distribution has delayed agricultural development and economic growth, causing Africa to continue to suffer from hunger, poverty and malnutrition (Deininger, Savastano & Xia, 2017).

Furthermore, African countries are challenged to develop a more sustainable, productivity-driven base for a competitive agricultural sector over the long run (Hazell et al., 2007). Agriculture stands

with great potential to be a key driver of economic growth and poverty reduction. However, long-term, credible data on a national scale that enables analysis of the trends in the smallholder agricultural sector and serves as a basis for interventions and strategies is needed before the challenges can be addressed and opportunities explored.

2.9 Future policy trends and issues in the agricultural sector

The literature confirms that most agricultural activities in Africa take place in small-farm systems. Household surveys from African countries generally show high rates of household consumption of agricultural produce (Gollin, 2014). However, there has been a persistent challenge with policies that are not favourable to small farm production. Hazel et al. (2007) contend that the growth of agriculture depends on the feasibility and efficiency of interventions aimed at small farms and rural households. For agricultural advancement, there is a need for policies designed for the benefit of smallholders as well as large-scale farmers.

Since small farms are likely to remain dominant in Africa (Barret, 2008), the development of the smallholder farming system is the key to agriculture contributing to poverty alleviation in South Africa. With reference to Cui et al. (2018), evidence from other countries shows that with the necessary support, smallholder agriculture holds great potential to eliminate poverty. However, this will require overcoming historical and geographical structural constraints and institutional reforms (Gollin, 2014).

Kundhlande et al. (2004) argue that among the reasons for the ongoing decline in farmers' productivity are the removal of government subsidies and the collapse of some institutions that supported farmers during the apartheid era. From the Labour Force surveys conducted between 2004 and 2006, it can be seen that the practice of smallholder farming as a main source of food declined from 33% to 6% (Statistics South Africa, 2006). This can be ascribed to people moving to urban areas and finding other remunerative economic activities and livelihood strategies.

Nesamvuni et al., (2016) mentions that as populations increase, there will be little arable land for farming. Population increase places implications on employment, income and food production making it more important to invest in the agricultural sector, its policies and opportunities. Moreover, according to Magadani (2014), where markets remain thin and investment is stagnant, small farms are likely to remain small or even decline. It is through appropriate policy development

designed to suit the needs of smallholder farmers that the smallholder sector is likely to move to a more profitable role in the chain of production (Barret, 2008).

Balie and Nelgen (2016) point out that there are many inadequately researched and targeted policies that do not yield results and that comes at a cost for those who stand to benefit from state resources and the success of these policies. There remains room for research that would shed light on ways in which people benefit from the existing policies and institutions in the agricultural sector. Moreover, there is a need for monitoring and evaluation to address whether interventions on the ground are sustainable and worthy of their impacts (Gollin, 2014). Gollin (2014) warns against a case where the cost of maintaining the intervention is higher than the benefits it yields. The key for a thriving agricultural sector is the implementation of suitable policies that aim at reducing bias against smallholder farmers, while simultaneously achieving the objectives and sustainability of the schemes (Faulker and Loewald, 2008). Given the heterogeneity of the African setting, it cannot be the case that development strategies always favour the agricultural sector. This then calls for better networks between different sectors for the goal of development and poverty alleviation particularly for the previously marginalized.

The long-term vision for the smallholder sector in Africa has been expressed in AGENDA 2063 (Kamara et al., 2019). AGENDA 2063 is a sustainable development policy agreed to by African countries during the event commemorating the 50th anniversary of the founding of the Organisation of African Unity (African Union Commission 2015: 2). As reported by Kamara et al. (2019), the vision of AGENDA 2063 sees Africa developed by 2063 and its narrative changed to one of modernised cities, decent housing and adequate access to necessities to life such as clean running water and health care. The vision includes modernised African agriculture with increased productivity, food security and prosperity for farmers and nations invested in agriculture (Kamara et al., 2019). As expressed in AGENDA 2063, many farms can transform into well-functioning projects secured by legal tenure wherein smallholder farmers will still exist but will not be defined by poor resources and yields (African Union Commission, 2015). The African Union Commission (2015) added that the expected outcome of vision 2063 in agriculture is to have a smallholder farming system characterised by proper management, adequate capital, good yields and better income for farmers.

According to the NDA (2002), priorities in the agricultural system include enhancing access to resources, participation, improved global competitiveness and profitability. When there are more participating smallholder farmers with sufficient resources and supported profitability, global competitiveness is inevitable. The shift to an inclusive economic system will take time but it is possible. Lessons can be drawn from the past with the potential to go further in developing the agricultural system.

As stated by (Smith and Haddad, 2000), South Africa must invest in the sustainability of its people, draw lessons from successful experiences such as Asia's green revolution, strengthen farm and non-farm linkages, produce high-value products and broaden rural strategies of livelihood. In addition, there should be government strategies in place linking farm and non-farm activities as part of the government's mission to advocate agriculture to all people, especially the poor and powerless.

2.10 Conclusion

The literature review revealed that there is no universally acclaimed definition of smallholder farming systems. The term is often understood interchangeably with family, small-scale, resource-poor, subsistence and low-income farming. The dominance of the commercial farming sector in South Africa and its demographic dominance by whites has been traced to the history of apartheid and colonial dispossession. This history has not been reversed due to many factors, including government inaction and lack of investment in smallholder farmers, who are largely black and poor. Structural problems include lack of access to credit facilities and markets, lack of knowledge and skills, insufficient use of technology, lack of land and secure land tenure and a policy environment that does not prioritise the small-scale farmer. Having informed the research problem and research question through the literature review, the next chapter explains the theoretical framework adopted that guided the study design and methodology.

Chapter 3: Theoretical and Conceptual Framework

3.1 Introduction

For the purpose of this research, the guiding theories for the research study are the Sustainable Livelihood Framework (SLF) and Human Development and Capability Approach. The chapter presents an analysis of the key elements and core principles of the theories and explains their applicability to the study.

3.2 Theoretical Framework

According to Abend (2008), theories are created to explain, predict and extend existing knowledge within the limits of a field. A theoretical framework is a structure that introduces the theory that explains why a research problem exists (Shepherd & Roy, 2017). The theoretical framework supports the need for a research study by connecting the researcher to existing knowledge in a particular field (Philipsen, 2018). Additionally, the framework limits generalisations and the scope of the relevant data by giving focus to specific objectives and a guiding basis for a hypothesis and research methods to be used.

Farming households are often characterised by weak livelihood assets, high exposure to vulnerability and little resilience and sustainability (Jacobs, 2008). The smallholder farming communities are often led by male traditional chiefs while an estimated 80% of the farmers are women (Jacobs, 2008). Although the actual number of women in farming in South Africa, particularly those owning the land, remains to be determined, it is known that smallholder farming is largely dominated by women in developing countries and the majority of economically active women in the least developed countries are involved in agriculture. These statistics have led Thamaga-Chitja (2012) to argue that the feminisation of smallholder farming is a critical dynamic shaping smallholder farming in South Africa. Whatever the number, the majority of smallholder farmers in South Africa reside in areas with inferior agricultural potential because of droughts and uncertain water supply, less fertile soils, lack of resources and a lack of skills in managing soil degradation (Obi et al., 2012). Few studies have been conducted on the context and experiences of the people involved in smallholder farming and how they are affected by everyday experiences (Chitja & Morojele, 2014).

The study seeks to understand the policies and institutions involved in smallholder farming and their effect on the complex web of factors outlined above, to provide insight into the dynamics shaping the smallholder farming sector in South Africa. Different theories are available to be applied to guide a research study. For the current purpose, as will be explained below, the researcher selected the Sustainable Livelihoods Approach (SLA) and the Human Development and Capability Approach to frame the study.

3.3 The Sustainable Livelihoods Approach (SLA)

‘Livelihood’ refers to the means used by individuals and communities to survive, including the skills and strategies employed. ‘Sustainability’ refers to the ability of individuals to use strategies of survival without completely expending their supply of the resources needed for survival (DFID, 2000).

The DFID and several other organisations employed the Sustainable Livelihood Approach (SLA) and its framework (SLF) increasingly from the late 1990s (Carney, 1998). The Sustainable Livelihoods approach organises factors that both constrain and enhance livelihood opportunities and then show how they relate (Scoones, 2009). Comprising assets, capabilities and activities required for means of survival, the SLA helps in planning for development by assessing the contributions that already exist in sustaining livelihoods and promotes a particular way of thinking about objectives and priorities for development (Kollmair & Gamper, 2002).

The approach facilitates the identification of practical priorities for action by connecting people who influence the outcomes of their livelihood strategies (Carney et al., 2000). This is done by bringing attention to people’s potential in terms of skills, social networks, and access to resources and institutions. Development guided by the SLA approach is people-centred, participatory, multilevel and sustainable (De Satgé et al., 2002).

3.3.1 Sustainable Livelihoods Framework (SLF)

The Sustainable Livelihood Framework is used to analytically show the various factors that can affect choices and how these factors interact among themselves (Hussein, 2002). The SLF shows people’s assets, how they use these assets to earn a living, the contexts in which support can be designed and offered to enhance the standard of living, and the factors which can strengthen resilience (De Satgé et al., 2002).

The SLA is guided by a framework consisting of people’s assets, vulnerability context, policies and institutions, strategies and outcomes of livelihood strategies and assets.

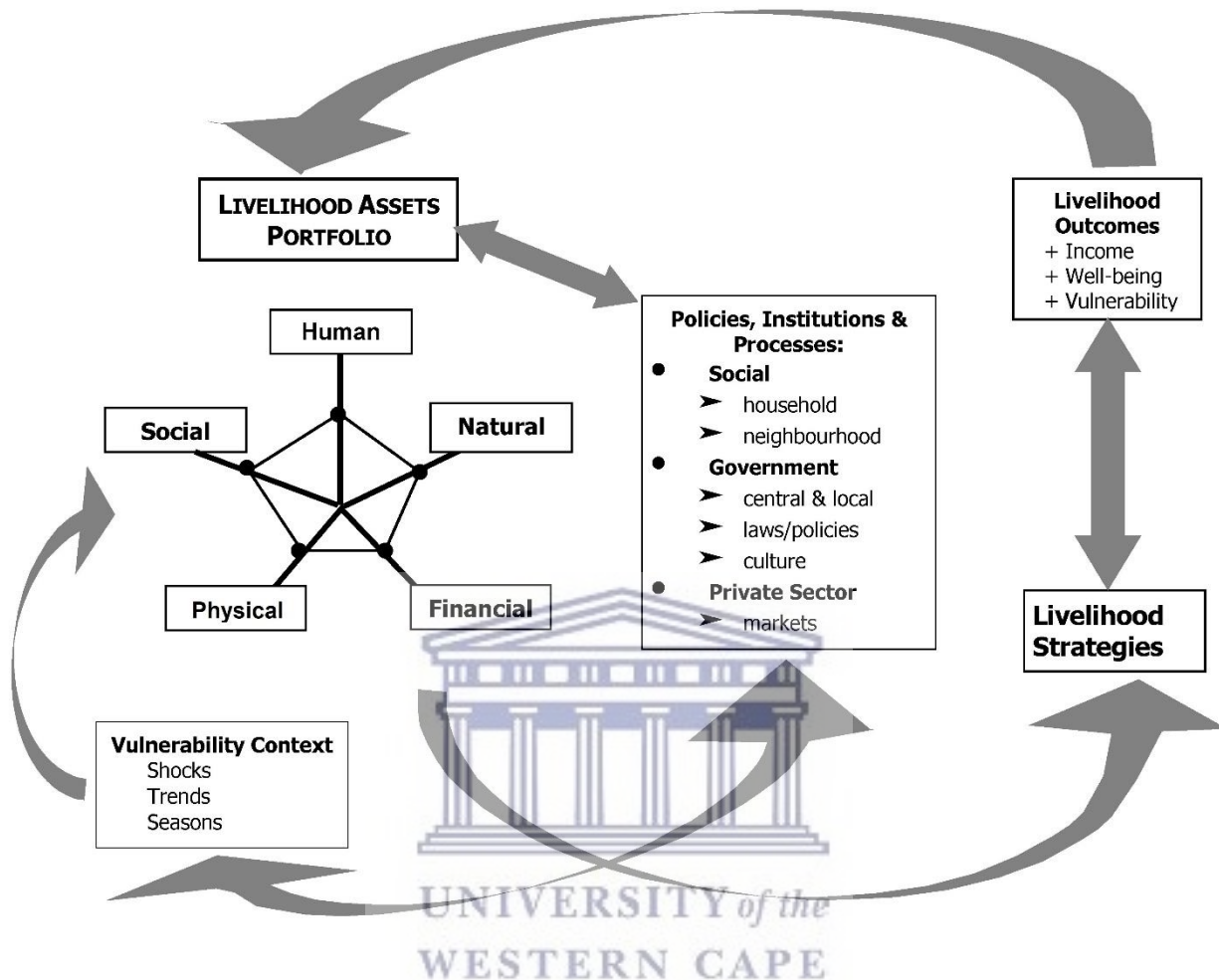


Figure 1: Sustainability Livelihoods Framework

Source: Majale, M. (2001).

3.3.1.1 Assets

Five types of assets are distinguished in the framework (Rakodi, 2002). *Social assets* are social networks, participation in decision making, common rules and shared values. *Human assets* include health, education and the capacity to work. *Natural assets* include access to land, water and clean air. *Financial assets* are mainly savings, remittances, income and social grants. *Physical assets* encompass infrastructure, tools for labour and technology, among others. According to Chambers and Conway (1992), these five types can be further classified into tangible and intangible assets where tangible assets can include water, food, machinery and cash and intangible

assets include forms of social capital such as family support, social networks, education and capacity to work. The different livelihood assets together form the portfolio of resources available to the person. For survival and the achievement of desired livelihood outcomes, people require access to a range of livelihood assets. The better the access to desired livelihood assets the higher the probability of them achieving desired livelihood outcomes and the possibility of a good quality of life (Chambers & Conway, 1992). In practical terms, livelihood assets for the smallholder are all forms of capital that the farmer may invest in achieving the objectives of the enterprise.

Human capital may consist of any contribution brought to the enterprise by people through their being, such as energy, intelligence, knowledge, skill, leadership, cooperation, entrepreneurship, etc.

Social capital refers to social resources that people possess to make a living and achieve their livelihoods outcomes (DFID, 1999). These resources are inclusive of community centres, institutions, networks, political environment and societal norms that people live by to enable community cooperation (Durlauf & Fafchamps, 2003). This capital is centred on relationships, values, beliefs and norms to facilitate livelihood actions within communities (Bhandari & Yasunobu, 2009).

Natural capital refers to the resources such as flora, fauna, land, soil organisms and minerals, air and water, that according to the International Institute for Sustainable Development (IISD) are the stock of natural resources that are the vital foundation for all human well-being and economic activities. These resources can be classified as renewable and non-renewable resources. Renewable natural resources can self-maintain or replenish themselves, such as solar energy, while non-renewable resources include fossils fuels and mineral raw materials that are unable to self-maintain and passively form geologically over long periods (Costanza & Daly, 1992).

Physical capital is assets created from natural assets applied in daily human activities to facilitate the production of goods and services people use to achieve desired outcomes (Bhandari & Yasunobu, 2009). Physical capital includes basic infrastructure such as transport and communication systems, water and sanitation systems, shelter and energy production systems. Physical capital also includes production inputs such as tools and equipment used to achieve desired livelihood outputs (Kataria, Curtiss & Balmann, 2012). These resources have a direct

impact on the well-being of people, e.g. the lack of access to potable water can cause health problems for those lacking access.

Financial capital is all the financial means and resources people use to achieve desired livelihood outcomes. These include financial assets such as savings, investment income and regular inflows of money that enable individuals to access desired livelihood outcomes (Kataria et al., 2012) as well as other forms of liquid assets such as cash, livestock and credit obtained from institutions. Regular money inflows may refer to pensions and other transfers from the state, payments for environmental services and remittances. Financial capital is considered the least accessible of the five forms of capital for the poor and disadvantaged (Carney et al., 2000).

3.3.1.2 Vulnerability context

The vulnerability context concerns shocks, seasonal change such as unemployment and critical demographic and governance trends. According to Krantz (2001), the vulnerability context is better explained in two dimensions – an external part encompassing shocks, seasonality and critical trends and an internal vulnerability caused by the lack of ability and means to cope with these events. Characterised by the insecurity of the well-being of individuals, households and communities in the face of changes and trends, the vulnerability context directly adds to poverty (Krantz, 2001).

3.3.1.3 Policies and institutions

Livelihood strategies are critically transformed by the environment of structures and processes (Jones, 2002). Structures are the public sector that set and implement policy and legislation, and the private sector that delivers services. Processes embrace the laws, regulations, policies, operational arrangements, societal norms and practices that determine how structures operate. Processes can transform one type of asset into another and also grant or deny access to these assets. It is important to consider that policies cannot be effective in the absence of appropriate institutions and processes through which policies can be implemented.

3.3.1.4 Livelihood strategies and outcomes

Potential livelihood strategies are the activities people engage in to achieve livelihood outcomes. Smallholder farming is a strategy used by the majority of people in rural areas in the absence of formal employment alternatives. If successful, livelihood outcomes can include increased

household income, reduced vulnerability, improved food security and recovered human dignity which then improves the well-being of the people using that particular strategy (DFID, 2000).

3.3.2 Strengths and weaknesses of the Sustainable Livelihoods Approach

The SLA encourages creative, considerate and careful thinking. It liberates policy makers and development practitioners from traditional approaches that are often restricted to just identifying problems and finding solutions without necessarily giving a context to the identified problems (Khanya, 2007). The approach invites them to look at contexts and relationships between trends so that development activities can become more about the people (Khanya, 2007).

3.3.2.1 Strengths of SLA

The SLA seeks to understand the dynamic context to changing modes of livelihood by investigating the relationships between different activities that make up people's livelihoods and also the social dynamics and different influences that shape the livelihoods' assets and strategies people use for survival (Khanya, 2007). According to Hassen (2008), the SLA acknowledges the need to work past narrowly restricted ways of finding solutions and emphasises a flexible approach where people are involved in their development.

The flexibility of the SLF allows it to be used and adapted to any field of study within the context of analysing people's livelihoods. The framework has been used in contexts varying from agriculture, migration, poverty reduction and development projects by government and private sectors (Scoones, 2009). The SLF proposes and integrates the four pillars of development – economic, social, institutional and environmental. Hence, it is a practical, holistic development framework (Serrat, 2017).

The SLF is a bottom-up method approach to development that examines people's attempts to strengthen their capabilities and make choices using their livelihood assets and outcomes (Krantz, 2001; Serrat, 2017). In addition to the SLF integrating the four pillars of the development, the SLF allows the inclusion of those at the grassroots of development projects. The SLF complements other developmental approaches such as people-centred development, participatory rural appraisal and participatory poverty assessment (Rakodi, 2002).

3.3.2.2 Weaknesses of SLA

The SLA assumes that capital assets can be expanded in a generalised and incremental trend (Scoones, 2009). According to Krantz (2001), the SLF pays too much attention to the resources

and systems at the micro-level, such as the local community and individuals, rather than focusing on the macro-level, e.g. the impact of the state and the international community on people's livelihoods. The SLF does not focus on or provide guidelines on how politics should be incorporated and applied to ensure that micro-level interventions are viable and sustainable in improving livelihoods (Krantz, 2001; Serrat, 2017). Scholars have proposed the notion that the SLF is not sufficient on its own when designing and implementing development interventions. It is also argued that the livelihoods approach does not pay enough attention to the inequities of power and its distribution and it underplays the probability that enhancing the livelihoods of one group can undermine those of another (Serrat, 2017).

3.3.3 Application of the approach in research

The application of SLA can be challenging in several ways, including in terms of the judgement of the participants. Individuals may disagree on what is best for them. For example, some farmers may prefer merging with commercial farmers to learn new ways of production from them and other farmers may prefer an independent learning path and to have practices in place that better suit smallholder farming than the methods of commercial farming.

An SLA allows communities to be planners and initiators of development (Hartini, 2004). Poverty in South Africa is highly concentrated among black people living in rural areas, some of whom have resorted to smallholder farming for survival. The persistent poverty calls into question the policies of governance institutions in place.

With regard to the research topic of the current study, the application of the SLA will help identify assets and policies pertaining to smallholder farmers and their vulnerabilities. It will establish how policies shape their farming and bring into focus what is missing and how their livelihoods can be enhanced. A detailed investigation of the living conditions of the targeted community is a vital starting point in identifying the limiting factors hindering adaptations of strategies and recognising their vulnerability (Carney, 1998).

A principle of the SLA is that poverty reduction should be long-term, flexible and sustainable. This requires partnerships between development practitioners and the people and for solutions to be people-centred, responsive and empowering (Carney, 2000; Cooper et al., 2002; Khanya, 2007).

In South Africa, the SLA has been used by NGOs, government sectors and development agencies such as DFID, OXFAM and CARE-SA (Carney, 2000).

Stewart, Ranis and Samman (2018) also cite the use of the SLA by the FAO. In 2003, the FAO identified projects that led to a successful reduction of poverty and where the application of the SLA yielded positive results (Stewart et al., 2018). Projects identified by the FAO included the Lowlands Agricultural Development Programme (LADEP) in the Gambia, Participatory Natural Resource Management in the Tonle Sap region in Cambodia, Empowerment of Women in Irrigation and Water Resource Management for Improved Food Security, Nutrition and Health in Nepal, and Improving Household Food Security and Nutrition through Community Empowerment in Zambia, among others (Stewart et al., 2018).

The FAO chose projects that represent different geographical settings to show the flexibility of the approach and those projects employing the SLA had measurable effects on poverty reduction (Stewart et al., 2018). The projects were assessed by evaluating their impact on rural poverty, determining the value added to people's livelihoods and whether an adequate number of sustainable livelihoods principles were used in the projects (Stewart et al., 2018). In the aforementioned cases reviewed that had applied the SLA, there was evidence or indicators of poverty reduction, increased resilience, reduced vulnerability and long-term sustainability, seen through the changes in household food security and income, increased preparedness of risk and sustainable post-project activities (Stewart et al., 2018). The application of the SLA even after the project through monitoring and evaluation (M&E) and participatory monitoring and evaluation (PM&E) was just as important as applying it before implementing projects (Stewart et al., 2018). By tracking the impact of these projects, the FAO tested the validity of the approach to prove its principles and impact.

Many poverty alleviation programmes in South Africa and other parts of the world are not sustainable and the beneficiaries of these strategies soon return to poverty (Swanepoel & De Beer, 2011). Applying the SLA places developmental projects at an advantage because it seeks to understand poverty from the perspective of the poor, which is an important principle for people-centred development policies and strategies.

The flexibility of the approach is appropriate for capturing different contexts and environments, making it reliable in capturing people's ways of living and identifying gaps for improvement.

Lastly, its emphasis on monitoring and evaluating the implemented development programmes promotes and strengthens the sustainability of development in that community.

3.4 The Human Development and Capability Approach

3.4.1 Human Development Approach

The Human Development Approach (HDA) focuses on holistically expanding the quality of human life rather than simply focusing on economic growth (Alkire, 2005). The merits of this approach have been recognised through its widespread use and preference for making people-centred development the focal point of development agendas (Fukuda-Parr, 2003). The HDA, aimed particularly at developing countries according to Fukuda-Parr (2003), has developed a broader and more contextual understanding of poverty and development.

The HDA arose out of a series of proposals conceived in response to social ills people were subjected to that affected their living standards (Gasper, 2002). This approach departed from the practice of solely using economic growth as a measure of development and took a new direction of trying to understand the factors that affect people's choices and decisions (Robeyns, 2005). This has led to new insights into the understanding of poverty and development (Fukuda-Parr, 2003).

The HDA advocates expanding people's choices to enjoy a life they deem valuable (Alkire, 2005). The approach emphasises that policies of development should be about people's opportunities to live a life of choice, including the freedom to exercise their human rights. At the core of the approach are people's opportunities and choices (Sen, 2003).

3.4.1.1 People, opportunities, choices

The approach focuses on improving lives rather than assuming that economic growth automatically leads to improved lives for all (Robeyns, 2012). For instance, the contribution made by commercial farmers to the GDP has little or no impact on smallholder farmers. Income growth is not an end in itself but rather the means to development.

Centred on giving people more freedom to live valuable lives, the HDA promotes the development of people's abilities and thereafter having opportunities to use those abilities (Alkire & Deneulin, 2009). For example, enrolling in a course at university builds skills needed for employment but these skills are of no use if that individual is denied access to a job that requires those skills.

Individuals must be given a chance to develop to their full potential and have a chance of leading productive lives according to their choices.

The concept of capabilities is central to the HDA (Robeyns, 2012). An individual may have the *right* to access education but if constrained by lack of finances and knowledge, may not have the *capability* to exercise the right.

3.4.2 The Capability Approach

The capability approach (CA) looks at what people can do and be, including the possibilities achieved through their functioning, capabilities and agency (Sen, 1999). *Functioning* is the valuable activities used by individuals to make a living, *capabilities* are the freedom to achieve and enjoy functioning, and *agency* relates to the person's ability to pursue and realise a life that is of value to them (Sen, 1999). This qualifies the CA as useful in developments that are people-based, to understand their perspectives so that the policies implemented accord with their needs (Sen, 2000).

The CA proposes that policies should be evaluated based on the freedom people have to achieve the functioning they value (Banerjee, 2006). Development policies should be evaluated based on their impact in affording people the freedom to live and achieve a life of their choice (Banerjee, 2006). The approach further identifies social constraints hindering the achievement of quality of life and aims to shed light on that gap to inform policies (Nussbaum, 2001). The CA covers dimensions of equity, participation, empowerment and sustainability that are central and critical to human development (Robeyns, 2012).

3.4.3 Critique of the Human Development Approach

3.4.3.1 Strengths of the Human Development Approach

The HDA encourages the broadening of the informational base on poverty by investigating what deprives functioning and capabilities (Fukuda-Parr, 2003). The flexibility of the approach allows policy markets a greater insight into what people think and what they wish their lives would improve (Streeten, 2002). Such an approach allows evaluations to be multidimensional, considering factors such as age, gender and social dynamics that have an impact on the life people lead (Nussbaum, 2011).

3.4.3.2 Weaknesses of the Human Development Approach

The HDA demonstrates shortcomings of previous poverty policies and advocates creating policies in line with people's realities and truth (Nussbaum, 2001). Translating such multidimensional information into policy has proved to be a difficult task (Gasper, 2002).

3.4.3.3 Criticism of the Human Development Approach

The HAD has been criticised for the difficulty of operationalising and incorporating the broad, multidimensional aspects of human development into a reliable policy (Gasper, 2002). Alkire (2005) adds that social institutions and capabilities that tend to be neglected are an important part of an individual's well-being.

3.4.3.4 Application of the Human Development and Capability Approach

The participatory method approach allows those who experience poverty to be involved in the conceptualisation of poverty (Streeten, 2000). It allows people the freedom of having their voices heard and to interpret their ideas of development and what a quality life looks like to them. This participatory research approach uses both qualitative and quantitative methods to understand poverty without imposing dictated ideas about poverty (Streeten, 2000). The formulation of effective policies and interventions rests upon giving people the freedom to be involved and, to a certain, extent shape their development (Gasper, 2002).

In the analysis of research, this approach is used as a framework for the evaluation and assessment of well-being, the design of policies and proposed strategies and those that are already implemented (Alkire & Deneulin, 2009). It focuses on the information needed before making judgements about people's well-being and asks questions relating to health, access to quality education, political participation and the social conditions people are living under (Robeyns, 2011).

Case study: Lake Taihu in China

The Human Development and Capability Association (HDCA) launched in 2004 employed the example of Lake Taihu in China to explain the Human Development and Capability Approach. The famous Lake Taihu was reported to be filled from 2007 with chemicals, depriving two million people of water. This affected people's ways of living and forced adaptation to new ways of living. While China has achieved remarkable progress in wealth creation, education and health, such environmental challenges call for a developmental shift (Mabasa & Mqolomba, 2016). There

should be a balance between economic and social development. People's well-being is affected by their environment and, therefore, for some, their whole view of China's development changes.

3.4.3.5 Relevance to the research topic

This study focuses on the institutions and policies shaping smallholder farming in South Africa. Agricultural investments and policies exist but lack focus on the experiences of smallholder farming (Swanepoel & De Beer, 2011) and therefore are less effective in dealing with the issues smallholder farmers face. This shows the need for a theoretical approach that actively involves people to study the environment and determine what exactly is needed (Masuku et al., 2017).

Coetzee (2001) contends that excluding people from the design stage of policies accounts for many policy and project failures. Successful interventions, on the other hand, have shown the importance of prior analysis and assessment of contexts (Bizikova et al., 2017). For future policies and investments to be effective and sustainable, policy-makers and development practitioners should employ approaches such as the SLA and HDA to understand the community context and see development from the perspective of local people. Misinformed or less informed policies deny rural farmers the chance of developing and maximising their productivity (Ingle, 2014).

Resources in most rural areas do not go directly to smallholder farmers but to the chief of that area who then allocates these resources as he sees fit. According to Ingle (2014), development interventions tend to fail in the hands of the authorities. Most smallholder farmers are poorly educated and lack basic literacy. This excludes farmers from accessing formal facilities and compromises their farming success (Masuku et al., 2017). Unless policy-makers are mindful of this in their research design, such farmers are unlikely to be consulted in policy making.

There is a need to study the context of the poor, including what shapes their quality of life and to develop strategies according to their perspective and what works for them. In South Africa's rural areas, this context included gender inequality that constrains women's equitable access to land and limits their productivity and development potential.

While people-centred development is more widely implemented, emphasis should be increased on implementing reliable monitoring and evaluation systems to track the impact of these projects on people's lives. This information would inform future policies and decisions and help establish a

reliable evaluation framework to trace the influence of various agricultural interventions on smallholder farmers (Arthur, Gearon and Sears, 2010).

While merely developing and implementing new policies and agricultural interventions will not automatically improve smallholder farming, the use of theories and a theoretical framework in research opens up a different mode of thinking for normative issues. The application of the SLA and the HDA will better inform future policies and investments in people-centred strategies that are thereby rendered effective and sustainable. The current focus on economic growth tends to overshadow the importance of people-centred factors of development, most importantly, the inequalities of income in South Africa. At the centre of the SLA is the understanding of people's potential, assets, resources skills, social networks and institutions (Krantz, 2001). The ability of the framework in considering what shapes peoples' livelihoods, including policies, social institutions, gender, land rights, rules and norms that shape the use of available resources (Jones, 2002) will further provide a detailed analysis of farmers' livelihoods to understand all factors influencing the lives of smallholder farmers. This, coupled with developmental strategies and interventions guided by human development approaches that are people-centred and participatory (Coetzee, 2001), will ensure a better understanding of people's livelihoods and smallholder farming policy design.

3.5 Conceptual Framework

According to Jabareen (2009), a conceptual framework is a written representation of an expected relationship between variables. This section provides a representation of the smallholder farming sector relative to the broader sector of agriculture in South Africa. The purpose of the discussion is to briefly frame the different variables influencing the state of smallholder farming in South Africa and the relationships operating between them that are guided and influenced by the sectoral policies and institutions.

3.5.1 Smallholder farming in South Africa

Agriculture has been recognised as the primary source of employment and income, particularly in rural areas (Mbanza, 2013). More than 50% of the world's poor people depend on agriculture, particularly smallholder subsistence farming (World Bank, 2007).

According to Leibbrandt et al. (2009), the South African agricultural sector can be seen in terms of three subsectors: subsistence farming producing for own consumption; commercial farming (medium or large farms employing non-household members) and the rural non-farming sector, including produce consumers and providers of services to farms. Farms less than two hectares in size constitute about 78% of the total farms in South Africa (Wiggins & Keats, 2013).

The DAFF (2012) defines smallholder farmers as farmers owning small plots of land on which they practice subsistence farming, growing enough crops for their families and perhaps one or two cash crops. Smallholders rely mostly on their resource capability and family labour. According to Abate et al. (2017), the main characteristics of smallholders are simple farming technology, low income from the sale of surpluses and seasonal labour in which women are actively involved.

The smallholder farming sector in African diaspora, including South Africa is highly heterogeneous due to wide variance in its geography, climates, socio-economics and demography. Consequently, the characteristics of smallholder farmers differ with context and location. Though subjected to the aforementioned factors, the productivity of farms is further determined by differences in land access, the environment, labour, resources, capital, technology and market orientation.

3.5.2 Factors shaping Smallholder farming in South Africa

3.5.2.1 Extension services

There is a decline in extension services and therefore a need to revitalise extension in agricultural production. Relevant technologies and techniques should be made accessible to farmers (Balie et al., 2018: 222).

3.5.2.2 Access to markets

Without well-functioning markets, it would be difficult to achieve the goal of poverty alleviation. There is a need for improved connections and trust between actors in the market chain to support small-scale producers (Balie et al., 2018: 227).

3.5.2.3 Access to credit schemes

A successful input credit system in the smallholder sector is a vital component for development and poverty alleviation in the sector (Balie et al., 2018: 228). There are systemic problems in the smallholder sector that add to the risks perceived by lenders in credit schemes.

3.5.3 Policies and institutions

Smallholder farmers in Africa are challenged by high operating costs in the production and marketing of agricultural outputs. According to Delgado (1999), this is not only due to the nature of their crop production but also the institutional environment under which they operate.

Most smallholder farms are characterised by poor management, absence of training, lack of resources, poor service delivery and conflicts among members (Ortmann & King, 2007); Van der Walt, 2005). Weak institutions have been one of the contributing factors leading to the failure of smallholder farmers (Zulu, 2007). Sound institutions are a critical influence on the economic performance, productivity and growth of farmers (Kherallah & Kirsten, 2002; Ortmann & King, 2007). According to Knight, Lyne and Roth (2003), favourable institutional environments enable empowered management and labour forces that improve the operational effectiveness of farmers.

The framework below illustrates how good governance (including policies) and institutional arrangements impact the performance of farmers.

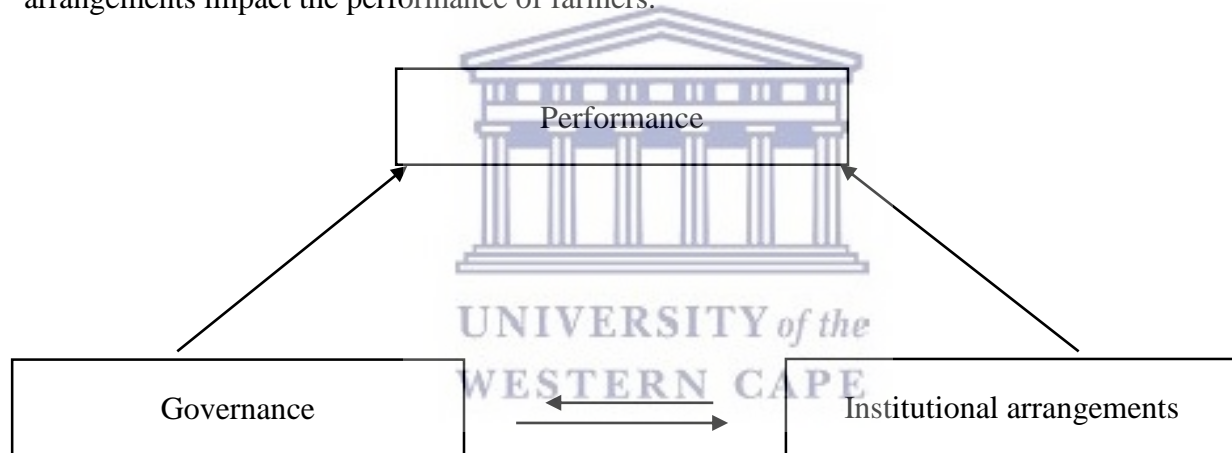


Figure 2: Relationship between farmer performance, institutional arrangements and governance

Source: Chibanda et al. (2009).

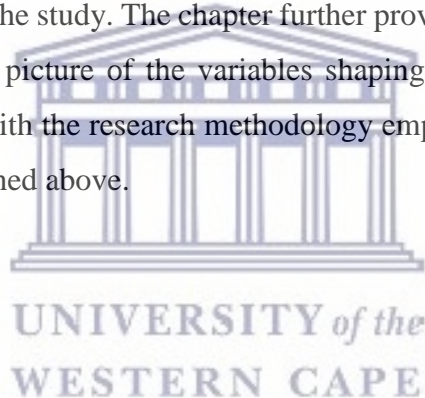
The literature emphasises that governance and policy influence the institutions, structures and processes under which the agricultural sector and farmers operate (Graham, Amos & Plumptre, 2003). *Governance* is understood as the process of determining how power is exercised, by whom and over whom (Graham et al., 2003). *Policy* is the guidance for a course of action adopted by an organisation or individual in the form of rules, principles or guidelines established to achieve long-term goals. According to North (2000), *institutions* can enable or impede the performance of

farmers. Certain institutions direct daily activities carried out by farmers and access to resources and therefore their output and engagement with other stakeholders (Chibanda et al., 2009). Because institutions create and shape structures of operation for farmers they directly impact the rate of growth (Frances, 2004).

The effectiveness of governance, policies and institutions shaping smallholder farming should be measured by a defined indicator. Mohamed (2004) suggests indicators of performance are clearly defined when the end outcomes and goals are known and established. For these to be achieved, institutional arrangements and policies should be based on transparency, accountability and fairness.

3.6 Conclusion

This chapter discussed the theoretical framework used to guide the study which was the SLA/ SLF and the Human Development and Capability Approach, explaining their core elements and the rationale of using them to guide the study. The chapter further provided the conceptual framework for the study which provided a picture of the variables shaping smallholder farming in South Africa. The next chapter deals with the research methodology employed in this study, which was guided by the approaches explained above.



Chapter 4: Methodology

4.1 Introduction

The main objective of the study is to understand the policies and institutions shaping smallholder farming in the Nkomazi area. This chapter discusses the research design and methodology used to conduct the study and how their design ensured the required data would be obtained. The chapter further describes the criteria employed to ensure the verification and trustworthiness of the findings obtained.

4.2 Setting of the study area

The study focuses on smallholder farmers in Nkomazi, a poverty-stricken area where major economic activities include smallholder farming, particularly crop farming. The Nkomazi area, which falls administratively under the Ehlanzeni district municipality in the province of Mpumalanga, South Africa derives its income mostly from power generation, mining, synthetic fuel and chemical production and related manufacturing. It is richly endowed with mountains, rivers and forests and has a thriving eco-tourism industry that includes the attractions of the Kruger National Park and Sudwala Caves. Most of the land is fertile and agricultural activities include livestock farming, forestry and a wide range of food crop production.

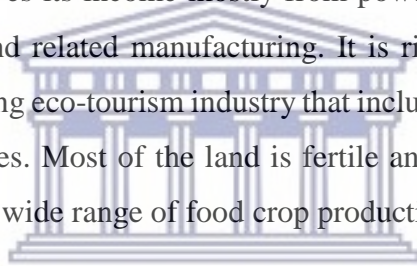


Figure 3: A map of Nkomazi



Source: Location & Area - Nkomazi Municipality website

https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.nkomazi.gov.za%2Fabout-nkomazi-municipality%2Flocation-area%2F&psig=AOvVaw3F4X8IE9pcAGvlZ73I0z1t&ust=1645814672659000&source=images&cd=vfe&ved=2ahUKEwiO6trI_5j2AhWMS8AKHcwhAFYOr4kDegUIARC7AQ

The population is generally characterised by high poverty, low literacy levels, unemployment, poor infrastructure and lack of municipal service delivery. Most land used as farming land is near homesteads and heavily degraded due to overstocking, poor veld management and inefficient farming techniques. Characteristics of the area include low public and private investment in trade, tourism and agriculture, low literacy, lack of economically productive skills and poor natural resource management. This is a deep rural area far from cities (and potential employment), with compromised access to services such as education, clinics and running water. Residents in the Nkomazi area heavily rely on farming, both as labour on commercial farms and as a survivalist subsistence strategy; casual and seasonal jobs; remittances; and social grants. Additionally, the municipality provides poor infrastructure and poor markets, lacks credit and finance facilities and is unable to develop industries or stimulate local enterprise development.

Aliber et al. (2006) maintain that smallholder farming is an essential way out of poverty and it should be used to improve food security and alleviate poverty. The fact that rural households continue to pursue farming activities to improve household food security makes smallholder farming the best route to take in the development of South African rural households (Baiphethi & Jacobs, 2009).

This cannot be done in isolation but requires policies and interventions designed to support smallholder farming. With this in mind, the study sets out to understand what shapes smallholder farming in Nkomazi and to use the findings to inform understanding the broader smallholder farming sector so that future policies and agricultural interventions can be better informed to improve smallholder farming in South Africa.

4.3 Research design

The research design provides a framework that guides the processes taken in fulfilment of the proposed study (Babbie & Mouton, 2001). This section provides a framework for the methodology to be used, sampling technique, data collection and analysis.

The study used a qualitative approach using both primary and secondary data sources. Primary and secondary data collection is crucial for the study to present a holistic perspective on the research topic. In a case where primary data is insufficient, secondary datasets offer support for robust findings. The study findings are presented in text supported by graphs.

The researcher collected primary data in the deep rural Nkomazi area. The selection of the research methodology and tools to be used were influenced by the location, the then-current movement restrictions due to the COVID-19 lockdown; the possibility of technological constraints, the study setting and the profile of participants.

4.4 Research methodology

According to Babbie and Mouton (2001) and Zikmund (2003), the research methodology presents the method and approach a researcher will use in carrying out a proposed study. The study uses a qualitative approach which is a contextualised description of an occurrence (Teddlie & Yu, 2007).

Commonly used in social sciences, a qualitative approach allows for an in-depth understanding of the behaviour of a specific population. (Cohen, Manion and Morrison, 2007) The results of a qualitative approach are more descriptive, helping the researcher to draw inferences about a particular phenomenon in a study (Cohen et al., 2007).

Qualitative primary data was telephonically collected through questionnaires and semi-structured interviews. Secondary data sources used to inform our study included academic literature, government policy documents and research reports. The discussions were recorded and translated by the researcher.

4.5 Sampling

Sampling allows the researcher to cover the targeted population in a research study. According to Taherdoost (2016), sampling in social sciences is the process of selecting the fractional parts of a larger population from which a researcher will collect data. Sampling makes an exhaustive and intensive study possible at minimal cost, and less time and energy (Onwuegbuzie and Collin, 2007). For proper sampling, the researcher needs to work under a specified timeframe for the study, budget, knowledge of population and study objectives (Babbie & Mouton, 2001). By studying the sample, judgments about the whole population can be made.

There are two categories of sampling procedures – random and non-random sampling. A random sample is probability sampling where participants in a study have an equal chance to be selected to participate in the study (Ben-Shlomo, Brookes & Hickman, 2013). Non-random sampling is non-probability where not every individual has an equal chance of being selected. Non-probability sampling aims to study a small intended population. Participants are selected by context using techniques such as purposive sampling, snowballing and quota sampling (Ben-Shlomo et al., 2013).

To sample participants for this study, a non-random sampling was used through the purposive sampling technique. Purposive sampling picks out a sample in relation to a criterion considered important for a particular study. Purposive sampling also allows the researcher to select an intended specific group of people from the population and to have better control of significant variables. This sampling technique provides the researcher with data from a specific group directly inclined to the objectives of the study.

Participants in the study included smallholder farmers in Nkomazi, academics involved in agricultural research and government officials at Nkomazi Municipality's rural development office. This provided perspective dimensions on the study. Key informants were selected by virtue of being a smallholder farmer, knowing the subject matter and convenience in terms of having the time and willingness to participate in the study. The government officials and academics interviewed were also selected by virtue of knowledge in the subject matter as well as their willingness and availability to participate in the study. One government official was directly approached by the researcher who was then further directed to other officials contributed to the study.

The researcher was able to access the academics interviewed because of previous work collaborations with them.

To maximise evidence and objectivity, the researcher sampled participants from three different farming villages in the Nkomazi area. The researcher sampled seven farmers from each of the three villages based on convenience. A questionnaire-interviews were telephonically conducted with a total of 21 farmers purposively sampled from the three farming villages. The researcher also interviewed three government officials working for the agricultural sector and rural development

office of the Nkomazi Municipality, using semi-structured interviews. Two academics with experience in agricultural research were also interviewed, using semi-structured interviews.

Table 1 below shows the list of study participants, their backgrounds and the channel through which interviews were conducted and questionnaires administered.

Table 1: Key informants of the study

Background	Number of key informants	Channel
Academics with agricultural research experience	Two	Telephonic
Government officials (Nkomazi Municipality)	Three	Telephonic
Smallholder farmers (Magogeni village)	Seven	Telephonic
Smallholder farmers (Boschfontein)	Seven	Telephonic
Smallholder farmers (Buffelspruit)	Seven	Telephonic

4.6 Data collection

Data collection is the process of gathering information from various sources to satisfy the objectives of the study (Olsen, 2012). Babbie and Mouton (2001: 80) suggest the combination of data sources for the flexibility of a research study. For the collection of primary data in this study, the researcher conducted a questionnaire-interview telephonically where the respondents in the sampled villages in the Nkomazi area each had a day scheduled to participate in the research study. Semi-structured interviews were conducted with government officials and academic researchers in the agricultural sector.

Initially, the researcher had planned to do face-to-face collection of data as this would have provided the field observations that could have been important in the study. However, due to the COVID-19 pandemic and its movement restrictions, the researcher used non-face-to-face methods of collecting data.

Secondary data was collected from a variety of credible sources including government sources, departmental records, national and international institutions, websites, published books and journals. According to Creswell (1998), secondary data provides information and databases that would be otherwise impossible for the researcher to collect individually. Additionally, secondary

data provides a degree of validity as it captures recorded studies and research done on a certain topic and thereby provides a clear baseline for intended research (Creswell, Feters & Ivankova, 2004).

Data was collected and recorded in a form suitable for the intended analysis. For this study, responses were recorded in interview notes and an audio record. Data collected and all records related to the study were safely stored online in two separate password-protected Google drives. Hard copy data related to the study is safely kept in an office drawer only accessed by the researcher and will be disposed of five years after storing. Data in hard copy will be physically destroyed/ shredded and the soft copies in Google drives will be permanently deleted.

The researcher ensured that data collected from respondents was provided voluntarily with a full understanding of the expectation and use of data. The requirements of confidentiality and validity of the study and proper recording of data were well demonstrated throughout the study.

4.7 Research Instruments

Research instruments are the tools used to collect data. These tools are well stipulated after the researcher specified the sample and the data collection approach. The wording in data collection tools must be simple, clear and direct. The researcher ensured that the instruments used provided clear, explicit instructions.

The research instruments for this study were employed in primary data collection. These instruments include a questionnaire and a semi-structured interview formulated in alignment with the objectives of the study. The research instruments concern the following:

- Socio-economic factors prevalent among smallholder farmers.
- The role of smallholder farming in farmers' livelihoods.
- Factors shaping the outlook of smallholder farming in the Nkomazi area.
- Effective agricultural policies and institutions in the Nkomazi area and the knowledge of these institutions by farmers.
- Current gaps and areas of improvement in the state of smallholder farming in the Nkomazi area.

4.7.1 Smallholder farmer questionnaire

A questionnaire is a systematic compilation of questions that are submitted to a sampled population from which information is desired (Cohen, 2013). A questionnaire as a data collection instrument is vital in gathering data that is scattered and from different sources (Ikart, 2019). Questions in a questionnaire must be clear and complete, direct and simple to understand (Cohen, 2013). The questionnaire was designed to collect data from smallholder farmers to reveal data as follows:

Factors investigated in the smallholder farmer questionnaire:

- Demography – age, education.
- Reasons for farming.
- Challenges and opportunities of smallholder farming.
- Available support/ Received support towards smallholder farming.
- Sustainability of smallholder farming in the Nkomazi area.
- Institutions and policies – how they facilitate or restrict smallholder farmers/ farming.

See **Annexure 1** for the questionnaire used.

4.7.2 Semi-structured interviews

According to McNamara (2006), an interview constitutes a social situation between at least two persons. The psychological processes involved require both individuals partaking in the interview to be well informed of the study and its objectives (Turner III, 2010). Additionally, the interview design offers flexibility in how respondents answer questions. This instrument helps the interviewer gain perspective and insight on the interviewee concerned (Creswell & Plano, 2011). Semi-structured interviews in this study were directed to the sampled government officials and academic researchers in the agricultural sector.

Factors investigated in the semi-structured interview for government officials:

- Outlook of smallholder farming in the Nkomazi:
 - Available institutions and policies for smallholder farmers in Nkomazi.
 - Available farmer benefits.
- Processes of accessing institutions and farmer benefits in Nkomazi.
- Challenges and opportunities of smallholder farmers in Nkomazi.

Factors investigated in the semi-structured interview for researchers in the agricultural sector:

- Outlook of the smallholder farming sector in South Africa.
- Policies and institutions in the smallholder farming sector.
- Challenges and gaps in the South African smallholder farming sector.
- Government efforts directed towards smallholder farming in South Africa.
- Recommendations for improvement in smallholder farming.

See **Annexure 2** for the semi-structured interview.

Having taken into consideration the possible technological and internet constraints in rural areas, the researcher collected the primary data using questionnaires and semi-structured interviews administered by telephone.

4.8 Data analysis

Data analysis is the process of extracting meaningful insights from a mass of data by structuring the collected data to communicate findings (Creswell, 2009). Data analysis is important in examining the statement of the problem and shedding light on the significance and value of the study (O'Neil & Schutt, 2013).

Before the analysis process, the researcher must screen all responses to determine whether they align with the research criteria; check whether the data collection procedure was duly followed and ensure that all questions are completed and answered. In addition, the researcher must be objective in interpreting results and cover all areas of the data collected (Cohen, 2013). As mentioned by Holsti (1968), content analysis allows inferences to be made through systematically and objectively identifying special characteristics within given data.

The researcher used content analysis to analyse findings. Content analysis is used to analyse themes or concepts within the context of given qualitative data (Lee & Fielding, 1996). The researcher must categorise and code texts into manageable themes for analysis. The researcher revisited the objectives, linking them to the collected data. The researcher then arranged and categorised the data into themes and patterns of responses to the research question and objectives of the study.

According to Rothbauer (2008), triangulation in social sciences refers to the application of several research methods in the same study. The process of triangulation involves using different sources

of data to study the same phenomenon from more than one standpoint (Cohen, Manion & Morrison, 2000). This is done to ensure that the findings are robust and credible. Triangulation minimises subjectivity and bias in findings. The researcher triangulated findings from participants, observations and relevant literature to reveal themes between the data collected and existing theories of the subject matter. The data analysed was then rendered in a textual document to enable the results to be understood in terms of what the study aimed to achieve.

4.9 Research verification and trustworthiness

Research verification and trustworthiness are crucial aspects of any study as they solidify and validate findings. For this study, verification and trustworthiness of findings can be seen in the transferability, dependability and confirmability of findings.

4.9.1. Transferability

Transferability refers to the degree to which the study results might be used in another context. The researcher provided the description and context of the study to ensure transferability when others seek to use the findings for another study.

4.9.2 Dependability

The researcher ensured the dependability of the study through using reliable sources, interviewing farmers who are directly involved in smallholder farming, validation of the proposal by an ethics committee and consultations with the supervisor throughout the research process.

4.9.3 Confirmability

The research ensured that findings were objective and reflected the study's objectives and this aspect was regularly reviewed by the supervisor.

4.10 Ethical considerations

The researcher understood the rights of the participants to withdraw from the study for whatever reason and to remain anonymous. Moreover, the researcher ensured that all participants were well aware that participation was voluntary and that they did not feel coerced to participate.

The researcher ensured the privacy and anonymity of respondents were protected and that respondents were aware of their right to not answer any question. To manage any potentially stressful effect of questions about the loss of land and living conditions, the researcher secured the

agreement of a registered, qualified counsellor based at a medical centre in Driekoppies, Nkomazi, to offer pro bono counselling services to participants if needed. The availability of counselling was made known to the participants by the researcher. However, none of the participants indicated the need for counselling.

Lastly, the information sheet, consent form and questions administered were translated from English to siSwati to ensure that language was not a barrier and that the key informants understood the nature of the study and their rights therein.

4.10.1 Ethical clearance

This study was undertaken after approval was granted and ethically cleared by the Humanities and Social Sciences Research Ethics Committee (HSSREC) of the University of the Western Cape. This clearance validated the proposal of the study and authorised the data collection.

All participants were required to give consent to voluntarily and anonymously participate in the study and were advised of their right to withdraw at any time for any reason. For the collection of secondary data, the researcher used credible data and carefully considered whether re-using data violated any ethical grounds between the primary researcher and previous participants. All source documents consulted during this study were properly cited and referenced using the Harvard style of referencing.

An official (Mr A Mamba) from the office responsible for agriculture in the Nkomazi Municipality agreed to facilitate the telephonic contact between the farmers and the researcher for the questionnaire tool to be used to collect data.

4.11 Limitations

Findings for non-probability studies tend to be context-specific and therefore cannot be applied in other studies unless the researcher provides clear contexts. The results of the study highly depend on the opinions and perspectives of the participants. For these reasons, findings for non-probability studies cannot be generalised.

There is a large body of literature on smallholder farming globally, but this research focused on rural areas in the South African context. While it is generally difficult to narrow down literature, the researcher was careful in filtering the most appropriate data.

The research coincided with the advent of the COVID-19 global pandemic, and the related restrictions imposed by the government impacted the time frame set for the study and the methodology used to carry the study. Under the circumstances, the researcher was compelled to collect primary data telephonically and integrated this with secondary data.

4.12 Conclusion

This chapter described the study area, theoretical framework and research methodology of the study. A qualitative method was chosen to collect data using interviews and questionnaires as primary data sources and a variety of source documents as secondary data. Despite the impact of COVID-19 restrictions, the desired sample was successfully obtained and analysed. The next chapter describes the results obtained and the findings derived from them.



Chapter 5: Results and Discussion

5.1 Introduction

This chapter presents the qualitative findings of the study, based on the primary and secondary data obtained. The chapter aims to meet the study objectives, which are: to investigate and understand institutions and policies shaping smallholder farming; to determine the role and impact of policies and institutions shaping smallholder farming; to understand the socio-economic factors prevalent among smallholder farmers in rural areas and to discover current gaps in policy and make recommendations.

The chapter organisation roughly conforms to three parts, each corresponding to a primary data source. That is, the chapter first presents findings based on information and insights derived from smallholder farmers' questionnaires. The smallholders were selected from the three villages described below. The second part of the chapter presents findings from interviews with the academic researchers. The third part of the chapter presents findings from government officials to reveal the outlook for the smallholder farming sector in Nkomazi, including the policies, institutions and interventions in place that shape the smallholder farming sector. This part will further serve to reveal gaps in or missing institutional support to the smallholder farming sector in the Nkomazi area. Finally, the chapter will present conclusions on the findings, linking them to the study objectives.

5.2 Farming communities included in the study

The Nkomazi local municipality is one of five local municipalities under the Ehlanzeni district municipality. According to the municipality's website, the municipal area consists of about 479 000 ha, much of it un-serviced arable land. There are eight tribal authorities that share governance with the municipality over 43 villages (Nkomazi, 2021). The local municipality is politically headed by an executive mayor assisted by an eight-member mayoral committee. The area is divided into 33 wards, each of which elects one councillor during local government elections held every five years. A municipal manager is responsible for the municipality's administrative departments. In practice, councillors consult with the tribal authority in making community-level decisions, with the chief exercising considerable power by tradition.

The community of approximately 411 000 people is mostly black and siSwati-speaking. The chief at the time of the study was Chief Ndlemane of the kaMhlaba royal kraal.

5.2.1 Magogeni

The dominant characteristics of the Magogeni area are female-headed households, unemployment, active involvement in subsistence farming, a predominantly elderly population, low level of education and poor service delivery. The area is secluded and largely underdeveloped. The majority of households are dependent on subsistence farming, seasonal employment such as harvesting, old age grants and remittances from relatives working in the cities.

Magogeni is a farming community and there is sufficient arable land in the area to enable crop and livestock farming. Most households own some livestock (cattle, goats, poultry). The tribal office is supportive of local farming and provides maize seeds and fertiliser to farmers yearly. The community is largely traditional and maintains good cooperation with the chief, which contributes to maintaining peace and stability in the community.

Two primary schools, one secondary school and only one primary health clinic cater for the whole community. The main road is the only (poorly) tarred road, which affects public transportation and access to markets and places of employment. Water is delivered on a rotational schedule to community sections once a week and there is no formal waste disposal system. As a result, there is widespread littering and no proper sanitation. The area, however, has access to electricity.

Most of the employed population community members reside in the cities to be close to their places of work and others use public transport to commute to work. The few employed people living in the area are mostly professionals working at the three schools and the clinic and government employees. The majority of households are dependent on subsistence farming, seasonal employment such as harvesting, old age grants and remittances from relatives working in the cities. Smallholder farming is dominated by farming vegetables, including maize.

5.2.2 Boschfontein

Boschfontein has four primary schools, two secondary schools and one primary health clinic as well as two development centres for the youth and the elderly. There is a tarred main road and street lights which positively impacts public transportation, access to markets and places of employment. Water is delivered to community sections three times a week on rotation and there

is no waste disposal infrastructure. The area has access to electricity. The majority of the farmers interviewed worked on land owned by the Chief. There is also a noticeable lack of available arable and grazing land in the area. The employment situation closely mirrors Magogeni although there is some small business development in the area.

5.2.3 Buffelspruit

Buffelspruit resorts under the chief of the Matsamo tribal authority, Chief Shongwe. Although largely rural, Buffelspruit has been developing, with a local shopping complex, private schools, private clinics and youth and development centres that are effectively improving the community. There is a tarred main road, established waste disposal, well-built infrastructure and street lights which positively impact public transportation, access to markets and places of employment. Water is still an issue for some sections in the area but is delivered according to a rotational schedule. The area however has access to electricity. There is a noticeable lack of available arable and grazing land in the area. Farmers indicated that, although there is some private ownership of land, the land they farm is owned by the chief.

The area provides some jobs through small businesses, the local schools, the clinic and development centres but most people are dependent on subsistence farming, social grants and remittances from relatives working in the city.

5.3 Demography of farmers

According to Hammer (2011), the exclusion of demographic information places the study at risk of assuming that the subjects of interest are the same. Demographic information allows the researcher to consider the differences between and within groups and individual participants (Hammer, 2011). Socio-economic factors play a critical role in shaping agriculture and development plans (Doss et al., 2015). Factors include age, farming experience and household income source.

The table below provides an overview of the demographic profile of farmers.

Table 2: Demography of farmers

Variables	Description	Magogeni N=7		Boschfontein N=7		Buffelspruit N=7	
		F	%	F	%	F	%
Gender	Males	0	0	0	0	3	43
	Females	7	100	7	100	4	57
	Total	7	100	7	100	7	100
Age	31-40	0	0	0	0	2	29
	41-50	0	0	0	0	1	14
	51-60	2	29	0	0	4	57
	61-70	5	71	7	100	0	0
	71-80	0	0	0	0	0	0
	Total	7	100	7	100	7	100
Education	Read and Write	7	100	7	100	7	100
Marital status	Single	0	0	0	0	3	43
	Married	7	100	7	100	4	57
	Total	7	100	7	100	7	100
Social grant		5	71	7	100	0	0
Other activities	Part-time employment	0	0	2	29	0	0

Source: Primary data.

The table above shows some of the factors that can influence peoples' farming efficiency and their livelihood potentials. The participants from the three farming communities (21 farmers in total) included both male and female farmers. Only 14% (3 out of the 21) farmers were male and 86% (18 farmers) were women.

Gender and marital status become important factors to look at because of the dominance of patriarchy in traditional rural areas. In most rural areas, women stay at home as caregivers in their households and are not allowed to own agricultural land (Agarwal, 2011). Women may not be allowed to look for employment and because most of them are uneducated, they tend to be forced to work on rural farms. The farmers in the three studied communities mentioned that married women in their communities are allowed to own land because they are the ones providing for their

households if their husbands migrated to cities in search of work. They also mentioned that the impact of having to care for their households affects the time and effort they can put into their farm work and therefore their levels of production and income.

Age is an important demographic factor shaping smallholder farming. A majority of the farmers studied were between 61 and 70 years old with only two of the participants between the ages of 31 and 40 years. The elderly farmers admitted that they were no longer as active as they used to be before and this negatively affected their productivity. The fact that they nevertheless continued implied reluctance on the part of the youth to get involved in agriculture and farming. While 57% (12 farmers) mentioned that they received social grants, only 10% (2 farmers) of the 21 interviewed were employed. With minimal means of income, the communities studied used farming as a means of securing food and income (see Table 2).

5.4 Structure of smallholder farming in Nkomazi

From findings extracted from the farmers' questionnaires, smallholder farming in Nkomazi is characteristically limited in resources and financial capacity, with farmers producing little more than for their own household consumption. The majority of the farmers were elderly women dependent on farming for income and food. The smallholder farming sector in Nkomazi, however, holds enormous potential, especially through the promotion of land ownership and active engagement in farming by community members. This potential is however diminished by the lack of government involvement in providing extension services, funding, farmer training and access to markets. Apart from the chief providing seeds and plots of lands to farmers, the policies and institutions influencing the Nkomazi smallholder farming sector were unclear.

5.4.1 Finances

Agriculture is the main source of food and extra income for the majority of the world's population (Doss, 2018). According to Mbanza (2013), finances play a vital role in improving agricultural productivity, ensuring that farmers have enough food for consumption and a surplus to sell. During the questionnaire-interviews, farmers mentioned the lack of funds as a reason for their difficulty in improving production. The farmers emphasised that they do not get funding from the government to purchase the needed input supplies to invest in their farming businesses and their

own financial capacity was limited. Lack of finance forced them to use intensive human labour and hand tools since they could not afford tractors to speed up the farming process.

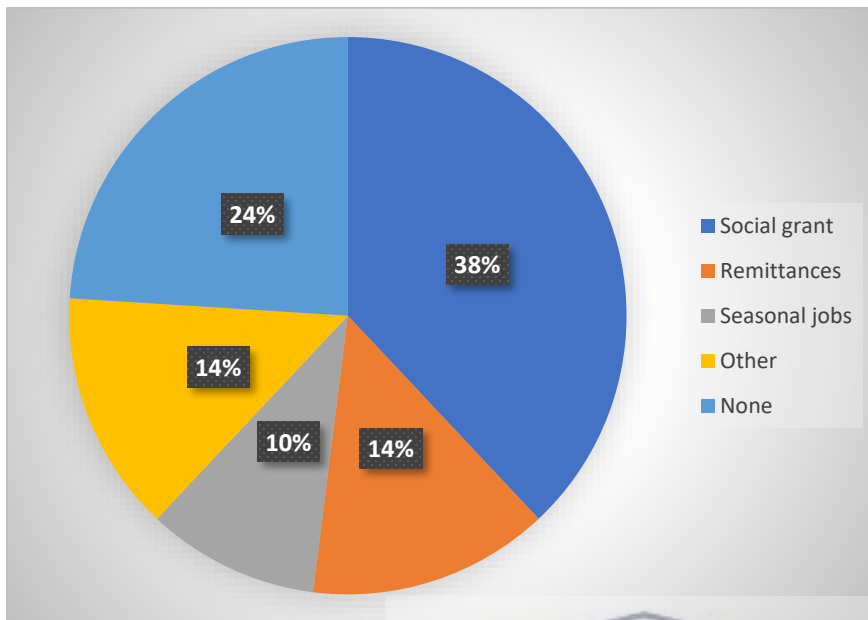


Figure 4: Sources of income for smallholder farmers in Nkomazi

Source: Primary data.



The farmers interviewed were asked what makes the most income for their households. From the three sampled respondent groups, only 38% of the farmers received social grants and 10% mentioned getting additional income from seasonal jobs. The farmers used these sources of income to finance their farming. Lack of funds also compelled some to work collectively to pool resources such as hoes and rakes. This, however, undermines potential productivity.

Lack of finance has a huge impact on farmer productivity. For example, farmers may be forced to plant less than they need to ensure their food security and income. The farmers' responses revealed their frustration at the current state of their farming and the need to increase productivity.

I am struggling to make ends meet even with the social grant included. I have a large family and we sustain a living only through farming and social grants. My production is always compromised because of the lack of resources, I am just not satisfied and I would like to improve my farming produce. – Farmer 7

We are never sure if the government will continue supplying us with seeds and we are definitely not sustainable working independently. Farming is expensive and time-consuming.
– Farmer 21

All three of the studied communities are dependent on smallholder farming as the main source of household income. Although Buffelspruit has an increasing range of other economic activities, the majority of households are still actively involved in farming as the main source of income. None of the participants mentioned getting financial support or loans when asked about the external support they received from the government and/or the private sector. The responses by participants also showed that they had inadequate information about the financial support and institutions that they could access. The farmers in Nkomazi have largely self-financing their farming enterprises and underfunding has consequently heavily influenced the state of the smallholder farming sector.

5.4.2 Markets to sell and buy in

Access to markets is crucial in the farming sector. For the studied communities, the lack of adequate infrastructure, finance and agricultural extension support are the main causes of their lack of market access. When asked about the challenges they faced, a majority of participants linked the lack of market access to the lack of government support in terms of finances and extension services.

My produce end getting spoiled either way because of the lack of markets to sell. At times I work at a loss because of the money invested only to have my products spoiled. – Farmer 12

The lack of extension services and training on markets. So far my family has tried to buy some of the farming resources but I do know where to sell my produce. – Farmer 13

The biggest challenge is the lack of support both from the government and locals. As farmers, we experience thieving and loss of produce due to the lack of market. That is a challenge for us and anyone who wants to start farming. – Farmer 21

Since Nkomazi is secluded, far from cities and concentrations of potential customers, the lack of physical infrastructure such as decent roads, potable water and reliable electricity affects the ability of smallholder farmers to reach markets. The lack of farming infrastructure, from farming tools to produce processing tools and finance means that farmers cannot scale up production to reach the

volumes that would interest supermarket chains and institutional buyers like hospitals, prisons, colleges and government departments.

Further, participants mentioned local markets as the most productive available market to sell their produce. They sell door-to-door in their communities, install market stalls near main roads and sell higher volumes on what they called “pension day sales”. Farmers in Buffelspruit added that the shopping complex attracted an inflow of potential buyers that worked to their advantage most of the time. Buffelspruit also had better infrastructure, much-improved roads and irrigation systems which improves their overall productivity and market access.

Balie et al. (2018) mention that market failures occur because it is costly for lenders to screen input credit applications and farmers lack collateral for loans. Eighteen of the 21 farmers mentioned being married and, in terms of those farming on family land, the women said that their husbands held the title deeds. Only 10% of the farmers mentioned having a side job. Farming was their main source of income. This has implications for their appetite for risk in taking out loans and possibly failing to repay them. While women in the studied communities are most involved in the farming activities, their husbands hold the title deeds and there is obviously risk in using family land as collateral for loans. Three participants used communal land for farming that cannot be used as collateral for loans.

Initially, farmers were drawn to the sector mainly to overcome the stresses of unemployment and sought only to produce enough food for household consumption. The farmers grew to see the need and opportunity to grow and sell a surplus. Farming with the intention to sell demands greater investment in seeds, fertiliser, farming tools and other inputs. One farmer from Boschfontein travelled for four hours to buy cheaper seeds which paradoxically caused financial strain. According to the farmers, access to seeds and farming tools is an issue and a strain for the smallholder farmers in Nkomazi.

The efficiency of markets is highly related to the infrastructure of the community. All the communities in the study had no proper roads or regular public transportation and only one had a shopping centre. This lack of infrastructure affects the capacity of the farmer to access markets to sell products and the capacity of the consumer to buy food. In their quest to sell more produce, the farmers at Magogeni tried selling as hawkers with no success. All respondents mentioned that maximising their produce with intent to sell had resulted in losses because there could not access

markets to sell. Market access was especially bedevilled by their isolation, distance to towns and the lack of government assistance to find markets.

When they were able to sell surplus produce the farmers used this income to reinvest in their farming and to buy food items that they cannot produce. When asked about current needs, the farmers stressed the development of sustainable market access as of paramount importance.

5.4.3 Land

In most rural areas, women struggle to access land because of patriarchy and, as primary caregivers of their families, this hinders them from providing for their families (Agarwal, 2011). In the current study, gendered access to land was not a challenge. A majority of the women participants were married, giving them access to family land through their husbands. For instance, over 50% of the respondents at Magogeni use a plot of land that ‘belongs’ to their family. The plots, however, still lack infrastructure, especially irrigation systems and fencing. Furthermore, the responses of the participants showed that most of the farmers used plots of land that were too small to grow their farming businesses to commercial production levels.

I would like to focus solely on farming but the amount of produce I make does not allow me. If I can get more land, sustainable farming inputs and a guaranteed market I would focus only on farming. I can say I am not really satisfied. – Farmer 3

The sampled participants seemed to not understand the processes and institutions to negotiate to access tribal land. Only Magogeni participants mentioned being encouraged by the village chief to own land. Only a few farmers mentioned farming on family-owned land while Buffelspruit farmers farmed on communal land owned by the Matsamo tribal authority.

Gender plays a huge role in land access. According to Agarwal (2011), women are major contributors to the production of food, Agarwal (2011), gender is still a barrier for women to take opportunities linked to the production of food because of patriarchy and customary policies. Although women are major contributors to food production and farm labour, most of them are landless because of patriarchy and unfavourable customary traditions (Kristjanson et al., 2017). In the farming communities studied, women work under insecure land arrangements that are mostly obtained through the chief or through their husbands. This discrimination has become a norm

where women are restricted to farm labouring without ownership benefits and security (Patel, Khan & Kar, 2015).

None of the women farmers said they own land. Patriarchy is thus dominant in Nkomazi, even though the majority of households in Nkomazi are female-headed as many men have migrated to cities to find jobs. Women are left to nurture their households and children, occasionally securing seasonal jobs such as weeding and harvesting.

5.4.4 Agro-climatic conditions

A change in climate patterns can have adverse results in agriculture, such as flooding and droughts (Connolly-Boutin & Smit, 2016). Nkomazi is known for rain scarcity and the respondents confirmed that they had struggled with drought in previous years to the point where their access to food was affected. According to Syed and Jabeen (2018), when food production is compromised, food prices escalate and the capacity of a household or an individual to access nutritious food is also compromised. In addition, floods tend to destroy infrastructure, particularly roads and cut off people's access to markets and settlements where they could access food (Hall et al., 2017). The farmers reported that they had indeed experienced floods at the beginning of 2021 that washed away and destroyed crops, waterlogged smallholdings and destroyed roads which severely affected farm production and access to markets.

5.4.5 Training and skills

Agricultural extension support is deteriorating in impact in South Africa. One agricultural researcher who participated in the study mentioned the near cessation of farmer support services such as the Farmer Support Group (FSG) that offered training support to farmers in farming skills such as seed preserving. Only 38% of the farmers reported having extension officers visit once in six months and annually for some. One farmer from Buffelspruit mentioned attending a meeting once where they learned how to apply for seeds. Farmers from Magogeni mentioned receiving guidance from an extension officer on plant and garden bed preparation. Most of the farmers however were not clear on the duty of an extension services officer as they attributed the only duty of extension to supplying seeds.

The responses of the participants suggest there is a disconnect between farmers and departmental stakeholders. Beyond the inadequate support, farmers are unaware of the skills and training they

ought to receive from agricultural extension officers. When asked about the challenges they face, they mentioned the need for skills in accessing finance institutions, business skills and finance management and post-harvest methods of preserving and selling produce. The farmers mentioned that they lack assistance from extension services in the improvement of farming skills, farmer registrations and access to markets, as well as training in post-harvest processes, financial management and business start-up skills.

The support currently available to smallholder farmers is insufficient to achieve a successful farming sector. Farmers must be trained and empowered to manage their businesses effectively through information and knowledge management, technical and advisory assistance, training and capacity building and marketing and business development.

5.5 Reasons for farming

In a typical South African rural area, smallholder farming is reportedly the main livelihood strategy and source of income (Machethe, 2004). However, it does not meet smallholders' needs due to challenges such as fragmented land rights, lack of production inputs and access to markets (Allahdadi, 2011).

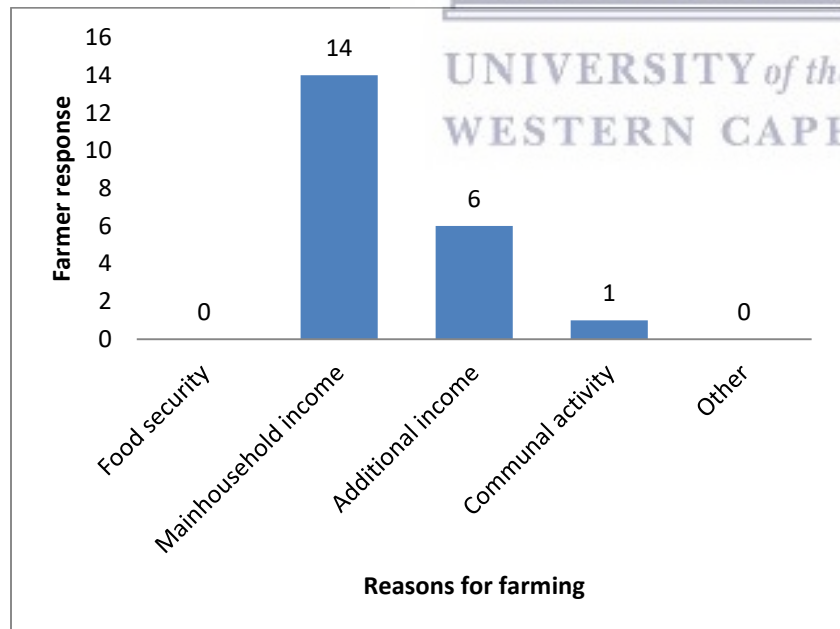


Figure 5: Reasons for farming

Source: Primary data.

Smallholder farmers in Nkomazi farm for reasons ranging from main household income, an additional source of income and as a communal activity. The smallholder farmers that participated in the study are in the deep rural area of Nkomazi where development has been slow to take off. The area is characterised by a lack of proper infrastructure, resources and public services, and consequently, has minimal income generation opportunities. Consequently, 14 of the 21 farmers in the study (67%) were involved in smallholder farming as their main source of income. Some had joined together to farm cooperatively to increase production and improve prospects of accessing funds and other support from the government. Most of the respondents' livelihood strategies also included social grants and remittances from relatives.

5.6 The state of smallholder farming in South Africa

Three of the sampled participants were agricultural researchers with experience in academia and research.

Researcher 1: Agricultural Economics professor.

Researcher 2: Research experience in land and agrarian issues.

Researcher 3: Academic/ Lecturer in food security.

The researchers were asked to comment on the outlook and state of the smallholder farming sector in South Africa.

Researcher 1 noted that the definition of smallholder farming was constantly revolving. According to Researcher 1, smallholder farming has been defined in terms of the size of the farming unit. Smallholder farming has also been described as being merely subsistence farming evolving into a business venture.

All the researchers perceived an actual regression in smallholder farming since democracy.

Smallholder farming in South Africa is neglected by the state with a few farmers getting benefits such as subsidies towards farm maintenance. The support overall since 1994 has been

declining and it was ironically better during apartheid because the state was involved. –

Researcher 3

State involvement was an important driver of the thriving agricultural sector in South Africa although heavily directed towards commercial farming. This support, which ensured access to agricultural credit, infrastructure and subsidies, declined after 1994. Post-1994 supposedly marked an era of land redistribution and the rise of previously excluded black smallholder farmers. Despite a crucial need for State support, the period has been characterised by a lack of support and intentional efforts directed to the emergent farmers, particularly the smallholder farming sector.

Researcher 3 contended that the current smallholder farming sector had the potential for success but was hindered by a lack of accountability, coordination, support, transparency and trust between stakeholders. All three researchers were clear that hope was not lost for the smallholder farming sector but there is a need for intentional change and transformation in policies, processes and institutions currently serving the agricultural sector. Their consensus was that the state of smallholder farming in South Africa reflected an ongoing state bias towards commercial farming. For farmers in areas such as Nkomazi, this is discouraging and hinders progress. There were limited specifically designed support and measures in place to improve smallholder farming. State support was inconsistent and only smallholders able to pay for private agricultural services and to self-fund their farms were thriving.

Farmers in undeveloped areas like Nkomazi are no closer to being able to self-fund the operation of their farms. By contrast, white commercial farmers were doing better despite the unstable economy because they could afford to pay for inputs such as specialised hired machinery and labour.

5.6.1 Current policies and institutions

Given the range of policies and institutions shaping the smallholder farming sector (reviewed in Chapter 2), it was surprising and concerning that none of the farmers were aware of any of these., including the farmers who reported extension officers' visits. Researcher 2 explained that there was an implementation issue in the agricultural sector. Although the policies are designed and approved, they are not implemented in ways that serve the needs of smallholder farmers. There are also no instruments in place to measure the effectiveness of policy and implementation. The rare visits by extension officers were insufficient to monitor and evaluate projects implemented.

There is a need for not only active implementation of agricultural projects and support structures but also frequent monitoring and reporting. This will further assist in informing future policies and projects that are aligned with farmers' needs.

Responding to the outlook on policies and institutions in South African agriculture, Researcher 3 spoke of the gap and lack of agricultural offices and extensions in rural areas. Where these offices are available, they are not accessible or efficient in servicing small farmers. The researchers even alleged that such offices and resources were abused with some farmers having preferential access to resources.

Even in rural areas, it has become a norm for only the more affluent people to access available agricultural support. The captured local offices with resources that benefit a certain proportion of farmers is a critical dynamic when looking at the state of smallholder farming in South Africa. – Researcher 3

Five of the seven smallholder farmers from Magogeni who mentioned receiving seeds also mentioned that they receive seeds and at times manure and fertilisers through the tribal office. The farmers said that seeds and other available resources are delivered at the tribal office and then distributed to local farmers providing they are registered. It was however unclear from the responses if the process of resource distribution was transparent enough to ensure fairness and equity among all beneficiaries.

Researcher 1 mentioned that the philosophy of agriculture in South Africa promotes the wealthy and this could be why the state is geared to disregarding small-scale farmers.

For instance, a 60-year-old woman producing a hectare of cabbages may not be considered as a farmer in the eyes of the agricultural philosophy. Our state promotes large-scale and all farmers have been indoctrinated into believing that farming is large-scale. – Researcher 1

In the context of the study, where the majority were women over 50 years of age, dependent on farming, social grants and some seasonal jobs for income, the possibility that such farmers are being disregarded is an important problem to consider, since such an attitude would mean the state is, consciously or unconsciously, undermining its own policies and institutions shaping smallholder farming.

5.6.2 Current Interventions

Researcher 1 indicated several problems with agricultural offices in South African rural areas, including one of farmers' access to these offices.

There is a doctrine of state workers believing that they are doing farmers a favour by assisting them, particularly in this sector where oftentimes they deal with the poorest of South African citizens. Resources are there but the work is not done, especially for the poorest. – Researcher 1

The researchers acknowledge that, albeit at a slow pace, the government has invested efforts and money in agricultural development. A problem revealed in the study relates to access to and knowledge of these interventions by smallholder farmers. Those sampled did not know the agricultural policies and had limited knowledge of the processes required to access agricultural support. This was despite the fact that there was an active agricultural government office in Nkomazi meant to service farmers in the area, according to one agricultural coordinator working specifically in Magogeni.

The farmers from all three studied communities agreed that some had received seeds, manure, fertilisers and extension officer visits. The extension services were, however, limited to having farmers register to receive seeds. The farmers mentioned that there was major dissatisfaction with government support. They mentioned the need for agricultural skills training, infrastructure, market and credit access and the present and consistent involvement of the government in the smallholder farming sector. Importantly, Researcher 3 pointed out that a progressive and sustainable agricultural sector in South Africa demands addressing the dismissive attitude in government towards small-scale farming.

The acknowledgement of small farmers should be the first step. It must also be acknowledged that this attitude is actually deliberate by the large-scale farming sphere to push their own agenda and interest in government departments and media. – Researcher 3

The researchers' consensus was that the current interventions were geared towards the lack of effective extension services and the dismissive attitude to small-scale farmers by stakeholders in the agricultural sector. The South African government prioritises and promotes large-scale farming and agri-business as they were regarded as economic enablers, especially when compared to smallholder farming, which requires considerable resources and effort to develop. The researchers

were particularly concerned that the government has been indoctrinated into the view that large-scale commercial farming was the only way forward and that this attitude had filtered from the national government to the ground level.

The figure below illustrates the current interventions and agricultural improvement strategies for smallholder farmers in Nkomazi as experienced by the sampled farmers.

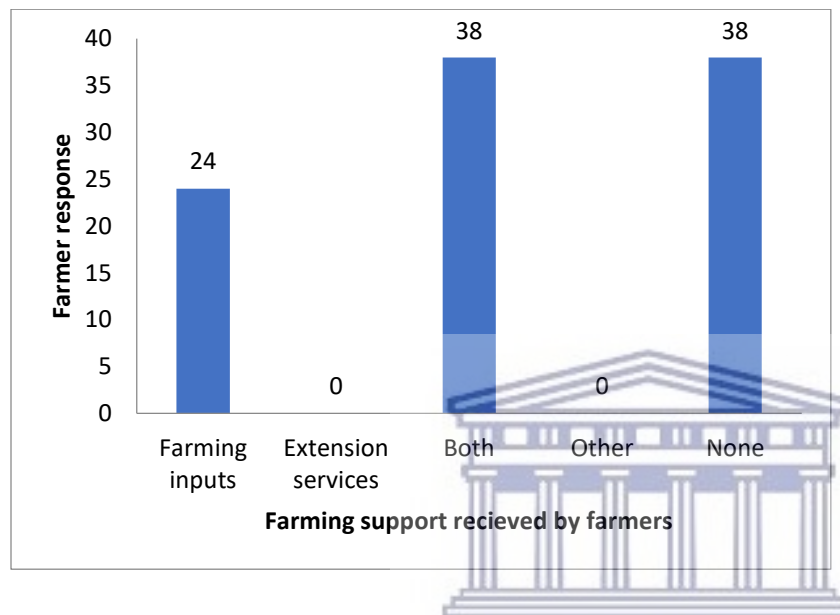


Figure 6: External support/ Government support received by smallholder farmers in Nkomazi

Source: Primary data.

While the majority of the 21 farmers interviewed indicated that they had received limited assistance with farming inputs (received seeds) and extension assistance, 38% also indicated not receiving any support. In other words, they had borne all the costs of farming themselves without government assistance.

5.6.3 Gaps and missing institutional mechanisms

When interviewed about the gaps in policies and institutions, the responses yielded recognised smallholder farming as a key national economic player that should be getting all the necessary attention, effort and investment. As a first step, it should be acknowledged that land has been distributed disproportionately between blacks and whites. Although the literature reviewed

showed efforts made towards restitution and distribution of land, the issue of land remains unresolved in South African agriculture.

The possibility of fair distribution of land seems to rely on a government that would rather let things be for the sake of national stability and peace while people suffer especially the poor. –
Researcher 2

The above quotation illustrates the failure of the government to revisit the issue of land and the beneficiaries of the redistribution of land.

Researcher 1 echoed the sentiments of Researcher 2 arguing that there is a degree of conservatism from those currently in power that reflects the crumbling and one-sided agricultural sector.

Land issue has always been addressed on paper. However, in practice, those in power pull back. There is great poverty in South Africa and the land issue adds to that frustration and thereafter the unstable state of agriculture we see. – Researcher 1

All the researchers noted the need for transparency in processes, accountability and fairness in resource distribution. To promote good performance, there also has to be accountability from the state and fairness. The shared sentiments from the responses included that government institutions, through extension officers, need to participate in terms of passing on information and solutions to smallholder farmers and equip farmers with networking skills, financial management skills, entrepreneurship skills and understanding of the sector and its dynamics.

There are additional problems such as marketing, skills cultivation and financial institutions' support, especially because the majority of the smallholders are older people. Banks cannot provide loan financing because subsistence farmers usually lack collateral because they do not own the biggest asset, the land they farm. Most of the studied farmers in Nkomazi were farming on land controlled by the chief.

One crucial institutional mechanism, extension services, was perceived as inefficient and even dysfunctional.

Extension officers are at most not hands-on and the distribution is unevenly proportioned and lacking in skills. There is a huge decline in extension services and their skilfulness. –
Researcher 1

The lack of extension services reflected in the rarity of contact between the smallholder farmer and extension officers does not only affect the productivity of farms or fuel the discouragement and frustration of farmers. Extension officers are the face and the frontline officers of the state. With regular contact, they are not only able to avail their knowledge of agriculture to the farmer, but are well-positioned to inform the state of the progress of existing projects and what strategies would aid the development of the farms visited.

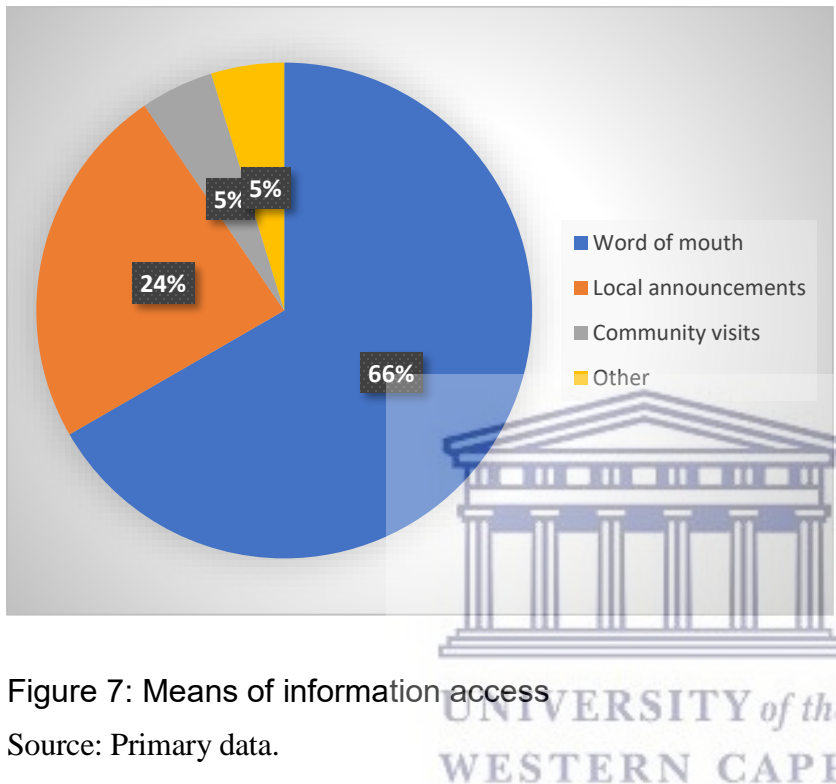


Figure 7: Means of information access

Source: Primary data.

The above figure shows that most (66%) of the 21 farmers interviewed attributed their knowledge of agricultural interventions and external support to word-of-mouth information from other locals. Only one farmer reported receiving information and support from extension officers. The farmers had no consistent means of accessing information regarding available interventions. Access to agricultural interventions is therefore difficult where there is no means of accessing knowledge and information about these interventions.

As shown below (Figure 8), none of the farmers were familiar with the policies that are meant to serve their sector. This shows the gap in knowledge and access to information meant to assist smallholder farmers. This further confirms that the gaps are huge between the aims of state policies and the on-the-ground implementation of policies by government officials and farmers. The lack

of delivery calls for a thorough review of agricultural policies and relevant state infrastructure, including fresh consultation with smallholder farmers about their needs.

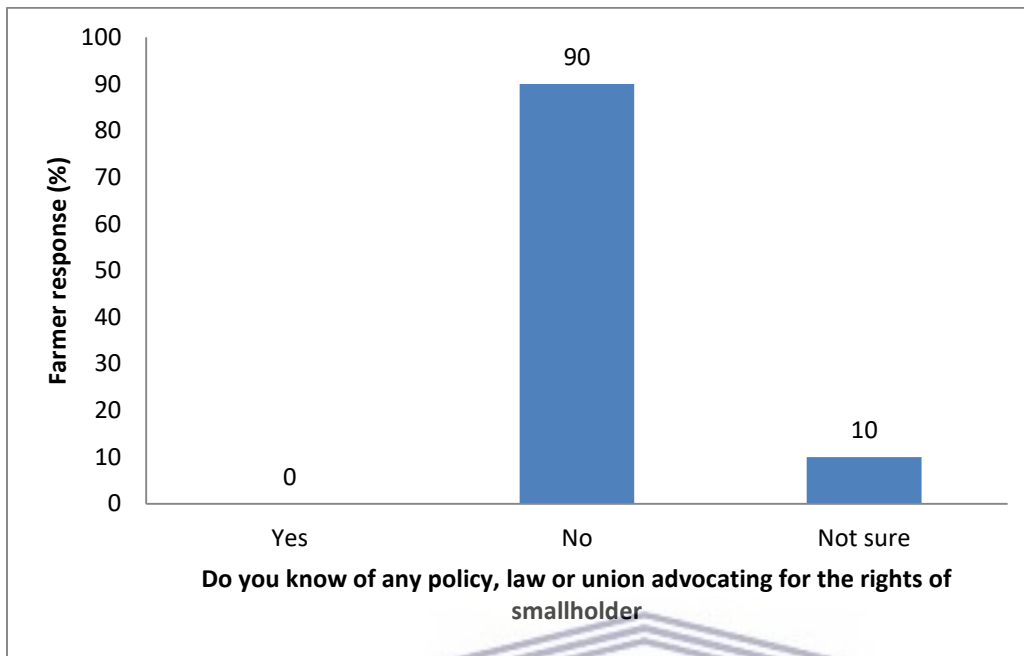


Figure 8: Farmers' knowledge of state policies in agriculture

Source: Primary data.

5.6.4 Gaps and recommendations for the smallholder farming sector

According to the researchers' expressed sentiments, the land redistribution issue is critical in agriculture. There is ample unused land that is undistributed. One way to assist smallholder farmers is to redistribute land to black small-scale farmers and then get more involved as the state in the support of the sector. Researcher 1 mentioned Limpopo as an example where progress was being made by the smallholder farming sector that was becoming a key economic player despite the few resources available.

Researcher 2 when responding to the gaps and making recommendations first outlined the scientific dynamics to be addressed about the state of agriculture in South Africa that includes climate change. The researcher also mentioned the political dynamic that has to do with the neglect of small-scale farmers on the national level. At the heart of the neglect is the overrated perception of the success of the large-scale farming sector that has infiltrated governance and policies.

The farmers who participated also shared their recommendations and what they see as gaps in the current state of smallholder farming.

The government can help with agricultural training and mentorship. This will help us learn how to farm efficiently and also access markets to sell. – Farmer 5

We need transparent processes from the government. We should be made clear on what to expect from extension services and what is expected from us. For now, extension services hardly come. – Farmer 13

The farmers' grievances are valid and within the capacity of the government to address. Researcher 3 agreed but pointed to a disconnect in the way the government approached availing agricultural support.

There is an institutional gap between farmers and institutions, a bridge that seems difficult to connect and this is vital for the development of smallholder farming in South Africa. – Researcher 3

Researcher 1 proposed farm-based extension officers and farm-based researchers to constantly monitor and report on the progress of the farms and to create a better and enabling environment between stakeholders and farmers. According to this researcher, attempts to form a partnership between commercial farmers and small-scale farmers in Limpopo became politicised and tainted by corruption and the programme had collapsed.

Smallholder farming in South Africa is in trouble and suffering economically and politically because it is disregarded by the government, commercial farms and agribusinesses. The researchers agreed that programmes should be farmer-driven and guided by a dedicated smallholder farming policy.

5.7 Outlook of smallholder farming in the Nkomazi area

Smallholder farming in Nkomazi has been a tool in the fight against poverty but is struggling, albeit with the potential to develop. Although one of the poorest areas in Mpumalanga, Nkomazi is fortunate to be rich in arable land. Farming has increased the availability and access of food for those involved and continues to be the main source of income for many. There are common challenges such as inadequate resources, lack of funding and few markets. There is also a very

narrow path for the elevation of smallholder farming into a formal business with a sustainable income.

Two government officials from the agriculture office working for the Nkomazi Municipality were interviewed to obtain an outlook on smallholder farming in the Nkomazi area, from the government perspective. The two officials were the Nkomazi Farms Coordinator (Officer 1) and an Extension Officer (Official 2).

5.7.1 State measures and interventions in place for the improvement of smallholder farmers

When asked about the specific measures in place directed towards smallholder farmers in Nkomazi, Official 2 mentioned that farmers are supplied with input resources such as seeds and manure. Though slow-paced, there has been skills training and financial assistance for labour purposes, especially for sugarcane farmers. Official 2 acknowledged that these measures were not as effective as the designed plan towards agricultural acceleration anticipated.

Official 1, who works directly with farmers, said that the demand for farmer support surpasses the funding capacity of the municipality. The official admitted that agricultural inputs such as tractors and planters were insufficient in terms of the demand and for that reason, agricultural coordinators have been ineffective in assisting the progress of farms. The official also mentioned that new training had just been introduced in other farming communities in Nkomazi and has seen improvement in agricultural practices. However, skill training had not been implemented yet for the three studied communities.

When asked about the ineffectiveness of extension support, the officials pointed out that what happens at the municipal level is influenced by national and provincial laws and policies. They conceded that some government officials have been remiss in performing their duties. However, in the case of Nkomazi, there were not enough assigned extension officers to reach all the existing smallholder farmers.

5.7.2 Process of accessing interventions and farmer benefits

As mentioned, the sampled farmers were unaware of farmer benefits and that reflected in the limited agricultural support they had received. Most of the farmers said they had heard about receiving seeds and other material support through word of mouth from other farmers.

Regarding the processes of getting farmer benefits, the officials said farmers ought to first be registered with the DALRRD. This is done through the submission of their ID copies to the local office of the department to be registered and added as a beneficiary. The register is used as a database of farming communities and their needs. Some of the farmers had received farmer benefits by following this process.

I am not sure if this falls under policies but for farmers to get assistance from the government, they need to travel to their offices with ID copies and stand numbers so the officials can inspect the plot before handing over seeds or any assistance. – Farmer 21

An official from the department assigned to our area came to take our ID copies and we signed forms indicating our needs. It has been a year and nothing has happened and we have not been contacted since. – Farmer 20

The responses from the sampled farmers above show that the processes for accessing support were unknown to them, which would not be the case if there were sufficient extension officers and coordinators assigned who visited these farms regularly. Government officials had not taken responsibility for making resources and information accessible, despite the majority of farmers in Nkomazi being poorly educated elderly people who did not have the resources to access the information they needed about assistance available from the government in terms of current policies.

5.7.3 Current gaps in the smallholder farming sector of the Nkomazi area

The interviews with both officials showed that they had a good grasp of the issues affecting smallholder farming in Nkomazi. Official 2 separated the gaps existing in the smallholder farming in Nkomazi into internal and external factors. External factors were systemic challenges, included land ownership, gender roles, climate (including the crucial determinant of water availability), health (especially related to the advanced age of most farmers) and the income available to farmers who have to sustain their own farms. Internal factors were on-farm weaknesses. Among the internal factors he identified were challenges such as lack of equipment such as tractors to improve efficiency, insufficient operating capital and lack of irrigation systems to have a secure supply of water. The capacity to access markets to sell produce and buy necessities was understood to involve both external and internal factors for smallholder farmers since the lack of product to

supply markets was internal while distance and the lack of infrastructure and credit that prevented market access were external systemic factors.

Official 1 agreed with this analysis and added the need to revise methods in the face of the COVID-19 pandemic. The official mentioned that the pandemic brought new challenges for farmers and the economy and understood the importance of reviewing farmer needs and revising methods of support according to the changed operating environment. At least one of the farmers shared this perspective.

Not just because of the pandemic but I have for years seen the need of active involvement from extension services. As local farmers, we need consistent training on effective farming strategies. – Farmer 19

The sampled farmers were very clear in their grasp of the current gaps in the smallholder farming sector that were preventing smallholder farming development in Nkomazi.

If we can have a sustainable supply of seeds, a guaranteed supply. Seeds are expensive and the government could really help if they can guarantee us seeds. – Farmer 20

We need extension services at least once a month. Our soils have to be tested for crop suitability also. The government must help us gradually turn our farming into sustainable businesses. This will require agricultural extensions, sustainable farming inputs and better access to markets. – Farmer 5

I would appreciate it if the government can provide agricultural mentorship and visits once every month. This will help provide a transparent working relationship between farmers and the government. – Farmer 6

By providing an active support structure for farmers to help them navigate farming through the pandemic. Markets are now different and we need new strategies to make this work. – Farmer 11

The above quotes are extracted from responses of the farmers in the three different farming communities sampled in Nkomazi. They show that, despite their lack of education and training in agriculture, all the farmers understood the need to have guaranteed farming inputs to succeed in agriculture.

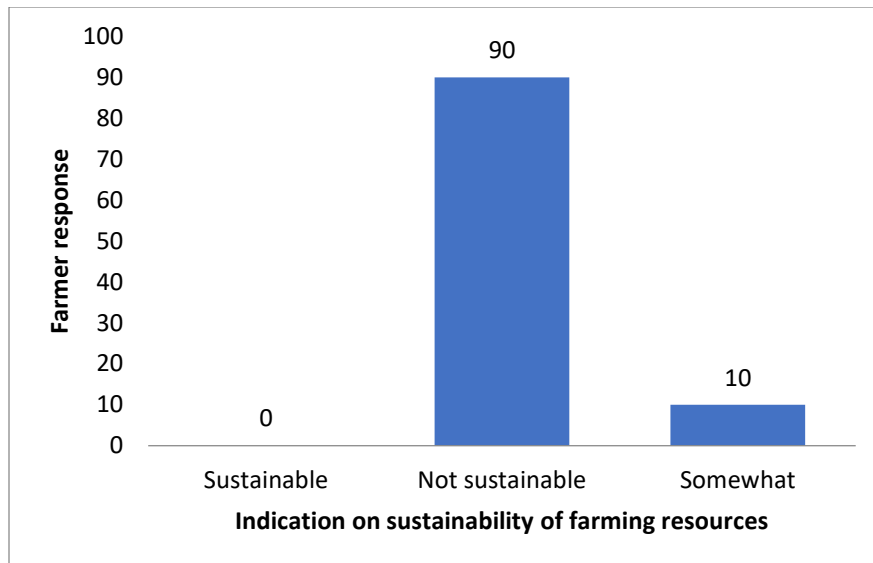


Figure 9: Sustainability of farming resources used smallholder farmers in Nkomazi

Source: Primary data.

The above graph shows the sustainability of the available farming resources for the smallholder farmers who participated in the study. The graph shows that not even one of the smallholder farmers indicated to having sustainable farming resources. The farmers indicated that they do not have confidence in their current resources to sustain their farming ventures, now and in the future. This leaves the current state of the smallholder farming sector in Nkomazi one that is unsustainable, threatened and in need of constant intervention

5.7.4 Missing institutional support mechanisms in the smallholder farming sector of the Nkomazi area

Official 1 alleged there was corruption on both the government side and the farmers, indicating poor management of resources.

There have been reported instances though without paper evidence where farmers sell seeds and fertilisers and corruption in farm registrations by the farmers and government officials. –
Official 1

If farmers are indeed selling their farming inputs for short-term expediency (or in desperation) it shows a lack of basic knowledge, lack of funds and issues of trust and accountability that can only be corrected through improving the institutional structures for oversight which are practically non-

existent in the case of Nkomazi and improving access to support infrastructure such as credit and training specifically designed to address the challenges of farmers in Nkomazi.

There is also a lack of data captured about small-scale farmers and their needs that contributes to the current situation where the majority of farmers are unsupported and underfunded. Improving data capturing will assist the government to determine where and how best to distribute input resources such as seeds, water tanks and capital-intensive equipment such as tractors and harvesters, to ensure maximum smallholder productivity.

The literature shows that institutional mechanisms of good governance are needed to encourage harmony, reduce conflicts and increase productivity. Good governance is characterised by discipline, transparency, independence, accountability and fairness (Chibanda et al., 2009). Having sound institutional arrangements in place and practising good governance would ultimately improve government commitment and support and result in more effective farming (Dlamini, 2010).

5.7.5 Recommendations to improve smallholder farming in Nkomazi

The study provided ample indications of weaknesses on the part of individual farmers (related to poverty, age, gender, education) and systemic weaknesses (poor policy environment, lack of commitment by government, poorly performing support structures) that conspire to prevent smallholder farmers from progressing. On the other hand, the farmers sampled reported successful occasions where pooling their limited resources had improved their outputs. One way of formalising this pooled approach is through forming agricultural cooperatives, a structure that has (at least nominally) been a feature of government policy for many years. Cooperatives were introduced as a vehicle to improve food production for smallholder farmers and allow them to overcome the challenges they face such as lack of access to input resources, markets and credit (Allahdadi, 2011). Agricultural cooperatives improve opportunities for smallholder farmers including access to agricultural training and financial support from the government and development agencies (Allahdadi, 2011). Agricultural cooperatives have the potential for smallholder farmers to thrive in food production and in improving food security (Mbanza, 2013). Working collectively in groups may not only improve productivity but having a strong collective voice may enable smallholders to force the government to provide more support to the sector.

The study also showed consistent weaknesses caused by the general lack of development and infrastructure related to government inefficiency, economic restraints and the isolation of rural communities. Better leadership and initiative by all levels of government, especially through the facilitation of networks between existing private and public institutions, will assist smallholder farmers to build relationships that unlock resources that will enable farmer development and improve outputs. These role-players include banks, input suppliers, retail buyers, and research and training institutions.

Ensuring efficient communication between government agencies and farmers, between smallholders in the municipality and even between smallholders and commercial farmers will improve support to smallholders, especially if government agencies assume responsibility for ensuring this through infrastructure and appropriate incentives. This will enable government institutions and extension officers to understand and anticipate what support smallholder farmers actually need and how to apply funding and other resources to achieve the greatest effect.

Further, the DALRRD should work to ensure that extension officers carry out their responsibilities more efficiently and effectively. The Department should also take the lead in equipping smallholder farmers with networking, financial management and entrepreneurship skills to ensure a stronger understanding of what farming demands as a business rather than as a survivalist response.

None of these recommendations will work sustainably unless the government shows a greater commitment to resolving the issue of land ownership, including addressing the remnants of the homelands system that vested parallel political power and *de facto* control over communal land in the hands of traditional leaders.

5.8 Conclusion

This chapter described the results of the study to reveal how the institutions and policies shaping smallholder farming in Nkomazi impact farmers' success in the three smallholder farming communities sampled in Nkomazi. The responses from all participants show that there are serious systemic challenges preventing smallholders from developing their enterprises beyond survivalist responses to food insecurity and unemployment. How to overcome these challenges and what direction future research in this area can take will be addressed in the concluding chapter.

Chapter 6: Conclusions, Recommendations and Reflections

6.1 Introduction

The main objective of the study was to understand the institutions and policies shaping smallholder farmers in South Africa with a particular interest in rural areas and, for the purpose of this research, focusing on the Nkomazi area of Mpumalanga. Three farming communities, government officials and researchers were studied to explore the research question. The specific objectives were to determine the role and impact of policies and institutions shaping smallholder farming; to understand the socio-economic factors prevalent among smallholder farmers in rural areas; and to discover current gaps in policy and make recommendations. With the participants' consent, data was then collected and analysed and specific conclusions were drawn from the results.

6.2 Summary of findings

Nkomazi is a rural area characterised by the lack of proper infrastructure, resources and public services. For these reasons, the area has minimal income generation opportunities. This is evident in the respondents' livelihood strategies, which include social grants, remittances from relatives and smallholder farming. However, they face challenges in farming successfully, including the lack of equipment and knowledge, lack of sufficient funds, poor irrigation systems and the lack of access to markets.

The smallholder farming in Nkomazi is one characterised by limited resources and financial capacity, with farmers producing for their households only, with an occasional small surplus to sell. The majority of the farmers are elderly women dependent on farming for income and food. Although the smallholder farming sector in Nkomazi holds enormous potential, it is negatively impacted by the lack of government involvement in providing extension services, funding, farmer training and access to markets.

The future success of the smallholder farming sector depends less on smallholder farmers than external influences such as improving government policies and structures, changes to funding institutions and criteria and changes to land ownership and power relations.

6.2.1 Objective 1: Socio-economic factors shaping smallholder farmers

Socio-economic factors such as age, literacy and household income play critical roles in shaping agriculture development and success. Addressing these factors and properly integrating them into development plans is important if interventions are to succeed.

The farmers in the three studied communities reported that married women were ‘allowed’ to own land only because they headed their households while their husbands pursued employment in the cities. In general, however, smallholders did not own the land they farmed and had no assets to use as collateral to obtain credit to fund farming inputs. Land ownership is thus the single most influential socio-economic factor influencing their farming success. Furthermore, although farmers were literate they were poorly educated and in need of training in business, agricultural science, marketing and communication.

6.2.2 Objective 2: Institutions and policies shaping smallholder farming

Apart from the chiefs providing seeds and plots of lands to farmers, the institutional influences on the smallholder farming sector were generally negative. There is an evident lack of dedicated policies and institutions directed at supporting small-scale farming. There are no performance measures in place to judge the effectiveness of policy which undermines accountability. Agricultural extension offices are inaccessible to small farmers and inefficient. There appears to be a lack of commitment to extension services delivery, at least partly because the state continues to be biased towards the commercial farming sector. An overhaul of institutional arrangements to improve governance and management will positively impact the productivity of small farms and thereby the smallholder farming sector.

6.2.3 Objective 3: Impact of policies and institutions on smallholder farming

The smallholder farmers that participated in the study in the deep rural area of Nkomazi reported minimal contact with government institutions and were mostly ignorant of government agricultural policies. Most were farming because the economic environment offered no other alternative to obtaining food and income. While some of the farmers sampled indicated receiving seeds and other extension service assistance most had had very little contact with extension officers and therefore were almost unaware of current policies and institutions relevant to smallholder farming. Since farmers cannot access rights they do not know about, the lack of information about policies and

institutions governing their sector guarantees that they miss the few opportunities the system offers for assistance to them.

6.2.4 Objective 4: Institutional and policy gaps

There is a dismissive attitude in government towards small-scale farming and a bias towards large-scale commercial farming that should be addressed. The smallholder sector must be acknowledged and included in development plans.

The government has largely neglected to resolve the land issue and allowed rural tribalism and patriarchy to continue and even thrive in South Africa, to the detriment of the dispossessed, the poor and women. Until the government implements its already existing policies and addresses the redistribution of land and the empowerment of rural citizens, agriculture will not significantly impact unemployment and poverty alleviation.

The study shows that there is both an institutional gap in terms of insufficient and inefficient extension support services to smallholder farmers as well as a lack of good governance in the agricultural sector. In the case of Nkomazi, this is reflected in both the dual authorities of tribal and municipal power structures, which are unable or unwilling to create an environment that allows the smallholder farming sector to progress. To promote good governance, there has to be greater accountability from all state institutions involved, especially by the DALRRD, whose management of the farming sector has been desultory at best.

6.3 Recommendations

The current state of smallholder farming however exposes the urgent need for strategies to improve and enhance the effectiveness of smallholder farming. According to Dorward et al. (2004), the success of agricultural plans is highly dependent on the consideration of local, global and policy conditions and how these conditions shape the agricultural system. The government must work with researchers in studying and investigating these conditions to design informed and impactful policies. Policies must enable effective smallholder farmer participation in agro-processing and participation in other high-value market chains.

The government should institute key performance indicators and monitoring & evaluation systems for all its officials involved in agricultural development that are cognisant of smallholder farming

needs but that reflect the values of discipline, transparency, dedication, accountability and fairness that are not always visible on the ground.

The government needs to make a mental shift away from seeing small-scale farmers merely as an occupation for the unemployed irrelevant to macro-economic growth and towards seeing them as a growth engine for the next farming generation and the long-overdue transformation of the sector. To make the shift towards seeing and respecting the small-scale farmer as an equal partner, farmers themselves must organise themselves into collectives that can lobby government effectively to release resources needed for sustainable development. In turn, this can only happen when farmers are educated to withstand the negative power relations of rural governance, in particular, the hegemony of 'traditional' authorities. Again, without addressing the issue of land ownership in rural areas, sustainable development cannot be achieved. Therefore, this study makes the following specific recommendations:

- All smallholder farmers should be captured on a national database so that farmers can access support from the government and private institutions.
- The government should urgently commission national research to reveal the extent of small-scale farming and the sector's contribution to GDP, jobs and food production.
- Contiguously, the government should determine through research what the primary resource needs of smallholder farmers are and take the necessary steps to reform institutions to service those needs.
- At the very least, the input resource requirements of smallholder farmers should be audited and programmes instituted to provide seeds, fertilizer, water tanks and such equipment as required to immediately improve productivity.
- Banks should be incentivised to improve farmers' access to credit with the government not only underwriting lending to reduce commercial risk but enforcing interest rates relative to the farmer's actual returns. Along with assistance to access markets, this will enable farmers to re-invest surpluses and grow their businesses.
- The government should institute a national training programme for existing farmers based in the extension services system to improve agricultural practices and skills in marketing, management, business and communication to enable farmers to transition from subsistence to viable businesses.
- The government, commercial farmers, large companies that service needs in agriculture and small-scale farmers associations should work together to create an enabling environment to

encourage smallholders to form agricultural cooperatives, to pool their farming resources and knowledge for collective benefit. Cooperatives can be formed to specifically focus on production, transportation, distribution and marketing. This process should be incentivised by the government. One easily implemented incentive could be to compel all government procurement offices to purchase perishables from the cooperatives. Such guaranteed supply contracts would serve as collateral for the loans farmers will need to fund their inputs.

6.4 Conclusion

The smallholder farming sector in South Africa has many problems, including both access and process problems in policies, governance, marketing, skills, finance and institutional support. There is a huge lack of extension services and the distribution is unevenly portioned. These factors affect the current and potential productivity of farmers and discourage involvement in agriculture, especially by the youth. To a large extent, the process problems outweigh access problems in South Africa. There is a lack of local and national governance, poorly implemented policies, a disconnect between legislated transformation objectives and the reality on the ground, and a persistent bias on the part of government and policy-makers towards large-scale commercial farming that leads to the dismissal of small-scale farming as a mere survivalist strategy of the poor. This attitude pervades all levels of government, legislators, lending institutions, the retail sector and commercial farming. At the other extreme, smallholder farmers are disempowered by rural power relations and their own ignorance of the few benefits government policy and legislation allow them, exacerbated by lack of capital and insufficient education and training. In short, farmers cannot benefit from what they do not know or cannot afford. There is an urgent need for government to re-commit to transformation and reform, including resolving the land issue and formulating and implementing dedicated policies that result in effective farmer-driven, bottom-up programmes to develop the smallholder farming sector into a vehicle for economic growth, poverty alleviation, wealth creation and jobs. To achieve this vision, the factors that influence the development of the sector, that were the subject of this study, must be thoroughly re-examined by all stakeholders involved in shaping the smallholder farming sector so that the policies and institutions can be re-purposed to benefit small-scale farmers, their beneficiaries and the consumer.

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Annexures

Annexure 1: Research Questionnaire for smallholder farmers in Nkomazi, Mpumalanga province



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This **questionnaire** is intended to collect data on the socio-economic factors shaping smallholder farming in rural areas, particularly on the institutional arrangements and policies.

1.1 Demographic information

Variables	Description	Participant 1	Participant 2	Participant 3	Participant 4
Gender	Males				
	Female				
Age	31-40				
	41-50				
	51-60				
	61-70				
	71-80				
Education	Read and Write				
Marital Status	Single				
	Married				
Pension					
Other activities	Part-time employment				

OR

Participants	Age	Education	Marital status	Pension	Other income activities
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1					
2					
3					
4					

1.2 Economic factors

1. What motivated you to start farming? (socio-economic factors prevalent)
 - Food insecurity
 - Main household income
 - Additional household income
 - Communal activity
 - Other (Please specify)
2. Do you have any other source of income?
 - Yes
 - No
 - a. If yes, what other sources of income do you have
 - Social grants
 - Remittances
 - Seasonal jobs such as beading, harvesting and weeding?
 - Other (Please specify)
 - b. Does having other sources of income affect your commitment to farming?
 - Yes
 - No
 - c. What makes most of your income? (Role of smallholder farming in farmer's livelihoods)
 - Farming
 - Social grants
 - Remittances
 - Seasonal jobs such as beading, harvesting and weeding?
 - Other (Please specify)
3. Are you satisfied with your production? (Exploring what shapes smallholder farming)
 - Yes
 - No
 - a. Do you produce only for household consumption; market purposes or both?
 - Household consumption
 - Market
 - Both
 - b. If it is to sell, what is your target market?
 - Local community members
 - Local supermarkets
 - Other (Please specify)
 - c. Since you started farming, have you noticed any improvement in the availability of food and income in your household?
 - Yes
 - No

1.3 Social factors

4. What challenges do you face as smallholder farmers? Please name them
5. Do you get external support for your farming activities?
 - Yes
 - No
 - a. If yes, which institutions offer support?
 - Government departments/ institutions
 - NGOs
 - Other (Please specify)
 - b. If yes, what kind of support do you receive?
 - Farming inputs (such as seeds; water pipes; fertilizers)
 - Training and extension services
 - Mentorship
 - Other, explain.
 - c. How many times in a year do you receive external support?
 - Once a year
 - Every 6 months
 - Every 3 months
 - Once a month
 - Other, explain.
 - d. How did you hear about this farming support?
 - Word of mouth from other locals
 - Local community announcements
 - Community visits from municipality officers
 - Other (Please specify)
6. What farming inputs do you own? (Exploring policies and institutions)
 - Land
 - Seeds and fertilizers
 - Irrigation system
 - Equipment (such as water pipes, rakes, and weeding hoes)
 - Other (Please specify)
 - a. Are these inputs sustainable?
 - Yes
 - No
 - b. Do you ever fear losing these inputs?
 - Yes
 - No
7. Do you know of any policy, law or union advocating for the rights of smallholder farmers?
 - Yes
 - No
8. What support does government provide to you?
 - a. Is the support provided effective?
 - Yes

- No
 - b. What should be done to make the support more effective?
- 9. What else should be done by the state to support and improve your farming output?
Please specify



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Annexure 2: Semi-structured interview questions for agricultural researchers



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This **semi-structured interview** is intended to collect data on the outlook of the agricultural sector in South Africa and the institutions and policies shaping smallholder farming, their role and gaps in the smallholder farming sector. Voluntarily and allowed the right to anonymity, this questionnaire will be answered by the selected **agricultural researcher**.

1. What is the outlook of smallholder farming in South Africa? Explain your answer.
2. Which of South Africa's agricultural policies and institutions are most beneficial to smallholder farmers in rural areas?
3. What are the measures and interventions that the government has put in place for the improvement of smallholder farmers in rural areas?
 - 3.1 Which ones are more beneficial and why?
4. What is the process of accessing these interventions and farmer benefits?
 - 4.1 Do farmers find them easy to access? Please explain.
5. What are the current gaps in the smallholder farming sector in South Africa?
6. What are the missing institutional support mechanisms in the smallholder farming sector in South Africa?
 - 6.1 Why do these gaps exist? Please explain.
7. What recommendations can you make towards the improvement of smallholder farming in South Africa?

Annexure 3: Semi-structured interview questions for government officials at the Nkomazi municipality, department of agriculture and rural development



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This **semi-structured interview** is intended to collect data on the outlook of the agricultural sector in South Africa and the institutions and policies shaping smallholder farming, their role and gaps in the smallholder farming sector. Voluntarily and allowed the right to anonymity, this questionnaire will be answered by the selected **government officials at the Nkomazi Municipality**.

1. What is the outlook of smallholder farming in the Nkomazi area? Explain your answer.
2. Which of South Africa's agricultural policies and institutions are most beneficial to smallholder farmers in the Nkomazi area?
3. What are the measures and interventions that the government has put in place for the improvement of smallholder farmers in the Nkomazi area?
 - 3.1 Which ones are more beneficial and why?
4. What is the process of accessing these interventions and farmer benefits?
 - 4.1 Do farmers find them easy to access? Please explain.
5. What are the current gaps in the smallholder farming sector of the Nkomazi area?
6. What are the missing institutional support mechanisms in the smallholder farming sector of the Nkomazi area?
 - 6.1 Why do these gaps exist? Please explain.
7. What recommendations can you make towards the improvement of smallholder farming in Nkomazi?

Annexure 4: Situation analysis of farming communities in Nkomazi

Situation analysis

Name of community:

Location of community:

Type of community:

Brief history of community:

Governance of community:

Demographic profile of community:

Physical infrastructure of community:

Social services in the community:

No. and quality of:

Schools:

Training centres:

Clinics:

Crèches:

Community centres:

Recreation activities:

Other services:

Government extension services available:

Distance from and availability of transport to nearest:

Hospital(s):

Local and provincial government offices:

Police station:

Livelihoods of community members:



Institutions of civil society in the community:

Power relations in the community:

Strengths and assets of the community:

Weaknesses and needs of the community:

Problems:

Priority needs:

Underlying needs:

Areas of attraction (1-hour proximity):



Annexure 5: Letter of consent for all participants



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Letter of consent: To participate in a questionnaire for the study conducted by Millicent Londiwe Nhleko entitled Investigating institutions and policies shaping smallholder farming in South Africa: A case study of the Nkomazi area, Mpumalanga province

Incwadzi yekuvuma kuphendvula imibuto yelucwaningo.

I,, have read and understood the information sheet regarding this research.

Mine,, ngifundzile futsi ngavisisa yonkhe imininingwane mayelana nalolucwaningo.

I have had the opportunity to ask any questions related to this study, and received satisfactory answers to my questions and any additional details I wanted.

Nginikiwe lifuba lekubuta imibuto mayelana nalelucwaningo ngatfola timphendvula letanelisa imibuto yami.

I understand that my participation in this study is voluntary. I am free not to participate and have the right to withdraw from the study at any time, without having to explain myself.

Ngiyavisisa kutsi angikaphoceleki kuphendvula imibuto mayelana nalelucwaningo futsi ngivumelekile kuhocisa noma ngabe ngusiphi sikhatsi.

I am aware that the information I provide in the Questionnaire might result in research which may be published.

Nginelwati loluphelele kutsi tonkhe timphendvula kulemibuto yalelicwaningo tingahle tikhicitwe njengeluphepha lelucwaningondzaba.

I understand that any written output resulting from this Questionnaire will never use my name that is my identity will not be revealed in any form.

Nginelwati futsi ngiyavisisa kutsi ligama lami litawugcineka liyimfihlo.

I agree to answer the questions to the best of my ability.

Ngiyavuma kuphendvula yonkhe imibuto ngekwati kwami lokuphelele.

I may also refuse to answer questions that I don't want to answer.

Ngivumelekile kungaphendvuli imibuto lengitiva ngingakakhululeki kuyiphendvula.

I understand agree that this Questionnaire may be voice recorded.

Ngiyavisisa futsi ngiyavuma kutsi timphendvula tami tingacoshwa njengebufakazi.

By signing this letter, I give free and informed consent to participate in this Questionnaire.

Ngekusayina lencwandzi, ngiyavuma kuhranganyela kulelicwaningo.

Date/ Lusuku:

Participant Name (Voluntary)/ Ligama lemlimi(Ngemvumo yakho):.....

Participant Signature/ Sayina:.....

Interviewer Name: Ligama lemchwani:.....

Interviewer Signature/ Sayina:.....

This research project has received ethical approval from the Humanities & Social Sciences Research Ethics Committee of the University of the Western Cape, Tel. 021 959 2988, E-mail: research-ethics@uwc.ac.za

Annexure 6: Information Sheet



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Information sheet for the questionnaires for smallholder farmers in the Nkomazi area, Mpumalanga province

Imininingwane ngelucwaningo lelubhekiswa kubalimi labancane base Nkomazi, esifundzeni saseMpumalanga

Project Title: Investigating institutions and policies shaping smallholder farming in South Africa: A case study of the Nkomazi area, Mpumalanga province

Sihloko selucwaningo: Investigating institutions and policies shaping smallholder farming in South Africa: A case study of the Nkomazi area, Mpumalanga province

What is this study about?

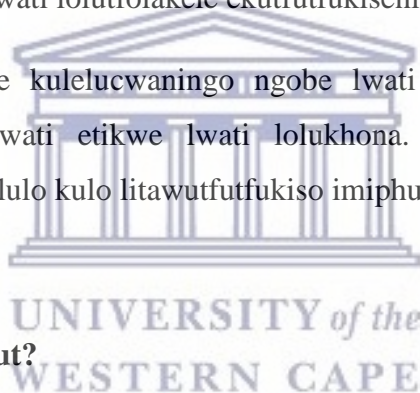
This research project is being conducted by Millicent Londiwe Nhleko, a student at the University of the Western Cape. The purpose of this study is to understand policies and institutions shaping smallholder farming and the impact thereof on smallholder farmers. This study is significant because The FAO maintains that rural households are likely to escape poverty if they are actively involved in farming activities. This however cannot be in isolation from policies designed to support smallholder farming. The vicious cycle of poverty, especially in rural areas however questions the policies and institutions shaping smallholder farming. In the quest of smallholder farming development, it is important to understand what shapes smallholder farming and thereafter use findings to inform future policies and agricultural interventions aimed at improving smallholder farming.

You are invited to participate in this project because the knowledge of farmers will give context to the study and enlighten existing knowledge. The integration of existing knowledge and the actual experiences of farmers will improve the outcomes of the study in meeting its objectives.

Mayelana nelucwaningo?

Lelucwaningo lentiwa nguMillicent Londiwe Nhleko, umfundzi wase University of the Western Cape (UWC). Inhloso yalesifundvo kwati kabanti ngemitsetfo netinhlango letakha balimi labancane nemitselela lenawo kubalimi labancane. Lesifundvo sibalulekile ngoba imindeni leminingi ikhalu etindzaweni tasemakhaya tinematfuba lancono ekubalekela inhlopheko uma batimbandzakanya ekulimeni. Imiphumela yekulima ayikho kudze nemitsetfo netinhlango letentelwe kusekela balimi labancane. Leluchungechunge lenhlopheko ikakhulu etindzaweni tasemakhaya tiveta imibuto ngalemitsetfo netinhlango letibekelwe kusekela balimi labancane. Ekutfufukiseni balimi labancane, kubalulekile kutsi kwatiwe kutsi ngutiphi tintfo letakha ebalimi labancane bese kusentjetiswa lolwati lolutfolakele ekutfufukiseni balimi labakhona nalabetako.

Uyamenywa kutsi uhlanganyele kulelucwaningo ngobe lwati lebalimi litawuletsa sisindvo kulesifundvo nekukhanyisela lwati etikwe lwati lolukhona. Lokuhlangwaniswa kwelwati lolukhona nelwati lebalimi lebadlulo kulo litawutfufukiso imiphumela yalesifundvo.



What is the Questionnaire about?

The questionnaire seeks to understand smallholder farming as a sector. This includes the benefits and challenges of smallholder farming, the outlook of farming communities and how policies and institutions shape smallholder farming as a sector. The responses will reveal gaps and overlooked parts in the implementation of policies and interventions and thereby give way for recommendations.

Imayelana nani lemibuto?

Lemibuto ihlose kuvisisa kabanti ngebalimi labancane. Loku kufaka ekhatsi inzuzo netingcinamba balimi labancane labahlangabetana nato; kubukeka kwebalimi nekutsi balimi basekelwa njani. Timphendvulo kulemibuto titawuveta tikhala letikhona tukwe mitsetfo netinhlango letikhona tekweseka balimi tibuye tinike tindlela tekuya phambili.

Will my participation in this study be kept confidential?

All participation will be treated with confidentiality and integrity. All personal information will be kept confidential and will remain anonymous. You will be required to sign a consent form before partaking in the study to protect your privacy and confidentiality. The researcher shall not reveal the identity of the participants and will safeguard the confidential information obtained in the course of the study. Moreover, all data collected during the study will be kept safe in hard drives with password and hardcopies locked in a drawer only accessed by the researcher.

Ingabe kutimbandzakanya kwami kulelucwaningo kutawugcinwa kuyimfihlo na?

Kuhlanganyela kwabo bonkhe bantfu kutawuphatfwa ngemfihlo nangebucotfo. Imininingwane lecondzene nebalimi itawugcinwa iyimfihlo futsi ingatiwa ngumunfu. Utawucelwa kutsi usayine lifomu lekuvuma kutibandzakanya kulelicwaningo kute kuvikeleke iminingwane yakho. Lona lowenta lolucwaningo angeke nangesiphi sikhatsi avete imininingwane yalaba lababutwako futsi utawuvikela lonkhe lwati lalutfolile kulelicwaningo ngekwetsembeka. Ngetulu, lonkhe lwati lolutfolakele kulesifundvo litawugcinwa luphephile kuma hard drive lanema password nakuma shelufu lakhiyekako.

What are the risks of this research?

Questions will be sensitive and considerate of participants' personal lives. However, in a case where questions evoke past trauma and stressful experiences, participants will be referred to a registered counsellor, Ms Olga Sono holding a B.Psych. Hons from the University of Zululand who will offer counselling to the participants affected.

Bungoti balelucwaningo?

Imibuto itawubutwa ngekuvelana nekubangela lababutwako ikakhulu ngetimphilo tabo tasemakhaya. Kodvwa, uma kwenteka kutsi leminyane imibuto ivuse buhlungu lebabhekana nabo kadzeni, batawutfole ku Ms Olga Sono umluleki wetengcondvo lowatfole tifundvo takhe eNyuvesi yaseZululand. Lona lowenta lolucwaningo utawuchumanisa laba labanesidzingo kumluleki wetengcondvo.

Is any assistance available if I am negatively affected by participating in this study?

In the event of stressful, upsetting and trauma evocative questions such as loss of land and traumatic living conditions, participants will be referred to Ms Olga Sono, a registered counselor holding B.Psych. Hons from the University of Zululand. The counselor is based in a Medical center in Drikoppies, Nkomazi in the Mpumalanga province much to the research area's convenience especially in terms of language barriers. Should the need arise counseling will be pro bono from the counselor.

Ingabe lukhona lusito uma ngabe ngitsikameteka ngalemibuto yalelucwaningo?

Uma kungenteka imibuto ivuse buhlungu lobenteka futsi kuba nesidzingo kulaba lababutwako, lona lohola lolucwaningo utawubatifumela kumeluleki wengcondvo Ms Olga Sono lotfole ticu takhe eNyuvesi yaseZululand (B.Psych. Hons). Lomeluleki wengcondvo utfolakala khona eNkomazi, Drikoppies lokutawenta kutsi kubemelula kusitakala kwalaba labanesidzingo. Loku kutawentiwa ngumeluleki njengesente sekubuyisela emphakatsini (Pro bono).

What are the benefits of this research?

There are no material benefits for the participants (respondents). The results may help the investigator to learn more about the smallholder farming sector.

Yini inzuzo yalelucwaningo?

Kutelokubambekako lokutawutfolwa ngulabalimi labambandzakanyeka kulelucwaningo. Imiphumela itawuncedza kulesifundvo nebalimi labancane.

Do I have to complete the whole interview proceedings or may I withdraw from the process at any time?

Your participation in this research is completely voluntary. Should you feel the need to withdraw from the study, you can do so at any-time

Ingabe ngiphoccelelekile kucedza imibuto yalelucwaningo noma ngivumelekile kuhocisa noma ngabe ngusiphi sikhatsi?

Kutibandzakanya kwakho kulelucwaningo kukutinikela. Nangabe uva kutsi awusakhululeki kuchubeka, uvumelekile kuhocisa noma ngangusiohi sikhatsi.

How long will it take to complete the whole interview process?

The questionnaire will take about a maximum of thirty minutes to complete with each farmer.

Kutawutsatsa sikhatsi lesinganani kucedza lemibuto yalelucwaningo?

Lemibuto itawutsatsa sikhatsi lesingendluli emashumini lamatsatfu emaminitsi ngamunye umlimi.

Do I need to bring anything to the interview?

You do not have to bring anything.

Kukhona lekumele ngiphatse ekuphendvuleni imibuto yalelucwaningo?

Awudzingi kuphatsa lutfo uma utophendvula lemibuto.

What if I have questions?

This research is being conducted by **Millicent Londiwe Nhleko**, a student at the University of the Western Cape.

If you have any questions about the research study or if you have any questions regarding your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact the student's research supervisor, **Dr A Bayat**, at the Institute for Social Development (ISD), University of the Western Cape.

Uma ngabe nginemibuto?

Lucwaningo lwentiwa ngu**Millicent Londiwe Nhleko**, umfundzi wase UWC.

Uma unemibuto ngalucwaningo nobe uma unemibuto mayelana nemalungelo akho ekutimbandzakanyeni nalelucwaningo nobe ufisa kwatisa tinkinga lonato ngalelucwangi, wamulekile kuchumana na Dr A Bayat kuleminingwane lengentasi.

Name of Supervisor: Dr A Bayat

Position at ISD:

Phone number of supervisor: 021 671 9668

Institute for Social Development

School of Government

University of the Western Cape

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Bellville 7535

This research project has received ethical approval from the Humanities & Social Sciences Research Ethics Committee of the University of the Western Cape, Tel. 021 959 2988, E-mail: research-ethics@uwc.ac.za



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