

Access to municipal markets by agro-smallholder producers in eThekwini Metropolitan Municipality: A Public Administration perspective

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Discipline of Public Governance

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ABSTRACT

The government's inability in South Africa to ensure that both local and national markets adequately accommodate smallholder producers is hindering the sector's ability to grow and develop. Minimal research has focused on how local government interacts with other spheres of government to improve and ensure accessibility to municipal markets for agro-smallholder producers, and limited studies have been conducted that explore the influence of municipal markets on agro-smallholder producers. Therefore, this study aimed to critically examine municipal markets' influence on agro-smallholder growth within a decentralised state.

This study employed a qualitative exploratory research methodology using semi-structured interviews and focus group discussions. The researcher utilised a non-probability, purposive sampling method—the sample comprised participants from government departments and agrosmallholder producers falling under the eThekwini Municipality's jurisdiction. The researcher conducted seven individual face-to-face interviews with government officials and 15 focus group discussions with agro-smallholder producers. The data collected were analysed using the thematic analysis technique.

The study results show that the municipal markets and the extension services do not provide substantial support to agro-smallholder producers who are seeking access to markets. Furthermore, the study found that there is no integration or relationship between the eThekwini Municipality and the KZN Agriculture and Rural Development on the issues related to the promotion and development of agro-smallholder producers. Through the application of administrative theory, the study recommends that the government institutions incorporate stakeholders' insights, lay a policy foundation for a whole-of-government approach to planning, and set the direction for agro-smallholder's planned future. The creation of a coherent planning and coordination system could assist government institutions in ensuring that better outcomes are achieved to deliver support services to agro-smallholder producers. Furthermore, the government institutions will be more effective if they have sufficient human resources who are qualified and able to ensure their departments' effective management and smooth functioning.

Keywords: Government, markets, agriculture, producers, integration, public services, local economic development, rural development and Constitution

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	ABBREVIATIONS		
ACDP	A frican Christian Democratic Party		
AGRA	Alliance for a Green Revolution in Africa		
AGRO-SMALLHOLDER	A gricultural smallholder		
ANC	A frican National Congress		
CASP	Comprehensive Agricultural Support Programme		
CBOs	Community Based Organisations		
CEO	Chief Executive Officer		
COPE	Congress of the People		
CoGTA	Cooperative Governance and Traditional Affairs		
CSAE	Centre for the Study of Africa Economies		
CRDP	Comprehensive Rural Development Programme		
DA	Democratic Alliance		
DAFF	Department of Agriculture, Forestry and Fisheries		
	Department of Provincial and Local Government		
DPLG			
DTI	Department of Trade and Industry		
ECA	Export Credit Agency		
EFF	Economic Freedom Fighters		
FAO	Food and Agriculture Organization		
FF+	Freedom Front Plus		
.GEAR	Growth, Employment & Redistribution		
GDP	Growth Domestic Product		
GHS	General Household Surveys		
HLPE	High-Level Panel of Experts on Food Security and Nutrition		
HRSC	Human Research Science Council		
IFSS	Integrated Food Security Strategy		
IGR	Inter-Governmental Relations		
IDP	Integrated Development Plan		
IFAD	International Fund For Agricultural Development		
IFP	Inkatha Freedom Party		
IFNP	Integrated Food and Nutrition Programme		
ILO	International Labour Organisation		
KZN	Kwa Zulu-Natal		
KPMG	Klynveld Peat Marwick Goerdeler		
LED	Local Economic Development		
MAFISA	Micro-agricultural Financial Institutions of South Africa		
	National Agricultural Marketing Council		
NAMC NGOs	Non-Governmental Organisations		
NFP	National Preedom Party		
NDP	National Development Plan		
NDA	National Development Agency		
NPC	National Planning Commission		
OECD	Organisation for Economic Co-operation and Development		
PGDS	Provincial Growth and Development Strategy		
PSPPD	Programme to Support Pro-poor Policy Development		
PWPs	Public Works Programmes		
	Planning, Organising, Staffing, Directing, Coordinating, Reporting, and		
POSDCORD	Budgeting		
RDP	Reconstruction and Development Program		
RSA	Republic of South Africa		

ABBREVIATIONS		
Southern African Development Community		
Small Enterprise Development Agency		
Sustainable Development Goals		
Small, Medium and Micro Enterprises		
Statistics South Africa		
Traditional Council		
United Democratic Movement		
University of KwaZulu-Natal		
United Nations		
United Nations Environment Programme		
United Nations Development Programme		
United Nations Educational, Scientific & Cultural Organisation		
White Paper on Local Government		

CHAPTER ONE: THE INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 INTRODUCTION

The aim of this chapter is to provide an overview of the study. This chapter begins by explaining the operational definitions utilised in this study, followed by the study's background, after which the research problem is described. The chapter also discusses the following sections: aim and research objectives; preliminary literature review; theoretical framework; rationale of the study; research methodology; data collection; data analysis; ethical consideration; limitations of the study; and sequence of the chapters.

1.2 OPERATIONAL DEFINITIONS

To avoid ambiguity, the researcher has used the following definitions of the key concepts within this thesis.

1.2.1 Climate change

The primary contributor to agricultural productivity is the prevailing climate in each geographical location. The potential effects of climate change affect agricultural productivity and, by extension, human welfare, as agriculture plays an essential role within society. Climate change poses a significant threat to the country's food security due to its dire impact on water resources, infrastructure, health, biodiversity and ecosystem services (Ziervogel *et al.*, 2014). The term 'climate change' refers to seasonal changes over a long period caused by the growing accumulation of greenhouse gases in the atmosphere (Tkemaladze & Makhashvili, 2016).

1.2.2 Agriculture

Agriculture is one of the most critical enterprises in the world. It comprises crop production, agronomy, horticulture, animal science, agricultural engineering and agricultural economics. The term 'agriculture' is derived from the Latin words *ager* (which means land or field) and *cultura* (meaning cultivation). In this thesis, the term 'agriculture' refers to land cultivation for economic purposes – be it crop or animal farming.

1.2.3 Food security

Food security refers to a situation whereby "all people at all times, have physical and economic access to adequate, secure and healthy food to meet the nutritional needs and food preferences for an active, healthy life" (FAO, 1996:56).

1.2.4 The household

A household refers to a person or group of persons who may be related or unrelated, who stay together in the same house unit, who, together, make(s) provision for food or other essentials for living.

1.2.5 Poverty

Haughton and Khandker (2009: 1) indicated that the concept 'poverty' simply "implies a lack or deprivation of a certain minimum income necessary to attain a decent standard of living". Tackling poverty in South Africa remains one of the key government priorities. Poverty is endemic to rural areas.

1.2.6 Smallholder producer

A smallholder producer is a person or group of persons who produce agricultural products to sell to bakkie traders, hawkers and neighbours, and for household consumption. Such producers require support from the government and have minimal participation in the formal agricultural supply chain. For this study's purpose, smallholder producers are those farmers who are poor in wealth and agricultural land, are not well-integrated into markets with favourable conditions, and lack such critical elements as efficient credit or effective collective action. The term 'agrosmallholder producers' is used in this study to refer to farmers/producers involved in horticulture farming, especially crop production for food, who require support from the government and are not well-integrated into markets. On the other hand, the term 'smallholder producer' is generally used in the study to refer to those farmers who might be involved in either or both crop and animal farming.

1.2.7 Commercial producer

A commercial producer is a person or group of persons who produce agricultural products to sell to markets. These are farmers who are able to farm independently and broadly participate in the agricultural supply chain. They typically have ample access to more land than the smallholder producers and can diversify their business and penetrate other sectors. For instance, unused land can be used to build properties.

1.2.8 Integration

In most cases, institutions formulate their activities according to their organisational mandate and planning processes; sometimes, integrating similar services amongst institutions or departments to achieve optimal results is ignored or overlooked. In this study, the term 'integration' refers to a process that brings together two or more organisations that perform similar activities to respond more effectively to people's diverse needs to avoid duplications.

1.2.9 Infrastructure

Infrastructural support is essential to ensure the economic development of the country. All the activities and facilities that help sustain growth in production and income generation form part of the infrastructure. In other words, the critical items of infrastructure in the development planning of the country include energy, communication, irrigation, market facilities and water (dams, sewers), storage facilities, transport networks (roads, ports, bridges, tunnels, railways) (Grimsey

& Lewis, 2002; Ng & Loosemore, 2007; Fulmer, 2009). The infrastructure "supporting social services such as schools, hospitals, and public housing is also vital for national functioning" (Wiewiora *et al.*, 2016: 485). Infrastructure is thus defined as the physical structures and networks used to deliver services to the public.

1.2.10 Supermarket

A supermarket does not produce physical goods of its own, but it adds value by acquiring existing goods from distantly-located suppliers. Typically, supermarkets' suppliers are primary producers/manufacturers of household goods that are located far from their customers. The products are distributed to stores where they are sold to local customers – primarily residents and small enterprises. Therefore, supermarkets are businesses that provide goods and services close to the final consumers. A supermarket is defined as an "individual retail outlet that sells, primarily by way of self-service, a range of domestic supplies and non-domestic supplies organised into departments" (Matamalas & Ramos, 2009: 5).

1.2.11 Municipal markets

These are the markets that are owned, managed, controlled and administered by the municipalities. They are created to stimulate economic growth and provide an outlet for local producers across the economy's various sectors. In other words, the municipal markets provide a trading facility for both formal and informal businesses within the municipal jurisdiction area and develop and maintain a mutually beneficial relationship with producers/ suppliers.

1.2.12 Extension service

Gêmo, Stevens and Chilonda (2013: 59) defined extension services as a "function of providing needed and demand-driven knowledge and skills to rural men, women, and youth in a non-formal, participatory manner, to improve their quality of life". The extension services incorporate all characteristics of agriculture, including providing appropriate information; connecting producers with sources of farming inputs, markets and credit facilities, and providing education services to producers. In South Africa, the extension service is one of the critical tools that the government uses to attain its agricultural developmental goals, primarily providing support to the smallholder sub-sector.

1.2.13 Coordination

Vanagas and Stankevič (2014: 115) refer to coordination as creating "communication channels between people who are executing different work, and it combines workers with different but interrelated work tasks to achieve organisational goals".

1.3 BACKGROUND OF THE STUDY

The Constitution of the Republic of South Africa (RSA) of 1996 established three distinct, interdependent and inter-related spheres of government: national, provincial and local. The Constitution requires these spheres of government to operate within a framework known as cooperative government principles. The spheres of government, particularly the national and provincial, share the bulk of social services, which fall under their competence areas. Agriculture, education, health, housing, social security and welfare are examples of the bulk of social services. The national government's main functions are to "formulate policies and determine regulatory frameworks, including setting norms and standards and overseeing the implementation of these functions" (Constitution, 1996). On the other hand, the provincial sphere of government deals with the implementation of policies within the provincial framework.

The government's local sphere is responsible for providing basic services such as "electricity, municipal markets, municipal abattoirs, refuse-removal, and municipal infrastructure" (Constitution of RSA, 1996, Schedule 5: Part B). Furthermore, the Constitution indicates that the "local government has the right to exercise these functions, but they have to be performed within a set of regulatory frameworks" of both national and provincial spheres of government. Due to the decentralised approach that South Africa has adopted, an effective intergovernmental relations system is vital to ensure active integration and cooperation amongst the spheres of government. According to Sunday (2014: 43), "Inter-governmental relations concern the links between different government levels in a decentralized system". To achieve the government's objectives, the Constitution of RSA of 1996, S41(h) provides for an "inter-governmental relations system that seeks to improve coordination and alignment".

Although the Constitution of RSA of 1996, S40(1), classifies the spheres of government as being distinctive, interrelated and interdependent, they form "parts of a larger single body, the government of the RSA" (Millo, 2007: 83). Kahn, Madue and Kalema (2011: 65) argued that the "Constitution does not advocate for exclusivity in service delivery but that the principle of cooperative government obliges all spheres of government to put their collective mutual interest above parochial interest and work together for the common good". Within South Africa, the realisation of cooperative government is critical, but can be achieved by taking specific concrete steps. These include supporting and assisting one another on "issues that are of common interest, ensuring that there is a friendly relations amongst the spheres of government, always providing feedback to one another, informing and consulting each other on the matters of common interest, and adhering to agreed procedures" (Constitution of RSA of 1996, S41(1)). Intra and inter-

organisational coordination are critical within government departments because the successful implementation of policies depends on resources (human and financial) and a large extent on how the different government institutions interact with one another and how various government departments foster sound working relationships. The coordination of legislation, policies, programmes, and budgets form the basis of integrated strategic planning; if the spheres of government's strategic plans are not aligned, then the standard programmes or projects will not be possible. The inconsistent agricultural policies and programmes from the different government spheres that target the smallholder sector show that intergovernmental relations or cooperative government is not being successfully achieved. Integrated strategic planning will ensure smooth, integrated service delivery – a seamless web of services that cut across jurisdictional boundaries.

The National Development Plan (NDP) Vision 2030 indicated that the agricultural sector is a "concurrent function of the national and provincial government, but it is also dependent on basic infrastructure and planning decisions that are functions of local government" (The Presidency, 2012: 233). Thus, to ensure that the delivery of services and the implementation of policies occur, intergovernmental relations, especially coordination, are crucial. Steyn (2011) noted that the local government does not have a clearly defined policy mandate to systematically address the agricultural sector in the same way as line ministries. However, the Constitution does allow local government to play a role in ensuring food security through food systems such as municipal abattoirs and fresh produce markets. Battersby, Hayson, Kroll and Tawodzera (2015: 53) noted that when considering the "food system as a whole, local government plays a much wider role in shaping the characteristics and trends seen within the food system".

Furthermore, Battersby *et al.* (2015: 50) stipulated that "there is a need to acknowledge these existing roles and to consider how local government can work with other food system stakeholders", including the national and provincial spheres of government, to improve food security through food system interventions within existing mandates. The International Food Policy Research Institute (2002) stated that for the agricultural sector to succeed, the spheres of government must forge partnerships with other stakeholders like NGOs and industry bodies, and ensure that local government and communities have the resources they need to facilitate this sector. Ruysenaar (2010) and Malan (2019) stipulated that local government is crucial not only for the management of national food security, but also for providing support to producers in the agricultural sector. For this reason, the role of local government in smallholder producers to reach some degree of commercialisation through market output is critical. The ability of the spheres of government to work together to align their activities is vital. Thus government institutions should

ensure that their efforts are channeled into creating systems that will enable smallholder producers to access markets with the produce that is safe, garden-fresh, quality, and environmentally and socially friendly (The Presidency, 2012).

The South African agricultural sector is dualistic, comprising smallholder and commercial subsectors. The literature has widely recognised the contribution of the agricultural sector in developing countries at both the domestic and international levels (Kayanula & Quartey, 2000; Aliber & Hall, 2010; Erastus, Stephen & Abdullai, 2014; Jordaan, Grové & Backeberg, 2014; Aliber & Mdoda, 2015). The agricultural sector provides an opportunity for individuals to earn an income by participating in various agricultural supply chain stages. Mmbengwa, Gundidza, Groenewald and van Schalkwayk (2009: 33) noted that the agricultural sector worldwide is categorised by "subsistence, communal, commonages, smallholder and commercial sub-sectors". This study's main focus is on the agricultural smallholder sub- sector, with a limited discussion on the commercial agricultural sub-sector. This is because the South African agricultural sector consists of a small number of highly resourced commercial producers and numerous poorly resourced smallholder producers.

The NDP Vision 2030 recognises the agricultural sector as being "one of the most labor- intensive goods-production sectors, with substantial employment linkages" (National Planning Commission, 2012: 144). Furthermore, the NDP stipulates that any neglect of agriculture speaks to government negligence to the rural communities (The Presidency, 2012). Thus, the NDP 2030 proposed that more investments should be made to link the smallholder producers in communal and land reform areas to create innovative markets and buy products from smallholder producers to establish locally owned buffer stocks.

Many households in developed and developing countries participate in agricultural activities, whether formally or informally. In many cases, such agriculture-based activities are the main source of the households' livelihoods. Families engage in farming activities for different reasons. For example, some practice farming mainly for income generation, while others practice farming mostly for food consumption and subsistence (Punt, Pauw & van Schoor, 2005; Muchara & Mbatha, 2016). According to Raju and Singh (2014: 1), "seventy-five percent of the world's poor live in rural areas and depend on agriculture as their primary source of income". Most agricultural households depend entirely on the smallholder farming sector to survive (Louw, Jordaan, Ndanga and Kirsten, 2008). Aliber and Hall (2010), Hazell (2011), Singh (2012), Nelsona *et al.* (2014), Raju and Singh (2014) and Aliber and Mdoda (2015) noted that the smallholder farming sector

plays a significant role in producing food worldwide and contributing to the reduction of rural poverty, food insecurity, and unemployment. The smallholder farming sub-sector's role is also emphasised within South Africa's NDP, which allocated smallholder producers with a mandate to drive rural development and improve their livelihoods (NDP, 2011). Jordaan *et al.* (2014) asserted that smallholder producers are distinctively placed to play a vital role in stimulating the rural economy and alleviating poverty in South Africa. Yet while smallholder producers play a crucial role within the agricultural sector, a lack of land for production remains a challenge.

Many smallholder producers have two or fewer hectares of land (Wiggins, Kirsten & Lambi, 2010; IFAD, 2011; Hazell, 2011; HLPE, 2013; Sarah, Lower & Terri, 2016). Hazell (2011) and Sarah *et al.* (2016) maintained that approximately 500 million smallholder producers participate in agricultural activities worldwide. Smallholder producers share the following characteristics: low market participation, lack of institutional capacity and support, lack of infrastructure, labour intensive, utilising traditional production techniques, located in the rural areas, middle-aged women dominate the sub-sector, size of the land for farming or limited access to land, lack of access to adequate financing, and high levels of vulnerability (IFAD, 2011; Hazell, 2011; Singh, 2012; Nelsona *et al.*, 2014; Raju & Singh, 2014; Aliber & Mdoda, 2015; Sarah *et al.*, 2016).

Devereux and Maxwell (2001), Schmidhuber and Tubiello (2007) and Garrity, Akinnifesi, Ajayi, Weldesemayat, Mowo, Kalinganire, Larwanou and Bayala (2010), have stipulated that locally produce goods, from smallholder producers, are the key to ensuring food security. Furthermore, these authors emphasised the importance of increasing productivity amongst smallholder producers to tackle food insecurity issues. The growing global population will put increasing pressure on producers to produce more food in the coming years and pressurise governments to deal with food security and other pressing socio-economic challenges (Garrity et al, 2010; Funk & Brown, 2009). Therefore, the smallholder sub-sector's growth and development mustn't be overlooked, as it will be needed to address the critical challenges being experienced by different countries, particularly within rural settings.

Numerous researchers believe that smallholder producers' support and development are crucial for addressing some of the issues experienced by rural communities. The smallholder sector's proper support could potentially help redress the imbalances that exist within the agricultural sector (Resnick, 2004; World Bank, 2008a; Barham & Chitemi, 2009; Baiphethi & Jacobs, 2009; Aliber & Hall, 2012; IFAD, 2014). The imbalances within the agricultural sub-sectors relate to a lack of market access, agrarian business support, and land ownership regarding economically viable land

for cultivation. Furthermore, these researchers noted that relevant stakeholders, such as the public sector, NGOs, and the private sector, should assist the smallholder sub-sector in addressing some of the challenges associated with a lack of market access. Louw *et al.* (2008), Van Rooyen, Steward and De Wet (2012) and Jari and Fraser (2012) indicated that smallholder producers cannot be overlooked and will always be relevant in ensuring both household food security and income generation. Mpandeli and Maponya (2014) noted that the South African agricultural smallholder sector has continued to maintain a livelihood in the face of unfavorable conditions. On the other hand, van Rooyen *et al.* (2012), Norton (2014) and Devaux *et al.* (2016) mentioned that a bright future for agro-smallholder producers depends on their linkages into the agro-system and commercial value chain, while Machethe (2004) argued that promoting smallholders' access to the market can be one of the strategies to lessen income inequality and poverty in the rural areas.

Many smallholder producers are mainly involved in the "informal local markets due to lack of connectivity to more lucrative markets at the provincial, national, or global levels" (Torero, 2011:3). Although South African municipalities have jurisdiction over municipal markets, the smallholder sub-sector continues to find it challenging to participate in those markets due to transportation, quantity and quality, infrastructure, pricing, and storage systems for their produce, amongst others. Municipal markets refer to the spaces or structures created and controlled by a municipality where the selling and buying of farm produce occurs. As highlighted in the Constitution of RSA (1996), the municipal market is a local government competence.

Chikazunga, Deall, Louw and van Deventer (2008) stipulated that most of the municipal markets lack a clear vision of taking the smallholder farming sub-sector forward. The well-developed agricultural markets remain inaccessible to the smallholder farming sub-sector, mainly due to a lack of resources, poor technical knowledge and skills, and a dearth of market information (De Bruyn, De Bruyn, Vink & Kirsten, 2001; Masuku, Makura & Rwelamira, 2001; Randela, Alemu & Groenewald, 2008; Jari & Fraser, 2009; Baloyi, 2010; Ortmann & King, 2010; Jari & Fraser, 2012). A lack of or poor conditions of "infrastructure as well as the incapacity of smallholders to add value and meeting market quality demands" (Zwane, 2014:4) also contribute to the inability of smallholder producers to access markets. Zwane went on to emphasise that commercial producers largely dominate the agricultural markets in South Africa. Still, an evident shortcoming is that the smallholder sub-sector cannot participate in such markets due to numerous challenges mentioned earlier.

Numerous support programmes have been created by the South African government since 1994 to try to reduce some of the challenges faced by the smallholder farming sub-sector. Louw et al. (2008: 5) indicated that these support policies or programmes were designed to grant the smallholder sector an "opportunity to acquire land, improve infrastructure, finance inputs and broadly participate in the South African agricultural food chain", however, Aliber and Hall (2010) stipulated that the support activities initiated by different government institutions show little success in developing and growing the smallholder sector. Sikwela (2013: 78) noted that several "farmer support programmes have been instituted in South Africa, but very little is known about their impact on smallholder producers". Furthermore, Jordaan et al. (2014) commented that despite the various interventions and the enormous effort and investment by government institutions, the growth and performance of the South African smallholder sub-sector remain disappointing. Erastus et al. (2014: 29) also indicated that the structures that have been created to stimulate an enabling business environment for the smallholder sector "have not succeeded in providing the requisite opportunities to enhance smallholders' growth and development". A survey conducted by Statistics South Africa (Stats SA) in 2010 shows that the government programmes and policies have focused on commercially-oriented producers with little coordination related to the government's activities for smallholder producers (Stats SA, 2011). To ensure the sustainable and successful integration of smallholder producers into the agricultural value chain, the government should accept that this process must involve numerous stakeholders and integrated planning. The preparedness and willingness of all stakeholders to cooperate in developing sustainable and integrated smallholder producers are crucial components in this regard. Therefore, the main problem for supporting smallholder producers is centered on the lack of planning, coordination, and proper organising of the infrastructural, financial and human resources by the various government departments.

Aliber and Hall (2010: 3) indicated that the "smallholder sector in South Africa has been subject to years of official neglect, despite numerous policies and programmes that proclaim the opposite". For instance, the concentrated buying power and increasing quality of standards at the "retail end of the food value chain nurtures the entry barriers for smallholder producers to gain access to the retail market for agricultural products which, in turn, decreases the incentive for smallholder producers to transact with retailers" (Louw *et al.*, 2008: 5). This shows that the government's policies and programmes have failed to consider the changes in the business transaction conditions that the smallholder producers have experienced, particularly concerning gaining more access to profitable markets that would ensure the sector's sustainability for an extended period. Thamaga-

Chitja and Morojele (2014) indicated that the government's institutional support fails to take into account the communal life of rural people, which must be understood before business-oriented interventions in the agricultural smallholder sector can be successful.

Jacobs, Aliber, Hart and Donovan (2008) argued that the unsatisfactory results of the previous and current government policy initiatives mean that the smallholder sub-sector cannot fulfill the desired outcome of addressing socio-economic issues in the rural areas. Furthermore, Aliber and Hall (2010: 53) stated that the failure of government initiatives is because that they have been "too prescriptive about what smallholder farmers produce; their use of technology; the scale of production; and purpose of production (whether for consumption or sale)". According to GRAIN (2008) and Tregurtha and Vink (2008), most agricultural policies created to support and improve the smallholder sub-sector have been classified by their substandard performance, which can be attributed to several issues. These include "priority being given to emerging commercial producers, compulsory group formation for food production, compulsory land amalgamation to achieve large-scale production, prescriptive farming practices — including the use of specific inputs, and requirement of farmers to get into debt" (The Presidency, 2011: n.p.).

Researchers such as Andrew, Ainslie and Shackleton (2003) and Salami, Kamara and Brixiova (2010) have highlighted numerous reasons for why the smallholder sub-sector continues to fail, given the continuous support of the government. These factors include, amongst others, an inability to access markets, a lack of resources (labour, financial, infrastructural); climate change; the high risk of production losses; and a lack of cooperative solutions towards the betterment of the sector. The continuation of such challenges shows the ineffectiveness of the policies and support from the government. Despite such challenges, some smallholder producers can produce sufficient goods to generate an income and have food for consumption (Sebopetji, 2008). Authors such as Sartorious and Kirsten (2002), Ewert, Eva and Hamman (2007), Bediako and Debrah (2007), Louw *et al.* (2008) and Hendricks and Lyne (2009) have reported success stories where a few smallholder producers have successfully and sustainably become involved in the commercial agricultural food chains in South Africa. Therefore, it is evident from the documented stories of these authors that the potential contribution of vertical coordination and collective action could assist in tackling some of the problems that the smallholder sub-sector is experiencing (Jordaan *et al.*, 2010).

Aliber and Hall (2010: 2) noted that "broader economic conditions do not favour the development of smallholder producers within the agricultural sector". The "presence of a highly concentrated

and vertically integrated structure for agricultural food markets presents serious obstacles for smallholder producers" (Louw et al., 2008: 4). The smallholder sub-sector experiences enormous challenges related to marketing their fresh produce, mainly because of two key factors. The first of these is that the "entry of supermarket chains into both urban and rural towns has largely replaced the role of smallholder farmers as local food producers" (PSPPD, 2011: n.p). Van der Heijden and Vink (2013) stipulated that the growth of supermarkets is reducing the rewards while at the same time increasing the risks for the smallholder sub-sector. Secondly, the primary and large retailers and agribusinesses pose a high purchasing requirement, which the smallholder sector finds it difficult to meet (Chowdhury, Gulati & Gumbira-Sa'id, 2005; Louw, 2007a; Louw et al., 2008; Aliber & Hall, 2010). The trends in the "evolution of procurement systems that are dominated by large central procuring systems procuring fresh produce from a limited number of preferred suppliers are creating barriers for smallholder producers that don't have grower's programme contracts with the retailers" (Louw et al., 2008: 2). As a result, the smallholder subsector finds it challenging to benefit from the marketing opportunities offered by these agro-food chains (Aliber and Hall, 2010), so they are compelled to sell their fresh produce at the informal markets or their farm gates.

Weatherspoon and Reardon (2003), D'Haese and Van Huylenbroek (2005) and Peyton et al. (2015) have noted that the growth of supermarkets in South Africa favours more efficient, significant and well-organised producers, i.e. not the smallholder sub-sector. On the other hand, Barrientos and Visser (2012: 11) noted that there is also a decline in the volume of fresh produce goods being transported and sold to the "traditional fresh produce markets due to the reason that supermarkets buy directly to the large commercial producers". The dominance and expansion of supermarkets raise questions, such as how local governments can integrate municipal markets with the national and global markets and value chains for smallholder producers? And what is the influence of the growth and extension of supermarkets on the smallholder sub-sector and the municipal markets? Researchers such as Cooper (2002), Dobson, Waterson and Davies (2003), Chowdhury et al. (2005) and Emongor and Kirsten (2009) also noted that some practices of supermarkets negatively affect smallholder producers.

In South Africa, there are five primary channels for the retailing of food in cities: fresh produce markets, restaurants, supermarkets, fast food chains and informal traders. The main marketing channels for smallholder producers include informal markets, on-site or gate marketing, and minor access to municipal markets and supermarket chains (Baiphethi and Jacobs, 2009). This study focused on the municipal markets, which are controlled by the local government. The municipal

markets have traditionally played an essential role in "bringing in produce from various producers, setting a fair price, and ensuring a stable distribution of fresh produce for consumers" (Mubangizi, 2013: 176). According to Louw *et al.* (2007a), a readily available marketing opportunity for smallholders is to gain entry to wholesale markets such as municipal markets.

Furthermore, these authors highlighted that smallholder producers could gain learning experience and become gradually more skilled at selling their products to other markets once they start to sell their produce to the municipal markets. Smallholder producers' ability to achieve a good reputation as a suitable supplier in such markets might help them to be noticed by supermarkets. Haantuba and de Graaf (2009), McCullough, Pingali and Stamoulis (2009) stated that market access and integration might offer business growth opportunities, increasing income, stimulating growth, and reducing poverty among smallholder rural producer households. Unlocking markets for smallholder producers is considered by the government and farmers as a vital development necessity (Obi, van Schalkwyk & van Tilburg, 2012). The government's willingness to unlock markets for smallholders' farming sector is indicated in the NDP Vision 2030, which identified the "need to utilise procurement programmes to help smallholder producers connect to markets" (NDP, 2011: 205). This is crucial in South Africa due to the high market concentration (Battersby et al., 2015). Creating an enabling environment that will bring the smallholder sector into the mainstream of the agricultural value chain, therefore, lies at the core of achieving the government's development path. Thus, it is vital to explore how local government, together with the national and provincial government and other key agricultural actors, can ensure that the municipal markets remain competitive and fully functioning to expose the smallholders to the markets.

In most cases, in the metropolitan municipalities in South Africa, the municipal markets are divided into a municipal fresh produce market and a retail market. The fresh produce markets provide a space for the exchange of goods, specifically fruits and vegetables, between consumers and customers, while the retail market accommodates various products. Generally, the metropolitan municipalities participate in the commission-based markets in three capacities: "regulators and administrators, as owners and providers of infrastructure, or as operators of markets" (National Agricultural Marketing Council, 2005: 23). Thus, the municipal markets should enable smallholder producers to trade their products without any complications. Therefore, the coordinated support from the national, provincial and local governments is critical to avoid duplication, resource wastage, and ensuring high outcome towards the smallholder sub-sector development. Within the South African context, the involvement of numerous government institutions in reducing the challenges within the smallholder sub-sector has created similar,

uncoordinated and unintegrated programmes that do not fulfill the aim of supporting and developing the smallholder sub-sector, especially in tackling the market access issue. One of the questions that can be asked is how the governmental institutions located in the different spheres of government deal with such matters when they are delivering support to the smallholder sector.

1.4 RESEARCH PROBLEM

Since the first democratic elections in South Africa in 1994, the government has created numerous policies and programmes to grant the smallholder sub-sector an opportunity to participate in the South African agricultural food chain. However, the impact of such interventions has been minimal, and the support that the smallholder producers have received from government institutions is falling far short. In South Africa, agricultural activities are the function of the provincial government, while at the same time, local government supports agricultural activities through local economic programmes and municipal markets. While the South African government continues to provide support to the smallholder sub-sector, smallholders' access to the formal markets remains a challenge. Numerous researchers have indicated that the government processes and activities aimed at addressing similar problems are not integrated, and limited resources tend to be wasted on siloed projects that do not yield expected outcomes.

On the other hand, there is a lack of studies conducted on the government processes to improve the smallholder sub-sector's access to municipal markets. Also, few studies explore municipal markets' influences on smallholder growth and development in South Africa. This study aimed to investigate the influence of the governmental administrative processes and activities on agrosmallholders' ability to access municipal markets. This study explored the importance of coordination and integrated planning between government departments in shaping the smallholder farming sub-sector. Furthermore, the study explored the role of the provincial and local spheres of government, specifically the role of extension services, to ensure that smallholders participate in and benefit from municipal markets.

1.5 AIM AND RESEARCH OBJECTIVES

1.5.1 Aim of the study

This study aimed to critically examine the influence of municipal markets on agro-smallholder growth within a decentralised state.

1.5.2 Research objectives

The objectives of the study are set out below:

- To explore the accessibility of municipal markets by rural agro-smallholder producers.
 This main objective consists of two sub-objectives:
 - i. To explore the infrastructure that affects agro-smallholders performance/ growth in eThekwini Metropolitan Municipality, KZN.
 - ii. To assess the perceptions of agro-smallholder producers regarding extension services in eThekwini Metropolitan Municipality, KZN.
- 2. To explore the local government's administrative processes to support agro-smallholder producers for market entry. This main objective consists of three sub-objectives:
 - i. To describe the municipal planning processes that influence agro-smallholders' ability to participate in the municipal markets in eThekwini Metropolitan Municipality, KZN.
 - ii. To identify the coordinating mechanisms used by eThekwini Metropolitan Municipality to ensure inclusive and integrated support services to agro-smallholder producers in KZN.
 - iii. To describe the organising processes for allocating financial and human resources on the municipal markets in eThekwini Metropolitan Municipality, KZN.

1.5.3 Research questions

- 1. How accessible are the municipal markets to the rural agro-smallholder producers in eThekwini Metropolitan Municipality, KZN?
- 2. What are the administrative processes that eThekwini Metropolitan Municipality has to support agro-smallholder producers for market entry?

1.6 PRELIMINARY LITERATURE REVIEW

South Africa's agricultural sector is referred to as a dual economy. This is because it consists of both a large commercial sub-sector and a smallholder farming sub-sector, the latter of which operates mainly in the rural areas (OCED, 2006; Sebopetji, 2008; May and Carter, 2009; Louw *et al.*, 2008; National Development Agency (NDA), 2013). Most of the population within the rural areas live in poverty, and they are, in one way or another, participants in agriculture-related

activities. According to Stats SA (2017), poverty levels in the rural areas of South Africa are far higher than in the urban areas, with 45.6% of people living in rural areas being poor compared to 13.4% of those residing in the urban areas. Provinces such as Limpopo, North West, KwaZulu-Natal and Eastern Cape, in particular, have areas with significant poverty. The agricultural sector is one of the primary industries in sub-Saharan Africa with a large smallholder agricultural farming sub-sector that is not part of the mainstream, with most farmers operating in semi-arid and overcrowded areas (National Agricultural Marketing Council, 2005; Sebopetji, 2008; World Bank, 2008a; Poulton, Dorward & Kydo, 2010; Sikwela, 2013).

Machethe (2004) found that smallholder agricultural farming sub-sector is a critical income generation for many households in rural settings. According to Alliance for a Green Revolution in Africa (AGRA, 2014), the smallholder sub-sector represents 80% of all sub- Saharan Africa (SSA) farms and makes meaningful contributions to production in some of the SSA countries. The significance of supporting and developing the smallholder sub-sector is stressed in the quotation below from the World Development Report of the World Bank (2008a):

Smallholder farming – a small-scale farm operated by a household with limited hired labour – remains the most common form of agriculture, even in industrial countries. The record on the superiority of smallholder farming as a form of organization is striking. Many countries tried to promote large-scale agriculture, believing that smallholder farming is inefficient, backward, and resistant to change. The results were unimpressive and sometimes disastrous. State-led efforts to intensify agricultural production in Sub-Saharan Africa, particularly in the colonial period, focused on large-scale farming, but they were not sustainable.

In contrast, Asian countries that eventually decided to promote small family farms were able to launch the green revolution. They started supporting smallholder farming after collective farms failed to deliver adequate incentives to produce, as in China's farm collectivization, or on the verge of a hunger crisis, as in India and Indonesia. Countries that promoted the smallholder sub-sector – for various political reasons – used agriculture as an engine of growth and the basis of their industrialisation.

As highlighted earlier, smallholder farmers produce fresh goods to meet the needs of their families while at the same time, they hope to find opportunities in the local, regional and global markets (NDA, 2006). Yet numerous constraints block these farmers from quickly accessing lucrative markets for their produce. For example, most smallholder producers are found in remote areas where there is a severe lack of marketing facilities (Makhura, 2001; D'Hease & Kirsten, 2003;

Sikwela, 2013). Additional limitations include "poor or underdeveloped infrastructure, ranging from the nonexistence of local market spaces to unreliable sources of market information" (Machethe, 2004: 8).

The high and deep levels of poverty, unemployment and inequality in the country, especially in rural areas, make the agricultural sector an essential tool for addressing some of these challenges. Reducing some of these challenges requires the government to create strategies and policies that will encourage and support the smallholder sub-sector's inclusion in the agricultural markets (Humphrey, 2005). Furthermore, the author stipulated that it is not governmental policies, but administrative mechanisms such as budgeting, coordination, and implementing specific policies that will enable smallholder producers to access these markets and generate profits from their fresh produce sales. In countries like South Africa, where most of the poor population is situated in the rural areas, institutional arrangements and the development of policies have to be shaped in a precisely achievable way to achieve the objective of poverty reduction and food security (Sartorius & Kirsten, 2002; World Bank, 2008b).

The smallholder producers who are involved with agricultural activities in rural settings are often unable to access markets effectively due to their failure to continually supply the right quantity and quality of products to the lucrative market segments (Louw et al., 2008; Poulton et al., 2010; Salami, 2010). A lack of investment by relevant agriculture stakeholders mainly the government on the smallholder sub-sector, coupled with a lack of access to capital as well as poor infrastructure, have consistently limited this sector's ability to improve its productivity and the quality of its produce (World Bank, 2008b; Van der Haijden, 2010; Jari & Fraser, 2012). For the farming sector's activities to remain attractive, access to resources, output markets, knowledge, information, skills and infrastructure is crucial to ensure that smallholder producers do business within the agricultural sector (Raju & Sign, 2014). Micro-finance institutions play a pivotal role in assisting smallholder producers, particularly women, to apply for working capital. While microfinance institutions have some shortcomings, some of the best agricultural practices from other countries such as Asia can also be implemented in South Africa. Nicholls et al. (2013: 25) noted that connecting smallholders to "functional markets are, therefore, crucial to realizing sustainable livelihoods for the rural communities. This must be done by empowering smallholders to respond to the demands of the market in terms of volume, quality, consistent supply, and traceability".

Despite the numerous sound agricultural policies that have been created by countries to support their smallholder sub-sector, proper implementation has often been lacking (Salami, 2010). Any

policies that have been properly implemented have had the highest likelihood of success. The implementation of policies concerning the agricultural sector, particularly at the provincial and local levels, is critical for the commercial and smallholder agriculture sectors' operation and development. Therefore, it is crucial that for the smallholder sector to develop, government institutions at all levels have to be efficient and effective concerning the formulation, integration, and implementation of policies. Mamabolo (2017: 13) indicated that the "inadequate support of agriculture through policy serves as a negative tool for providing, amongst others, food for farmers, food security, and job opportunities". The complexities and effects of factors such as land, technology, market access, infrastructure and finance/credit show that both the government and relevant stakeholders need to be involved. Furthermore, the government and all stakeholders' involvement requires an in-depth understanding of the smallholder sector's distinctive challenges for proper support to be provided.

Most smallholder producers' operations occur in farming systems, with the family as the "centre of planning, decision-making and implementation, and operating within a network of relations at the community level" (Uganda Coalition for Sustainable Development, 2011: 1). For agriculture-based economies, the growth of the agriculture sector is the primary source of addressing poverty. For this reason, the growth and development of the smallholder sector could also lead to a faster rate of poverty alleviation by stimulating rural economies and decreasing food expenditure, and thus tackling income dissimilarity in the rural areas (Magingxa & Kamara, 2003; Diao & Hazell, 2004; Resnick, 2004; Anriquez & Kostas, 2007; World Bank, 2008a; 2008b; Barham & Chitemi, 2009).

Several studies have been conducted on the smallholder farming sub-sector, including research on smallholder market access. These have included studies on the state of fresh produce markets; direct marketing; factors affecting farmers' choices of marketing channels and produce; institutional and technical factors affecting farmers' market choices; the innovative system approach; alternative marketing options; the agri-business value chain; farmer linkages to markets; strategies and empowerment programmes; market access and socio-economic issues; land grant resources; food security; commercialisation of emerging farmers; cooperative or collective action to improve access; sources of credit for smallholder producers; measuring and tracking access; direct and indirect economic contribution; and the contribution of ICT (Masuku *et al.*, 2001; Louw *et al.*, 2005; Bond et al., 2006; Chikazunga, *et al.*, 2008; Louw *et al.*, 2008; Louw, 2008; Randela *et al.*, 2008; Baloyi, 2010; Salami *et al.*, 2010; Ostrom *et al.*, 2010; Owusu-Antwi & Antwi, 2010; Fischer & Qaim, 2011; Torero, 2011; Aliber & Hall, 2012; Jari & Fraser, 2012; Hounkonnou *et*

al., 2012; Moobi & Oladele, 2012; Obi et al., 2012; Panda & Sreekumar, 2012; van Tilburg & van Schalkwyk, 2012; Abdulsamad et al., 2013; Arias et al., 2013; Fan et al., 2013; Greenberg, 2013; Msimango & Oladele, 2013; Muhongayire et al., 2013; Sikwela, 2013; Wiggins & Keats, 2013; Xaba & Masuku, 2013; Wiggins & Keats, 2013; Chisasa, 2014; Fischer & Qaim, 2014; Gyau, 2014; Mpandeli & Maponya, 2014; Matsane & Oyekale, 2014; Mukwevho & Anim, 2014; Qwabe 2014; Raphela, 2014; Raju & Singh, 2014; Shange, 2014; Thamaga-Chitja, & Morojele, 2014; Arinloye et al., 2015; Aliber & Mdoda, 2015; Battersby et al., 2015; Koech et al., 2015; Louw & Lulama, 2015; Njelekela & Sanga, 2015; Devaux et al., 2016; Kepe & Hall, 2016; Khapayi & Celliers, 2016; Nesamvuni et al., 2016; Ngqangweni, 2016; Poole, 2017; Range, 2017).

Additional studies have investigated the role of the extension services towards the smallholder sub-sector (Dercon *et al.*, 2006; Mmbengwa *et al.*, 2009; Van der Heijden, 2010; Hart, 2011; Kibet, 2011; Anaeto, 2012; Jouanjean, 2013; Sanga *et al.*, 2013; Davis *et al.*, 2014; Zwane *et al.*, 2014; Afful *et al.*, 2015; Davis, 2015; Rapsomanikis, 2015; Davis & Terblanche, 2016; Isaac, 2016; Abdu-Raheem & Worth, 2016; Sebeho & Stevens, 2019.), as well as the impact of supermarkets on the smallholder farming sub-sector (Cooper, 2002; Weatherspoon & Reardon, 2003; Chowdhury *et al.*, 2005; Louw *et al.*, 2007a; Emongor & Kirsten, 2009; Haantuba & de Graaf, 2009; Ortmann & King, 2010; Muchopa, 2013; van der Heijden & Vink, 2013; Kodithuwakku & Weerahewa, 2014; Pereira *et al.*, 2014; Peyton *et al.*, 2015).

Furthermore, various researchers have investigated the government processes that relate directly to smallholders producers, while others have studied service delivery in general, such as participatory local government planning processes to accelerate service delivery; good governance and service delivery; intergovernmental relations in strategic planning; horizontal bureaucrats' influence on politicians and political decisions via their crucial role in preparing, coordinating and formulating policy; interdepartmental networks of coordinative action; network governance and coordination; coordination and organisational performance; the state of collaboration between municipalities; conflict in local-provincial intergovernmental relations; public infrastructure; public expenditure and contradictions between adequacy of support provided and government priority on smallholder sub-sector; and the business-oriented approach to strategic planning of farmers' markets (Merna & Njiru, 2002; Mamatzakis, 2003; Fan & Zhang, 2005; Andersen & Shimokawa, 2006; Stevens *et al.*, 2006; Louw, 2006; Hall & Aliber, 2010; Keast & Brown, 2010; Mubangizi, 2010; Patel, 2010; Kahn *et al.*, 2011; De

Villiers, 2012; Osifo, 2012; Adepoju & Salman, 2013; Masuku, 2013; Mubangizi, 2013; Mubangizi *et al.*, 2013; Connell & Hergesheimer, 2014; Kanyane, 2014; Selepe *et al.*, 2014; Muchara & Mbatha, 2016; Wiewiora *et al.*, 2016; Mamabolo, 2017; Biyela *et al.*, 2018; Hegele, 2018; Peters, 2018; Lowatcharin *et al.*, 2019; Magagula *et al.*, 2019; Ubisi *et al.*, 2019; Bayu, 2020; Phakathi, 2020). Although several studies have been conducted on the smallholder subsector market access, few have holistically investigated government processes' impact on the smallholder sub-sector's access to municipal markets. Also, few have explored the influence of municipal markets on smallholder growth and development in South Africa. While the preliminary literature has been discussed, it is also critical to highlight the theoretical or conceptual framework that underpins this study.

1.7 THEORETICAL FRAMEWORK

The classical theory of organization, namely the administrative theory, guided this study. This theory deals primarily with the formal organisational structures that determine the efficiency and effectiveness of those public entities responsible for supporting the smallholder farming subsector. The following section discusses the theory that has been utilised for this study.

1.7.1 Administrative theory

Several writers have contributed to the development of the administrative theory, including Mooney, Reily, Fayol, Gulick, Urwick, Follet and Shelton (Naidu, 2005). The crucial concern of the administrative theory is the formulation of certain universal principles of an organisation. Based on this theory, if an organisation's principles have been fully adopted, it can lead to maximum organisational efficiency and economy. Naidu (2005) also indicated that public institutions are governed by certain universal principles that are applicable to all forms of organisations in all environments. Fayol is regarded as an outstanding contributor to the formulation of administrative theory in terms of the five functional elements of organisation and the 14 principles of organization (Naidu, 2005). He believed that the "knowledge of elements and principles of administration would provide the manager with the power to organise any operation" (Naidu, 2005: 60).

The work of Fayol also influenced Gulick and Urwick to discover the principles of organisations (Chalekian, 2013). They described seven "major activities and duties of any higher authority of organisation" (Agrawal & Vashistha, 2013: 249). Since 1937, the contribution of Gulick and Urwick to the development of administrative theory has been known for the acronym "POSDCORB (Planning, Organising, Staffing, Directing, Coordinating, Reporting, and

Budgeting) to describe seven functions of managers" (Breese, 2013:28). The POSDCORB framework, which falls under administrative theory, was considered an appropriate framework for this study, as POSDCORB activities are essential for the organisation's efficiency. Writers on administrative theory indicate that organisations cannot achieve their tasks without proper planning, organising, coordinating, budgeting and reporting.

According to Ile (2007), Gulick's seven administration functions are also equally relevant in intergovernmental relations activities. These functions are briefly outlined below:

- Planning: For every organisation, planning is a hallmark of each activity (Ugwulashi, 2012). This administration function outlines the tasks that need to be done and the methods for doing them to achieve the organisation goals (Gulick, 1937). In other words, the planning function provides detail on what, who, when, where and how activities will be organised and accomplished with the most exceptional efficiency in the organisation. The most critical part of the planning process is ensuring that the roles of everyone involved are as clear, detailed and practical as possible. Ile (2007: 83) noted that for development purposes, "planning processes are crucial mechanisms for aspects such as inter-ministerial coordination or cluster planning", as in the case of South Africa.
- Organising: Gulick (1937) stipulated that the planning function deals with the establishment of a formal structure that clearly shows how work is arranged, defined, coordinated and executed for the defined objective of the organization. The main concern of organising is to relate all organisation components into a coordinated whole to ensure the achievement of the organisational goals (Oluwuo & Uche, 2004). Politte and Bouckaert (2000: 8) noted that management reform in the public service must consider the "administrative systems in which it occurs if organizational efficiency and effectiveness to be achieved".
- Staffing: The staffing function deals with attracting, retaining, and training appropriate staff who will work towards achieving the goals of the organisation. In other words, the staffing function ensures that there are clear strategies for the organisation to attract, develop, utilise and retain appropriate staff. According to Ile (2007: 83) citing Bretton (1962), "no degree of institutional refinement of a social or political system will be adequate if administrative skills are non-existent or inadequate". The quality of staff within an organisation is crucial at achieving the organisation's goals and is also at the core of intergovernmental relations as people interact with one another (Ile, 2007); they are the real determiners of relationships and interactions between government departments

- (Agrannof, 2007). The staffing function is also crucial within an organisation as it is what makes an organisation a social system (Ugwulashi, 2012).
- **Directing**: This administration function calls for clear and strong leadership to guide staff continuously. Ile (2007) indicated that directing requires a public sector manager to have a strong conceptual understanding of how the various systems work towards a common goal. This will help reduce efforts expended in intergovernmental conflicts, including the diffusion of tension that may exist as a result of the disputes or competition between units and spheres (which may altogether be unnecessary and completely counter-productive). Ugwulashi (2012) noted that without directing, an organisation would not correctly manage its activities, and the roles of the members may conflict. This will lead to a situation where an organisation's efforts will not be effectively channeled and its resources will be wasted.
- Coordinating: This administrative function attempts to synchronise and integrate the organisation's activities to ensure that its resources are utilised efficiently and effectively in achieving its goals and desired levels of harmony (Ile, 2007). The need for coordination is necessary across the spheres of government for intergovernmental relationship activities. One of the critical areas that require strong coordination is policy. Given that intergovernmental relations are embedded in policy issues that relate to policy alignment, this has to be carefully thought through, especially as it is further complicated in the context of multi-level governments, as is the case of South Africa. Bunger (2013: 2) asserted that the administrative coordination function "links organizations" infrastructure and processes through sharing and exchange of funding, space and other core organizational resources where the more resources that are shared, the more agencies coordinate administratively".
- Reporting: Ugwulashi (2012: 318) noted that in any organisation the reporting function "creates effective, realistic, good and unbiased, communication that enhances feedback for organizational growth". The reporting function tends to instill trust and confidence amongst workers. This administration function includes keeping everyone informed about the organisation's performance through records, research, and inspections (Gulick, 1937). The reporting function also provides an opportunity for monitoring and evaluation within the sphere of intergovernmental relations of various activities undertaken to measure actual against expected outcomes. Further, reporting checks the quality of services rendered by an organization, and plays an essential role in promoting communication and gathering information that may be useful for other organisational activities or managerial decisions. Adebayo (2000) noted that reporting is one of the functions that form the foundation of

- government responsibilities as it allows for balancing, conciliation, conflict resolution, and compromise to ensure adequate service delivery.
- **Budgeting**: As government departments plan, organise, staff, direct and report, budgeting is also another vital function within the organisation. Ugwulashi (2012: 319) stipulated that the "budgeting function involves the planning process of human, material and financial resources while estimating the judicious use of input to achieve results". Given that government resources are not always enough to meet society's demands, decisions around budget allocation are crucial for intergovernmental relations to achieve the government's goals. The budgeting function is one of an organisation's main tools to control its activities and programmes (Ile, 2007).

Some researchers have criticised the administrative theory. For example, Simon (1997) criticised its neglect of the human element in the organisation and the inconsistency in the work of supporters of this theory. Simon (1997) attacks on Gulick and Urwick principles, indicating that the principles are little more than ambiguous and mutually contradictory proverbs. In his attack, Simon (1997) came up with a different approach to the administrative theory, which emphasises the importance of decision-making processes within the organisation. Despite this, researchers who defended Gulick and Urwick (1937) argued that Simon's criticisms did not consider the elusiveness and depth of Gulick and Urwick's argument.

Notwithstanding such objections, this theory is still found to be relevant today. In support of this, Breese (2013) commented that the administrative theory is still relevant as some of its principles, such as coordination, division of work and delegation, are still present and being utilised in numerous organisations. Furthermore, the author stipulated that any organisation cannot operate without considering some of the principles of administration. Chalekian (2013: 4), citing Shafritz and Ott (2001), indicated that due to a lack of critical evidence of Simon's work by other scholars, the "classical approach persists as the base upon which other theories are built".

The government's inability to properly coordinate the support provided to smallholder producers, such as development planning, allocation of resources, and the implementation and monitoring of development programmes, is its main weakness when it comes to addressing the challenges facing smallholder producers. Due to financial and time constraints, this study considered the practical implication of three administrative principles: planning, organising and coordinating. The administrative theory was selected for this study because the researcher wanted to closely investigate the roles, processes and actions of government institutions in the municipal markets,

mainly for the benefit of smallholder producers. The study also utilised the administrative theory to provide the lenses used to explore how the government influences municipal markets to deal with market access by smallholder producers and growth in KZN.

The researcher used the administrative theory to break down critical concepts from the administrative functions to understand municipal markets' underlying significance on agrosmallholder growth in eThekwini, KZN. The main variables that were critical for this study were planning (developing policies and number of extension service staff required), coordination (integrating different government institutions' efforts towards unity of actions, i.e. infrastructure development and implementation, and projects or programmes aiming at assisting agricultural smallholder producers), and organising (determining appropriate resources such as financial and human resources, and training of smallholder producers as well as officials who deal directly with smallholder. The financial and human resources also link the staffing and budgeting functions of the administrative theory). Hence, only two functions of the administrative theory – directing and reporting were not applied in this study. Directing and reporting are mainly overlapping terms that refer to the application of all necessary management activities; that is, one cannot plan, organise, or coordinate without directing and reporting. Thus, directing and reporting is essentially by definition, forms part of everything a manager does. Numerous authors such as Agranoff (2007), McDonald (2010), Ugboro et al. (2011), Ugwulashi (2012), Chalekian (2013) mentioned that planning, organising, coordinating and budgeting are the four most common management functions which are necessary for successful management of organisations. From the literature reviewed, the researcher noted which theoretical areas were relevant to this study as well as how the variables interrelate (see Figure 1.1).

As seen in Figure 1.1, the government's ability to properly plan, organise, and coordinate their activities could assist agro-smallholder producers in receiving integrated support that will enable their performance and growth.

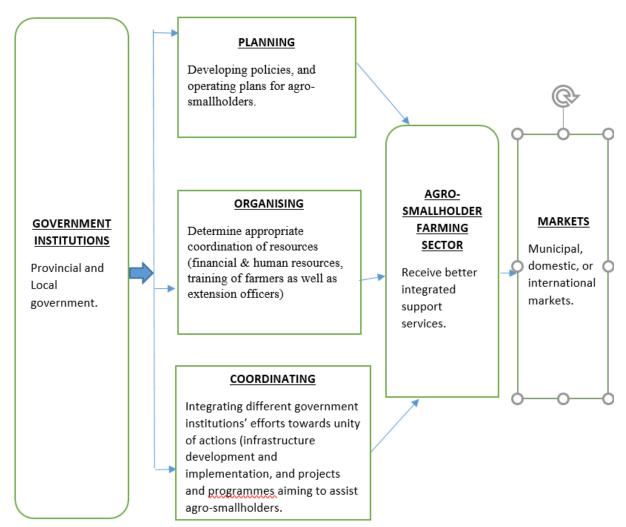


Figure 1.1: Key concepts for the study emanating from the theory

Source: Author's own (2016)

Thapa (2009: 12) indicated that the government institutions could support the smallholder farming sub-sector through "policy interventions that create a conducive economic environment for market-led development, and by providing stable economic incentives and necessary public goods and services". On the other hand, Raju and Singh (2014) noted that the growth and development of smallholder producers and their access to the market could be improved if certain factors, such as a lack of capital, inadequate farming and extension services, poor infrastructure and insufficient business skills, can be minimised. In such cases, "the first phase of government policies and programmes should establish the basics" (Thapa, 2009: 12), with investments in public goods to develop proper infrastructure that will enable the smallholder producers to improve their

productivity. Therefore, the ability of both the provincial and local spheres of government to effectively design policies, programmes, and projects that address smallholders' desires and needs could assist such spheres in implementing support services that could benefit the farmers.

The intervention of government is crucial, particularly when it comes to providing infrastructure, capacitating smallholders and providing market information to smallholder producers through different structures such as extension officers (Louw *et al.*, 2007b; Louw *et al.*, 2008; Thapa, 2009; Poulton *et al.*, 2010; Aliber & Hall, 2012; Abdulsamad *et al.*, 2013). The ability of both the provincial and local spheres of government to ensure adequate human and financial resources within their agriculture-related departments, as well as to organise training for both officials and smallholder producers, could thus be crucial in supporting and enabling a conducive environment for the smallholder sub-sector.

For smallholder producers to be attractive and competitive within markets, they need to have access to the relevant knowledge, markets, market information, skills, infrastructure and resources to sustain and succeed in the agricultural sector (Hazell et al., 2007; Nicholls et al., 2013). Obi et al. (2012: 18) indicated that smallholder producers continue to experience numerous challenges concerning access to markets, which force them into "exploitative exchange arrangements, which further erode their welfare and drive them deeper into destitution". This situation calls for a robust, integrated and supportive institutional environment for the agricultural smallholder sub-sector, so that these farmers can be in the position of accessing the markets as well as obtaining a livelihood from their farming operations (Obi et al., 2012). Furthermore, van Tilburg and van Schalkwyk (2012) emphasised that for the agricultural smallholder sub-sector to operate adequately, there should be a positive and robust supportive institutional environment. In this situation, the government becomes a critical influential environmental actor, which comes into contact with the smallholder producers be it through the provision of infrastructure, organising human resources to provide training for farmers, and/or designing programmes or projects for farmers. Therefore, the support provided by both the provincial and local government spheres towards the smallholder sub-sector should be integrated or coordinated to have a high impact and enable smallholders to access the markets better. In other words, the coordination of government institutions' efforts, such as the planning of policies, projects or programmes, and the organisation of financial and human resources to provide infrastructure and training, is vital for promoting the growth and development of the smallholder sub-sector. Such coordination could help the government to avoid the duplication and waste of limited resources when supporting the smallholder sub-sector.

The critical concepts investigated in this study included planning policy-making; the provision of programmes, projects and infrastructure; organising financial and human resources, and coordinating government processes to develop the smallholder agricultural sub-sector. The study explored how government institutions plan, organise and coordinate activities for the support of the agricultural smallholder sub-sector's growth and development. In other words, the influence of governmental administrative processes when providing financial and human support and infrastructure for the agricultural smallholder sub-sector, was researched. Any institution that works with the smallholder sub-sector must integrate its administrative processes with those of other actors to share the vision of the smallholder sub-sector's development and achieve the best results from the support provided.

The smallholder sub-sector's inability to access markets and the lack of governmental assistance to resolve this issue imply that the smallholder sector must compete for market share on its own in both the domestic and international markets. The situation thus highlights a need for government institutions to create a proper environment in which the agricultural smallholder sub-sector will have the opportunity to gain quick access to formal markets (Kherallah & Kirsten, 2001; Jari & Fraser, 2009).

1.8 RATIONALE OF THE STUDY

The NDP Vision 2030 recognises the role of the smallholder sub-sector within the agricultural sector. Further, it stipulates that making provisions for connecting smallholder producers in the communal and land reform areas to markets in South Africa and other subcontinent markets is vital. The researcher believed that by undertaking a study on municipal markets, a clearer and greater understanding of the attributes that impede the operation of municipal markets and smallholders' access to such markets would be advanced. Moreover, the lack of relevant research conducted within the South African context with a specific focus on key agricultural actors within the smallholder farming sector and municipal markets highlighted the need for a more considerable investigation and understanding of the factors and benefits offered by municipal markets to agrosmallholder producers. Also, investigating government institutions' integrated role in supporting the smallholder sub-sector necessitates studies like this to find solutions on how to optimally utilise limited resources more efficiently. As highlighted earlier, the lack of coordination amongst the spheres of government in dealing with the issues of smallholders necessitated a study like this being conducted. By undertaking this study, the researcher developed a model with the belief that it will assist government departments to effectively integrate their activities to ensure a deeper

impact on the smallholder sub-sector. It is believed that this would enhance the operations and effectiveness of municipal markets for the benefit of the smallholder producers and assist the government in achieving its objectives of rural development and promoting smallholder producers to stimulate the local economy.

1.9 RESEARCH METHODOLOGY

A research methodology is seen as the path along which a researcher carries out their study. In most cases, the research methodology section or chapter indicates how the research outcome and objectives of the study were obtained and met. Methodologies entail research methods, strategies and techniques that were used in this study.

According to Bryman (2008: 31), "research design provides a framework for the collection and analysis of data", while Flick, von Kardorff and Steinke (2004) described research design as the means of achieving the goals of the research. In other words, research design links the research problem, research questions, theoretical framework, generalisations, and research methods and resources available in order to achieve the objectives of the study (Flick *et al.*, 2004). This study employed an exploratory research design, which enabled the researcher to collect extensive data on the individual(s), institution(s) and event(s) under investigation. The comprehensive primary data were collected using face-to-face, semi-structured interviews, and focus group discussions. Bougie (2010: 103) noted that an "exploratory study is undertaken when not much is known about the situation at hand, or no information is available on how similar problems or research issues have been solved in the past". Exploratory studies are also necessary when some facts are known (see, for example, studies by Alber *et al.*, 2010; Alber *et al.*, 2012; Louw *et al.*, 2007a; Louw *et al.*, 2008; Salami *et al.*, 2010).

In every study, researchers strive to systematically gather practical information and scrutinise data patterns so that a clear understanding and explanation of social life can occur (Neuman, 2011). When conducting a study, there are three known research methodologies to choose from: qualitative, quantitative and mixed methods. This study used a qualitative research approach because it allowed the researcher to understand how figures and themes are created through social processes. Barbour (2008) noted that by utilising a qualitative method, it is possible to study how people understand concepts. Furthermore, the author stated that a qualitative approach could assist a researcher in understanding apparently illogic behaviours. According to McNabb (2002), a qualitative research methodology entails an in-depth interaction between a researcher and their

participants, enabling the researcher to understand the issues being investigated clearly. Leedy and Ormrod (2005: 134-135) stated that:

Qualitative research studies typically serve one or more of the following purposes, firstly, qualitative studies can reveal the nature of certain situations, stings, processes, relationships, systems, or people. Secondly, qualitative studies enable a researcher to (a) gain new insights about a particular phenomenon (b) develop new concepts or theoretical perspectives about the phenomena and discover the problems that exist within the phenomena.

This study was conducted in KwaZulu-Natal, specifically in the eThekwini Municipality, which is one of the eight metropolitan municipalities in South Africa. The targeted population of this study was composed of officials from the KZN Agriculture and Rural Development, the eThekwini Metropolitan Municipality, and agro-smallholder producers within the areas led by Traditional Councils within the jurisdiction of the eThekwini Metropolitan Municipality.

Identifying or creating a sample for a study is vital as a researcher cannot observe or record everything that occurs in a population. Sampling enables the researcher to select some cases or units to examine in detail, and then use what was learnt from them to understand a much broader set of cases or units (Trochim and Donnelley, 2006; Neuman, 2011). Due to the broad geographical location that the researcher had to cover, as well as resource and time constraints, this study utilised a non-probability, purposive sampling method. Trochim and Donnelley (2006), Stewart (2007), Gravetter and Forzano (2010) and Neuman (2011) indicated that non-probability sampling is a frequently utilised sampling method since it is more effective. Sekaran (2006: 235) described purposive sampling as being used in a "situation where instead of obtaining information from those who are most conveniently available, it might sometimes become necessary to receive information from specific targets". The purposive sampling method was chosen for this study because the researcher wanted to select participants who were knowledgeable about the subject matter under investigation. Unlike quantitative techniques, the sample size in qualitative research should not be too large, as it would be too challenging to extract thick and rich data.

On the other hand, the sample size should not be too small, as it would be difficult to achieve data saturation (Onwuegbuzie and Leech, 2007). Furthermore, the small sample size in qualitative studies tends to be small in order to "support the depth of case-oriented analysis that is fundamental to the mode of inquiry" (Sandelowski, 1996: 527). Mason (2010, n.p.) indicated that the ideal sample size for qualitative studies is still up for debate: "Some researchers believe that the sample

size for qualitative studies should be between 20-30 participants, others suggest that it should be between 30-50 participants, and others say between 30-60 participants." While some believe that the sample size does not matter, the data collection process must continue until data saturation is achieved. For this reason, the researcher conducted seven individual face-to-face interviews with government officials (provincial and local government), and 15 focus group discussions with agrosmallholder producers.

Semi-structured, face-to-face interviews were conducted with four managers from the eThekwini Municipality and three managers from the KZN Department of Agriculture & Land Reform. There were three focus group discussions with the smallholder farms per area, and each focus group comprised of four to ten smallholder farm members. Hence, 15 focus group discussions with the smallholders from five areas under the leadership of Traditional Council were conducted. These purposively selected areas were Mbumbulu TC, Qadi TC, Mnini TC, Shangase TC and Ximba TC, which fall within the jurisdiction of the eThekwini Metropolitan Municipality. A maximum of three agro-smallholder producers per identified area were selected.

1.10 DATA COLLECTION

For a researcher to be in the position of drawing a valid conclusion from the research undertaken, it is vital to obtain sound data for interpretation and analysis (Terre Blanche et al., 2006). There are many ways in which data can be collected in qualitative research, including individual interviews, focus groups and/or observation methods. As mentioned earlier, the data were collected through semi-structured (individual face-to-face) interviews and focus group discussions. Sekaran and Bougie (2010) indicated that exploratory studies can be undertaken by interviewing individuals and through focus groups. Furthermore, the authors stated that extensive interviews with many participants might have to be undertaken to get a handle on the situation and understand the phenomenon. Semi-structured interviews were used as the mode of data collection as they assisted the researcher to adapt the interview questions as necessary, to clarify any doubts, and to ensure that the participants' responses were adequately understood. Sekaran and Bougie (2010: 189) stipulated that the semi-structured interviews enable a researcher to "explore and probe into the several factors in the situation that might be central to the broad problem guided by the interview guide". The semi-structured interviews were mostly applied during the interviews with officials from government departments in the provincial and local spheres of government, which are KZN Department of Agriculture and eThekwini Metropolitan Municipality.

According to Remler and Van Ryzin (2011), a focus group provides a space in which participants can agree or disagree on a topic, thus enabling the researcher to see what views are widely shared relative to those views that are more idiosyncratic. Furthermore, a focus group assists the researcher to understand the generalisability of their qualitative findings better. Finally, a focus group provides a researcher with the opportunity to see how participants respond to each other's views, so s/he can build an idea of the interactions that take place within the group. In other words, participants may query one another and explain their answers to one another (Neuman, 2011).

Bryman (2008) noted that a focus group should comprise at least two to four interviewees; however, Remler and Van Ryzin (2011) stipulated that a focus group should include six to twelve interviewees. The focus group discussions for this research were conducted on smallholder farms, with the 15 focus group interviews being composed of three smallholder farms for each area. As noted above, the smallholder producers were purposively selected from five different areas under traditional leadership. During the interviews and focus group discussions the researcher utilised a tape-recorder and also used a notebook to jot things down that were not caught on tape, e.g. the expressions of the participants, gender representation, and the behaviours of the farmers.

The data collection methods mentioned above were crucial for this study as they helped the researcher to ask the participants in the individual interviews about their reasons for holding a particular view. Furthermore, they assisted the researcher to encourage the participants to probe each other's ideas and views. The researcher was observing the physical conditions and operational activities of the farms and the farmers themselves while conducting the interviews with the smallholder producers on the premises of their farms. The focus group discussions were conducted on the agro-smallholders' farms in order to get a wide picture of what is going on within their areas of operations.

1.11 DATA ANALYSIS

According to Creswell (2009: 183), the "process of data analysis involves making sense of the textual and image data being collected". Qualitative data analysis often involves dealing with large volumes of data, such as transcripts, recordings and field notes. The qualitative data collected during the semi-structured and focus group interviews were transcribed, coded and analysed using thematic analysis (TA) technique. The thematic analysis technique is highly inductive; that is, the themes emerge from the data and are not imposed upon them by the researcher (Fugard & Potts, 2015). Fereday and Muir-Cochrane (2006: 4) emphasised this point by stating that the thematic analysis process encompasses the "identification of themes through careful reading and re-reading

of the data". In other words, the thematic analysis focuses on identifiable themes and patterns of living and behaviour. The ability of the researcher to be able to observe behaviour and quickly identify related themes during the interviews and group discussions was the main reason behind the adoption of thematic analysis for this study.

1.12 ETHICAL CONSIDERATIONS

Neuman (2011: 143) indicated that "ethics issues are the concerns, dilemmas and conflicts that arise over the proper way to conduct research". Furthermore, the author stated that many ethical problems require a researcher to balance the pursuit of scientific knowledge and the rights of those being studied or of others in society. The integrity and values of a researcher play a crucial role in ethical research considerations; therefore, it is essential to take into account the ethical requirements that are apparent in all research studies. In most cases, ethical concerns revolve around the issues of harm, consent, deception, privacy and confidentiality (Denzin and Lincoln, 1994).

The researcher ensured that all the necessary ethical measures were strictly followed when conducting this study. Firstly, the researcher secured gatekeeper letters from the relevant organisations that were affected by this research. These letters, which were provided by the KZN Department of Agriculture and Rural Development, the eThekwini Metropolitan Municipality and KZN Department of Cooperative Governance & Traditional Affairs, granted the researcher permission to conduct the investigation. These letters are attached under Appendix B. Secondly, in terms of the university's General Rules (GR32), the researcher was required to get ethical clearance before conducting the study. Hence, he applied for and received ethical approval from the Ethics Committee of UKZN. The Ethical Clearance approval letter is attached under Appendix A. The researcher also familiarised himself with all of UKZN's ethics policies to ensure that they were followed correctly throughout the entire study.

In the field, the researcher requested that the participants sign consent forms, which clearly outlined the study's various aspects and asked for their voluntary agreement to participate before the study began. The purpose and objectives of the study were also clearly explained to the participants by the researcher. Furthermore, the issues of privacy, anonymity and confidentiality were carefully explained. The informed consent template has been attached at the end of the document under Appendix C.

1.13 LIMITATIONS OF THE STUDY

The main limitation of this study was that the research was only conducted in EThekwini Metropolitan Municipality, not in the entire province of KwaZulu-Natal. Furthermore, the study did not cover all the agro-smallholder producers who deal with crop farming, but only those who produce vegetables. This is of the reason that the agro-smallholders involved in vegetable production dominate in KwaZulu-Natal province. This made it difficult to generalise the findings of this study to the entire population of agro-smallholders within KZN. Time and financial factors were additional limitations that affected the researcher's decision-making when selecting a specific population for this study. The researcher anticipated that it will be not easy to arrange the interviews with the government officials, especially the participants from eThekwini Municipality, taking into account their seniority within their respective departments as they always have the busiest schedule. The remedial measure that the researcher put in place was to do a presentation of the proposed research with the eThekwini Municipal Academy. This assisted the researcher in having interviews with the participants, as the Municipal Academy was also helping to ensure that the participants avail themselves for interviews.

On the other hand, as the participants of the study were geographically spread, the financial constraint was a significant factor. The remedial measure the researcher put in place was to apply for funding. The researcher successfully received a grant from the National Research Foundation for two consecutive years. Lastly, the administrative theory's broad scope was also a factor as the researcher didn't apply all the functions of management in this study. But the researcher ensured that the administrative theory's main functions were utilised to thoroughly investigate the problem under this study.

1.14 SEQUENCE OF THE PRESENTATION

This study is organised around a theoretical investigation as well as an empirical inquiry. The content is divided into six chapters.

- Chapter One provided an overview and background to the study, which included its aim, research objectives, research questions, a preliminary literature review, a theoretical and conceptual framework, the research methodology used, the rationale for the study, and the limitations of the study.
- Chapter Two broadly deals with the context of the study, i.e. it provides a contextualisation for the agriculture sector, and more particularly the smallholder sub-sector, as well as South African's policy and legislative framework.

- Chapter Three provides the theoretical or conceptual framework used for this study. This chapter explores the administration theory, with the emphasis on Gulick's seven functions of administration.
- Chapter Four offers a theoretical and conceptual perspective, i.e. it provides literature on themes such as agricultural systems; government plans and strategies for the agricultural sector; and government investment into agriculture, rural development and sustainable development.
- Chapter Five focuses on the research methodology followed in the study, including the research design and methods selected, as well as the population and sampling procedure applied. Furthermore, it presents the data collection methods utilised for the study.
- Chapter Six presents the study's results and empirical analysis of the data. It also explains the processed data and synthesises them with the theoretical background.
- Chapter Seven provides research conclusions and recommendations.

1.15 CHAPTER SUMMARY

In many parts of South Africa, the infrastructure is remarkable. In major commercial cities like Durban, Johannesburg, Cape Town and Pretoria, the infrastructure is far better than that of the numerous township and rural areas where high socio-economic issues persist. The investment of government into infrastructure within the rural areas could play a significant role in creating the right conditions for business growth and investor attraction. Furthermore, the government must ensure that there is a stable and secure environment to enable innovation, development and production to stimulate the economic growth of the country. Such an environment would allow businesses to strive for excellence when providing their goods and services.

In South Africa, the current atmosphere in which the smallholder producers operate is difficult and risky, and the failure rate of the smallholders is high. The interventions of the government to ensure that the smallholder sector succeeds has always been critical. This is because the smallholder sector plays a crucial role in tackling poverty within the rural communities by generating income and producing food for consumption.

This chapter has highlighted the background to the problem, as well as the aim and objectives of the study, the research questions, the motivation for the study, the relevant literature, the research methodology and the sampling, and also provided an overview of the study sites. The next chapter broadly discusses the context of the study.

CHAPTER TWO: POLICY AND LEGISLATIVE CONTEXT

2.1 INTRODUCTION

This chapter outlines the background and context of the study by providing a review of South Africa's strategy and policies for the agricultural industry, particularly the smallholder sector. The chapter starts out with a discussion about the structure of government in South Africa, before examining the role of each sphere of government with regard to agricultural activities, as well as how the country's public service delivery and public administration is set up. The discussion is also based on the triple challenges of poverty, unemployment and inequality, which have directly or indirectly contributed to the formation of numerous smallholder producers in the country.

The agricultural sector plays an essential role in promoting the wellbeing of South Africa's citizens, and also contributes toward the GDP of the country. This chapter discusses the participation of smallholder producers in markets. It is the dream of every smallholder farmer to turn his or her operation into a profitable and sustainable business, yet a lack of access to markets remains a significant barrier for numerous smallholder producers. This chapter also provides a discussion on food (in)security. In most cases, food security is measured across three pillars: availability and quality, affordability, and safety. The country's exposure to climate change, as well as the natural resources risks to food security, are also taken into consideration when explicitly looking at food security. Finally, this chapter discusses the impact of supermarkets in South Africa, as well as their role in developing smallholder producers.

2.2 STRUCTURE OF GOVERNMENT, SERVICE DELIVERY SET UP AND MUNICIPAL MARKETS IN SOUTH AFRICA

The Constitution of South African establishes national, provincial and local as the spheres of government. These spheres of government are distinctive but interdependent, with interrelated functional responsibilities. The Constitution further categories municipalities or local government as metropolitan municipalities, local municipalities and district municipalities. According to the Constitution (1996), Metropolitan municipalities have exclusive executive and legislative authority in their area while Local and District municipalities share the authority. For the benefit of the country, it is considered essential that the spheres of government operate as a single system of cooperative government, therefore the government has adopted a system that is based on the principle of cooperation to ensure relationship between all the spheres. The White Paper on Local Government (1998: 38) indicate that the intergovernmental system aims to "promote cooperative

decision-making, ensure the execution of policies through the effective flow of communication, coordinate priorities and budgets across different sectors and the prevention of disputes and conflicts between spheres of government".

The government's institutions have a critical responsibility for delivering the services that the public requires to maintain and improve their standard of living. For the government to achieve this, organisational structures and financial and human resources are necessary to ensure the delivery of public services. Furthermore, the Constitution (1996) requires that all the actions and operations of public officials and political office-bearers are according to constitutional values and principles when delivering the services. The work or programmes of government should contribute towards an enhanced quality of life for all, hence the outcome of public administration must be the provision of quality services to ensure the improvement of the general well-being of the people (Franks, 2014).

Due to the closeness of the local sphere of government to the citizens, it is considered the engine of basic service delivery. Section 152(1) of the South African Constitution stipulates that the local government is charged, among other things, with ensuring the "provision of services to communities in a sustainable manner, promoting social and economic development, and promoting a safe and healthy environment". The core responsibility of the municipalities is to ensure the "provision of water, sanitation, markets, refuse removal, and land management" (Constitution of RSA, 1996, Schedule B). A study conducted by Afrobarometer (2017) on the assessments of local government service delivery found that most people were not happy with the performance of their municipalities regarding roads, marketplaces, the management of the use of land and the maintenance of health standards (Nkomo, 2017). On the other hand, Stats SA (2017) indicated that remarkable improvement has been made over the past few decades in the provision of services throughout the country. Given the history of the country, the current government has played a critical role in ensuring that the citizens receive necessary services in their communities, however the high rate of corruption, mismanagement of resources, and irregular expenditure in government institutions has severely tarnished the image and positive work that has been done so far. Furthermore, the government created a citizen-government dependent approach for service delivery, i.e. the government provides services freely or with subsidies to citizens. Such an approach affects the operation and provision of services by the government as revenue must be generated to ensure the maintenance of services provided and the provision of other services that are lacking.

A Community Survey conducted by Stats SA in 2016 found that "89.8% of households used piped water, that 63.4% used flush toilets connected to either the public sewerage or a local septic system, that 63.9% of households receive refuse removal services, and finally, that 87.6% of households had access to electricity" (Stats SA, 2017: xiii). However, the headline figures presented by Stats SA hide a lot of variation between provinces, district councils and local municipalities. For example, it was noted in the survey that households in the metropolitan municipalities have more access to services than those in rural municipalities. The quality and scope of the services provided to the public by government institutions, especially local government, have significantly damaged the institutional image and credibility (Makanyeza et al., 2014). Issues such as a lack of political and administrative leadership; political interference in administrative matters; inadequate public participation; and an improper alignment of budget with the requirements of the central government, are the main contributors to poor service delivery in South Africa. Local governments must ensure that such issues are tackled to ensure the proper provision of services to citizens. Dealing appropriately with such matters by local government could assist the smallholder producers to receive the necessary support and development when it comes to municipal markets. In this way, the local sphere of government is indirectly involved with the agricultural sector as it also deals with the municipal markets and abattoirs.

All the spheres of government are therefore directly or indirectly involved with the agricultural sector. Post-1994, agricultural activities were categorised as one of the functions of the provincial sphere of government, however the National Department of Agriculture still "oversees aspects of agriculture within South Africa and guides the policy environment" (Department of Agriculture, Forestry & Fisheries (DAFF), 2012: n.p.). The mission of the DAFF, as a national department, is to advance food security and the transformation of the agricultural sector through innovative, inclusive and sustainable policies, legislation and programmes (DAFF, 2012). On the other hand, the primary function of the department of agriculture at the provincial level is to simplify agricultural production within the provinces through the delivery of technical support to farmers and community-based initiatives, in order to enable a conducive environment for agricultural activities. In other words, the Department of Agriculture at the provincial level aims to promote agricultural development both in the rural and urban areas to ensure food security and the well-being of citizens.

Local government, as the decentralised sphere of government, can play a critical role in promoting food security and local economic development. By being closer to the people, the local government can improve food security and policy-making, and ensure the participation of the community on

the matters affecting their lives to ensure proper implementation of the plans, and delivery of the services. Local government can also correct both national and provincial government failures in agriculture by, among others, ensuring greater access to local information and by mobilising local social capital for policy reinforcement. More importantly, it can play a crucial role in promoting trade to improve inputs of food production on the one hand, and trade that will improve distribution and increase access to food items on the other. The local sphere of government has the constitutional mandate to manage and control abattoirs and municipal markets. In this regard, municipal markets have "traditionally played the crucial functions of bringing in produce from various producers, setting a fair price, and ensuring a stable distribution of fresh produce for the consumers" (Mubangizi, 2011: 2). Although the Constitution (1996) provides municipalities with the powers to manage and control abattoirs and municipal markets, it also indicates that agricultural sector activities fall under the provincial sphere's jurisdiction. For this reason, the local sphere of government does not prioritise the activities related to agriculture. A detailed discussion on the government institutions' administrative functions concerning the agricultural sector is provided in Chapter Three.

Local governments create municipal markets to stimulate economic growth and provide an outlet for emerging and other local farmers. Due to the lack of a national framework policy for markets, however, the municipalities develop and apply different approaches, and in some areas costly mistakes are being made. In the metropolitan municipalities, the municipal markets are divided into fresh produce markets, commission-based markets and retail markets, while the local municipalities have only the retail markets. The fresh produce markets provide the necessary facilities to emerging, growing and commercial markets, and also provide equal trading opportunities to all producers without discrimination in terms of size or origin (Louw *et al.*, 2013). Fresh produce markets therefore provide an accessible and easy way for smallholder producers to trade their produce. Range (2017: n.p.) noted that the commission- based markets are open to farmers or producers "who supply more than a million tons of fresh produce to the market every year", and commission-based markets largely use the markets agents to manage the sale of a farmer's produce.

Furthermore, Range (2017: n.p.) indicated that commission-based "markets also receive a commission, usually 5%, for providing and managing the infrastructure that makes the exchange of goods possible". One of the benefits of the commission-based markets is that farmers do not have to be on the premises of the markets to sell their produce, as they pay market agent specialists to manage their sales for them. This improves efficiency, strengthens skills and keeps competition

active. Some of the issues that may affect the commission-based markets include a supply risk that reduces volumes, strategic misdirection due to market deregulation, unclear objectives from both local and national councils, and changing demographics. The following two paragraphs provide a statistics overview of the country and highlight the challenges that local government faces.

This study was conducted in the eThekwini Metropolitan Municipality within the province of KwaZulu-Natal (KZN). South Africa is a democratic country that consists of nine provinces, with a total population of 57.7 million (Statistics South Africa, 2018). KwaZulu-Natal is the second largest province, with a population of 11.4 million people (Stats SA, 2018a). According to Kumo, Chulu and Minsat (2016: 2), "socio-economic inequalities continue to threaten the long-term stability of South Africa, and the legacies of apartheid - poor service delivery, widespread poverty, as well as high levels of unemployment - have characterised socio- political discourse throughout 2015". The eThekwini Metropolitan Municipality is positioned on the east coast of South Africa, spans an area of approximately 2555km² and is home to some 3,8million people (eThekwini Municipality, 2018). Like any other municipality within the country, the eThekwini Metropolitan Municipality is facing numerous economic, social governance, and environmental challenges. It is the objective of the Municipality to address any problems to meet the needs of the public. The biggest population group in the Municipality are Black Africans (74%), followed by Indians/Asians (17%), Whites (7%) and Coloureds (2%) [eThekwini Municipality, 2018]. The eThekwini Metropolitan Municipality is facing a high rate of in-immigration from small towns and rural areas in KwaZulu-Natal, several parts of South Africa, and other parts of Southern Africa. This has increased the population and put more burden on the municipality to deliver services and houses to a large number of new residents.

The eThekwini Metropolitan Municipality has a large number of areas with high potential for agricultural activities, yet due to urbanisation and an increase in population, many areas have been developed for non-agricultural uses. Despite this, millions of households within the eThekwini municipality are involved in agricultural activities. Stats SA (2017) reported that poultry, livestock and vegetable production are the main agricultural activities within the eThekwini municipality. The growth and development of the agricultural sector's income could contribute positively to overcoming issues such as poverty and unemployment. These issues tend to be more prevalent in rural areas, where most poor people live who mainly depend on agriculture activities to make a living. The following section discusses poverty, unemployment and inequality within South Africa.

2.3 POVERTY, UNEMPLOYMENT AND INEQUALITY IN SOUTH AFRICA

Without any doubt, most developing countries are faced with challenges of poverty, unemployment, low economic growth, environmental degradation, inequalities, and an inability to maintain stability (Leibbrandt & Woolard, 2006; Chibba & Luiz, 2011; Bhorat et al., 2012; Baiyegunhi & Fraser, 2014; Kumo et al., 2016). With the ongoing increase in population growth, immense pressure is also eradicating natural resources and damaging the environment. South Africa, as a developing country, is also facing the challenges listed above, which are complicated and long-term. Any comprehensive development strategy must tackle one of the core elements of poverty that lies in the labour market – the trend of the labour market to generate job opportunities for skilled, semi-skilled and relatively unskilled people (Chibba & Luiz, 2011). There are no easy solutions when addressing such challenges. Collective action must be taken, whereby the private sector, government, academia and communities discover methods to work together to build a strong economy and organisations that can find long-term solutions to the problems that exist within society. In other words, if solutions are to be found that can address the challenges mentioned above, there must be a "strong politico-economic, political and management or administrative dimension" (Chibba & Luiz, 2011: 308). For instance, decisive and effective leadership, the engagement of key stakeholders and political compromise are vital when adhering to the principles and values of public administration.

Since 1994, the South African government's commitment to deal with poverty, unemployment and inequality has been the foundation of its development policy. Such commitment motivated the Reconstruction and Development Programme (RDP) and the Growth, Employment & Redistribution (GEAR) programme, which were the inspiration behind the National Development Plan of 2012. Most of the people who are the victims of poverty and unemployment live in rural areas, and have little or no education (Leibbrandt & Woolard, 2006; Baiyegunhi & Fraser, 2014). Baiyegunhi and Fraser (2014: 262) indicated that the "dearth of infrastructure and outright dispossession of assets, especially land, has resulted in many households finding themselves with neither income nor assets from which to generate an adequate income". A lack of proper infrastructure and access to land, in both the rural and urban areas, but more particularly in the rural areas, continues to perpetuate poverty and unemployment in this country. In trying to tackle these challenges, the government developed the National Development Plan (NDP), which is a "detailed plan for how the country can eliminate poverty and reduce inequality by the year 2030" (The Presidency, 2012: 24). The NDP highlights the importance of economic growth to eliminate

poverty and reduce inequality within the country. Overall, the NDP aims to "improve service delivery for citizens of South Africa, while integrating national, provincial and local policies and programmes into a single, target-orientated, long-term plan" (NDP, 2011: 73). The development of provincial growth and development plans, as well as local government integrated development plans, must align with the objectives of the National Development Plan. The logic and consistency of national, provincial and local government plans should therefore seek to address the socio-economic challenges of the country.

Reducing poverty and unemployment is one of the main priorities that the spheres of government, working together with various other sectors of South African society, wants to achieve (Bhorat *et al.*, 2012). Although the government has done much in terms of tackling the issue of poverty, the percentage of the population in the country still living in poverty has not improved significantly since the advent of democracy. This means that the programmes of spheres of government are not yielding any positive results or the irrelevant programmes are being implemented by spheres of government. This is evident from Stats SA's (2017) findings, which showed that more than 30.4 million South Africans were living in poverty in 2017, with an unemployment rate of 29.1% in 2018 (Stats SA, 2018). One of the reasons that poverty and unemployment are still high is that the new democratic government inherited a country marked by severe poverty and inequality, with the majority of the population, particularly black community, lack access to basic services (Bhorat & van der Westhuizen, 2013; Baiyegunhi & Fraser, 2014). In addition, the ongoing low economic growth of the country has made it difficult to achieve significant strides towards poverty and unemployment reduction.

As an upper-middle-income country, South Africa is the most unequal in the world when it comes to income and wealth distribution (World Bank, 2013). Several factors contribute to this inequality. Firstly, because of the previous system of apartheid, the strong inequality between racial groups has always been a substantial driver of aggregate inequality. Secondly, a lack of access to services such as water, quality education and infrastructure within the rural areas perpetuate the unequal society, as urban communities have access to higher quality services. According to the National Development Plan (2012: 458), deep inequalities have a profoundly "negative impact on economic development and make it harder to forge a social compact that could move South Africa onto a higher developmental trajectory". Thirdly, Bharot and Van der Westhuizen (2013) noted that the disparities in skills, education, income and health system are some of the reasons for the continued issues of inequality, unemployment and poverty and inequality in the country.

The country's high rate of unemployment, inequality and poverty, coupled with low economic growth, has driven many households to become involved in agricultural activities through forming agricultural cooperatives, participating as smallholder producers, or being employed in the commercial agricultural sector. Some households participate in the agricultural sector to provide food for consumption, while others do it to improve their household income.

The agriculture sector plays an important part in guaranteeing food security, however access to markets by both commercial and smallholder producers has a key role to play in the success or failure of the sector. The agricultural sector in South Africa is regarded as dualistic as it consists of a small number of highly resourced commercial producers and numerous poorly resourced smallholder producers. Due to the history of the country, white producers dominate the well-resourced commercial sector, while black producers dominate the poorly resourced smallholder sector. The following section discusses the state of food security in the country.

2.4 FOOD SECURITY

South Africa has some of the highest levels of income inequality, unemployment and poverty in the world (Stats SA, 2016). The ability of the public to have access to food is critical to their well-being and development, therefore ensuring food security is vital to achieving the objective of tackling poverty and inequality. According to Altman, Hart and Jacobs (2009: 346), "food security cannot be understood in isolation from other developmental questions such as social protection, sources of income, rural and urban development, changing household structures, health, access to land, water and inputs, retail markets, or education and nutritional knowledge". Many factors contribute to food insecurity in South Africa, with the most crucial ones being increasing oil prices and domestic electricity supply constraints (Human Sciences Research Council, 2013).

Battersby *et al.* (2015: 4) indicated that "South Africa is food secure at the national level, but the country's agricultural sector has become more export-oriented and is increasingly dependent on imports". This means that South Africa currently either "produces enough food to feed its residents or can cover the cost of food imports through a trade surplus from agricultural exports" (Battersby *et al.*, 2015: 13). Being food secure at the national level does not mean that the country is food safe at the household level, however, as many households lack access to sufficient, nutritious, affordable and culturally appropriate foods. According to the Human Sciences Research Council's (2013: 10) survey on the South African National Health and Nutrition Examination, "45.6% of South Africans are classified as food secure while the 28.4% are at risk of hunger, and 26% are

experiencing hunger". The Department of Agriculture, Forestry & Fisheries (2012) noted that South Africa is in a situation where millions of households experience hunger everyday while the nation is classified as being food secure. There are two-dimensional challenges that South Africa is experiencing regarding food security: an attempt to sustain and able to ensure food security, and the country's aim to tackle inequality, poverty and unemployment amongst the poor households (DAFF, 2012). Although there are issues around food security within the country, the government has placed a high "priority on several national policies and programmes, which contribute to the common goal of raising nutritional levels, especially for the more vulnerable section of the population" (Food and Agriculture Organization (FAO), 2015: 10-11).

The effective coordination of government activities and the smallholder sub-sectors' ability to access the formal markets could play a critical role in safeguarding food security in the country. The policies and programmes on food security that the South African national government initiated post-1994 are discussed below.

2.4.1 Integrated Food Security Strategy (IFSS)

The National Development Agency (NDA) (2002: 5) stipulated that the disappointing "situation that was occasioned by the implementation of many food security programmes by different government departments in all government spheres" was the main motivation behind the formulation of the IFSS. The Cabinet thus created the IFSS in 2002 in an attempt to integrate the numerous previously isolated policies that aimed to tackle the issue of food insecurity in the country. A rapid increase in food prices in 2002 forced the Cabinet to "formulate a national food security strategy that would streamline, harmonise and integrate the diverse food security programmes into the Integrated Food Security Strategy" (Drimie & Ruysenaar, 2010: 322).

The IFSS was created with the aim of eliminating hunger, malnutrition and food insecurity within the country. The strategic objectives were to "increase household food production and trading, improve income generation and job creation opportunities, improve nutrition and food safety, increase safety nets and food emergency management systems, improve analysis and information management system, provide capacity building, hold stakeholder dialogue, and overcome rural food insecurity by increasing the participation of food-insecure households in productive agriculture sector activities". (Department of Agriculture, Forestry & Fisheries, 2002: 6).

Taking into account these strategic objectives, the main activities of the IFSS were to ensure the larger "ownership of productive assets and participation in the economy by the food insecure; increase the levels of nutrition and food safety among the food insecure, ensure the availability of

reliable, accurate and timely analysis, information and communication on the conditions of food insecure and impact of food security interventions to the community" (Department of Agriculture, Forestry & Fisheries, 2002: 10). Furthermore, the activities of the IFSS aimed to "increase the competitiveness and profitability of farming operations and rural enterprises that are owned and managed by or on behalf of the food insecure; enhance levels of public-private-civil society common understanding and participation in agreed food security improvement interventions; improve levels of governance, integration, coordination, financial and administration management of food security improvement interventions in all spheres of government; providing education and training; and improve alignments related to hunger and malnutrition" (Department of Agriculture, Forestry & Fisheries, 2002: 10).

The main intentions of the IFSS were to enable the food insecure population to gain access to productive resources, to access job opportunities to enhance their power to purchase food, and to receive relief measures. To ensure the achievement of these objectives, the implementation of the IFSS was placed on numerous government departments, which were chosen from the social cluster departments to ensure a greater oversight of the programmes (Department of Agriculture, Forestry & Fisheries, 2002: 9). Social cluster departments are groupings of government departments with cross-cutting programmes and projects such as the Department of Agriculture, Forestry & Fisheries, Department of Education, Department of Tourism, Department of Health, Department of Police, Department of Social Development, and Department of Small Business Development. The implementation of the strategy requires a frequent dialogue with all stakeholders, as well as synthesis of feedback, to improve food policies and programmes. Stakeholders from the public sector, private sector and civil society formed part of the National Food Security Forum, which provides strategic leadership and advisory services on food security, set standards and recommended policy options. According to Drimie and Ruysenaar (2010: 323), the IFSS could only become a reality through clear programmes, coordinating units and multisectoral fora to stimulate and support interventions to engage creatively with food insecurity. Furthermore, Drimie and Ruysenaar (2010) noted that the IFSS outlines interrelated issues such as availability, access, utilisation and stability as being critical in addressing hunger and malnutrition in the country, yet even though there are numerous national and international obligations to ensure food security, the reality is that these have not been met (Pieterse & Van Wyk, 2006; Drimie & Ruysenaar, 2010).

Koch (2011: 10) noted that although the "IFSS is recognised as an innovative strategy and a comprehensive approach to tackling food insecurity in South Africa, it has not achieved many of its goals". Furthermore, Koch (2011) argued that the IFSS is an exceptional strategy on paper, but

the practical implementation of the strategy is lacking and has not been utilised to its full potential. One of the reasons for this is that the IFSS employed a broadly developmental approach rather than a firmly agricultural approach to food security. In addition, regardless of government efforts to ensure food security, remarkable differences persist, many of which are linked to issues of inequalities based on race, gender and geographical location. The sad part is that food insecurity is severe in rural areas where the majority of poor people live. Furthermore, the other reason why ensuring adequate food remains unrealised is the lack of capacity of the government to deliver services to the community effectively.

Numerous authors such as Hamid (2005), Misselhorn (2006), Drimie and Verduijn (2007), Ruysenaar (2010) and das Nair (2016) highlighted the institutional challenges facing the IFSS, such as a lack of or poor community involvement, a lack of political will and a lack of legislation. In addition, infrequent participation and a lack of alignment within the IFSS have made it difficult for the objectives of this strategy to be achieved. Based on these challenges, Drimie and Verduijn (2010: 330) indicated that the "IFSS has largely failed in its mandate because of insufficient and inappropriate institutional arrangements to underpin the strategy". However, since the IFSS was formulated in response to increased food prices and worsening hunger for some vulnerable groups, food insecurity amongst the population has been declining since 2002. Between 2002 and 2012, the General Household Surveys (GHS) indicator displayed a "55-point decline in children experiencing hunger, from 24% to 11%" (Hendriks, 2014: 16). In addition, "GHS data on the percentage of the total population experiencing hunger reveals a similar trend to the GHS question on children experiencing hunger, at a slightly higher level" (Devereux & Waidler, 2017: 4). Between 2002 and 2007 there was a steady decline in the number of the population who were experiencing hunger, from 30% in 2002 to 14% in 2007 (Stats SA, 2016). However, Stats SA (2016) noted that because of the global financial crisis of 2007/08, the number of people who experienced hunger in 2008 and 2010 went up to 16%. Between 2011 and 2015, the GHS indicator indicated that hunger stabilised at around 13% of the total population of South Africa.

2.4.2 Comprehensive Agricultural Support Programme

The Department of Agriculture, Forestry & Fisheries together with nine provincial agriculture departments and assisted by the National Treasury, in the year 2003 initiated a fiscal review of the agricultural sector. The main purpose of the review was to detect the spending pressures and cost drivers within the agricultural sector. The adoption of the Comprehensive Agricultural Support Programme (CASP) was the result of the fiscal review process, which observed that insufficient

provision was made for farmer support within the agricultural sector (Mafsikaneng, 2015). The CASP was adopted in 2004 to provide funding, notably to support emerging farmers and the development of the agricultural sector. The main aim of CASP was to "enhance the provision of support services to promote and facilitate agricultural development targeting the beneficiaries of the land and agrarian reforms" (Department of Agriculture, Forestry & Fisheries, 2004: 1). **Funding** on-farm infrastructure. such as boreholes. irrigation, packhouses/warehouses, was the main long term goal of the CASP (Louw et al., 2006). The beneficiaries of the CASP included the "hungry and vulnerable, the household food producers, the beneficiaries of the land and agrarian reform programmes, and those operating with the macroeconomic environment" (Department of Agriculture, Forestry & Fisheries, 2004: 1).

The CASP consisted of six pillars or activities, namely: technical and advisory assistance, information and knowledge management, training and capacity building, financing mechanisms, on-and-off farm infrastructure, and marketing and business development. These pillars of CASP were expected to ensure "household food security, farm and business-level activity, and an agricultural macro-system within the consumer economic environment" (Xaba & Dlamini, 2015: 154). The implementation of the CASP was underpinned by three pillars, i.e. "cooperation between partners and the alignment of strategies; clear definitions of the roles and responsibilities of the partners; and a precise analysis of the spending pressures and cost drivers through the Intergovernmental Fiscal Review Process" (Department of Agriculture, Forestry & Fisheries, 2004: 3). A brief discussion on CASP's delivery mechanisms are discussed below:

2.4.2.1 Cooperation between partners and the alignment of strategies

CASP aligned strategies, policies, plans and processes to ensure that there is no duplication of actions, silo formation, lack of ownership, and distrust between the institutions, in order to create a successful delivery chain of services. It is thus within the policy framework of CASP that all stakeholders must cooperatively develop a common perspective on farmer support. Structures such as the Sector Strategy Implementing Committee, the Intergovernmental Fiscal Review Process, MinMec, the Intergovernmental Technical Committee on Agriculture (ITCA), and the Provincial Grants Committee all contribute towards the alignment of strategic plans and deliverables (Department of Agriculture, Forestry & Fisheries, 2004: 4).

2.4.2.2 Clear definition of roles and responsibilities of the partners

The Department of Agriculture, Forestry & Fisheries together with different stakeholders developed clear roles in order to assist the targeted beneficiaries of CASP, and in most cases, the strategic instruments and policy environments tend to influence service delivery. The

implementation of CASP is based on the idea of service provision to the public. The main stakeholders, amongst others, are: the Department of Agriculture, Forestry & Fisheries, the Provincial Departments of Agriculture, the Department of Land Affairs (DLA), District Committees and Councils, the beneficiaries, banking institutions, the LandBank and Sector Education and Training Authorities (SETAs). The role of the Department of Agriculture, Forestry & Fisheries in implementing the CASP includes creating a favourable and conducive environment for the beneficiaries; develop policies, strategies and programmes specifically relating to credit availability and financial support for a comprehensive agriculture support programme; playing an advocacy role; and ensuring that adequate financial resources for schemes is available. The roles of the provincial departments of agriculture are to identify farmers/beneficiaries under the agricultural reform programmes; to assist farmers to prepare and implement business plans that qualify for support; to identify service provides and intermediaries to provide support and capacity to applicants; to provide farmer training and capacity building; and to provide information and technology support (Department of Agriculture, Forestry & Fisheries, 2004).

The key responsibilities of the DLA include providing land acquisition grants under the LRAD and planning grant; monitoring and evaluating LRAD programmes together with the DAFF; assessing business plans; assessing all proposals from land reform projects; and coordinating policy and implementation issues. The responsibilities of the District Committees and Councils are to coordinate development efforts at the district level; to screen development plans involving government support; and to proactively initiate development projects at the district level. The beneficiaries, meanwhile, have to accept responsibility for the planning, implementation and management of the proposed agricultural activity (Department of Agriculture, Forestry & Fisheries, 2004). The duties of the banking institutions and SETAs are to "act as an intermediary agent, provide access to financing, design support products, provide financial management support and risk assessment, and to be responsible for the simultaneous development of skills in the primary agricultural sector through education, training and development" (Department of Agriculture, Forestry & Fisheries, 2004: 5).

2.4.2.3 Clear analysis of spending pressures and cost drivers

To ensure effective utilisation of resources on the government programmes, the management by project approach is seen as one of the standard features of a successful service delivery chain. Such an approach makes provision for well-defined objectives and outcomes with start and end dates, as well as resources assigned based on suitability, readiness and affordability. Stakeholders can thus cooperatively agree on the usage of standardised project management procedures and report

formats. The DAFF and National Treasury, through the Intergovernmental Fiscal Review process, have formed a joint technical committee to establish a more significant coordination policy development, as well as budgeting for functions that are the joint responsibility of the national and provincial governments (Department of Agriculture, Forestry & Fisheries, 2004: 13). For the effective implementation of CASP, a three-pronged strategy was developed, i.e. the alignment of support services, the phasing in of support services, and production inputs.

In a nutshell, the justification for the CASP was to help emerging farmers, through the various pillars mentioned above, produce food products for their families and localities and gradually graduate to become commercial producers. Although CASP was created to assist emerging farmers, the FAO (2010a) noted that over the years the infrastructure was vandalised and deteriorated, the farms' production declined, and agricultural skills levels did not improve. The "inadequate extension and advisory capacity with the Department of Agriculture" (Xaba & Dlamini, 2015:155) was identified as one of the factors that contributed to the failure of the programme. In 2015, Business Enterprises at University of Pretoria (Pty) Ltd conducted a study to determine whether CASP is achieving its policy goals. One of the findings from the study noted that the "CASP had made progress towards achieving some of its intended objectives (e.g., enhancing access to support services, increasing agricultural production, increasing income for beneficiaries, etc.), but insufficient progress has been made in promoting commercialisation, market access, employment and achieving food security" (Business Enterprises at University of Pretoria (Pty) Ltd, 2015: vii). Furthermore, the study noted that a substantial proportion of farmers continued to experience problems with market access even after the introduction of CASP.

2.4.3 Micro-agricultural Financial Institutions of South Africa (MAFISA)

The MAFISA programme and the CASP initiative were launched in 2004. The Department of Agriculture, Forestry & Fisheries (2015: 47) indicated that the MAFISA programme "was implemented as the financial pillar of CASP to provide support to smallholder producers by providing micro and retail financial services on a large, accessible, cost-effective and sustainable basis in rural areas". Chitiga-Mabugu *et al.* (2013: 8) commented that the main aim of establishing this institution was to offer finance credit to "aspiring black farmers and the poor, to improve livelihoods and reduce poverty through the creation of viable business ventures". Louw *et al.* (2006) noted that this programme aimed to help the working poor to start new and/or run existing agricultural businesses, and to develop these into full commercial operations. Emerging smallholder producers with a turnover of less than R300, 000 were the main target of the MAFISA

programme for loans (Department of Agriculture, Forestry & Fisheries, 2015). This programme was intended to have the following high development impact in the sector: enterprise development, entrepreneurial development, employment creation and economic growth. For the management and repayments of loans, the financial intermediaries were appointed by DAFF on a five year arrangement to make micro-loans to beneficiaries. Interest on the loans was charged at 8%.

The provision of financial support services was divided into three categories, namely: production loans, small equipment loans and livestock purchase loans. The MAFISA programme sought to "provide funding through participating institutions to address the financial-services needs of entrepreneurs in the informal economy and to strengthen the developmental, agricultural, microfinance system for their benefit" (Koch, 2011: 27). Carter *et al.* (2014: n.p.) noted that the "financial intermediaries carry the risk should the beneficiaries default, unless there are special circumstances such as disasters in which case DAFF carries the risk". Based on the study by Business Enterprise at the University of Pretoria (Pty) Ltd, which took place between 2013 and 2015 to gauge the impact of MAFISA, it was estimated that 4,208 MAFISA loans had been issued since the scheme's inception. Furthermore, the report highlighted the following issues since the introduction of the MAFISA initiative:

- A lack of cooperation between financial intermediaries and provincial departments of agriculture.
- The depletion of MAFISA funds, and some of MAFISA intermediaries not being financially sustainable.
- Inconsistent reporting of loan transfers to beneficiaries.
- Mismanagement of MAFISA funds.
- A lack of policy synchronisation (MAFISA beneficiaries feel it is unfair that they have to repay their loans plus interest. At the same time, other small-scale farmers receive free 'starter-packs' from the provincial departments of agriculture or through land reform grants).

The above issues resulted in MAFISA being wound-down and terminated. The National Treasury instructed the Land Bank to return unutilised MAFISA funds to the national revenue fund in 2013. As MAFISA was the only government-supported loan scheme to address the financial needs of smallholder producers in the agricultural sector, the termination of the scheme was not ideal. Before the termination of the scheme, the government was supposed to find ways of addressing the challenges identified to ensure continuity of the scheme.

2.4.4 Comprehensive Rural Development Programme (CRDP)

In South Africa, high rates of illiteracy, poverty and unemployment; a lack of infrastructure; and a high dependency on natural resources and social grants, characterise most of the rural areas in the country (Jacobs & Hart, 2012). To combat the issues mentioned above within the rural areas, the government created the Comprehensive Rural Development Programme (CRDP) in 2009 (Obadiere *et al.*, 2014), which has as its three main pillars Land Reform, Agrarian Transformation and Rural Development. To overcome socio-economic issues such as hunger, poverty, joblessness and underdevelopment in the rural areas, the CRDP employs a holistic approach that affiliates numerous stakeholders from government departments, the business sector, communities and non-governmental organisations. The Department of Rural Development & Land Reform (DRDLR) was given the mandate by the President of the country to develop and implement the CRDP.

In South Africa, the government has been emphasising the need for rural development to ensure that the standard of living of communities in non-urban areas is also improved. In most cases, the rural areas are characterised by a low number of inhabitants in wide-open spaces where agricultural activities are prominent. The aim of government with rural development is to enable rural people to take control of their destiny and deal effectively with socio-economic issues through the optimum use and management of natural resources within their localities. A strategic investment in the relevant economic and social infrastructure, as well as a coordinated and integrated broadbased agrarian transformation, could assist the government to achieve rural development. According to the DRDLR (2009: 38), Rural Development as a pillar of CRDP includes improved "social and economic infrastructure, while Land Reform includes increasing the pace of land redistribution, increasing the pace of land tenure reform, speeding up the settlement of outstanding land restitution claims, and effective support to all land reform programmes through land planning and information". Furthermore, the DRDLR (2009: 37) stipulates that Agrarian Transformation as one of the pillars of the CRDP includes increasing "production and the optimal and sustainable use of natural resources, livestock farming, cropping, food security, modern approaches, indigenous knowledge systems, and the establishment and strengthening of rural livelihoods for vibrant local economic development". According to DAFF (2015: 51), the CRDP is "aimed at being an effective response against poverty and food insecurity by maximising the use and management of natural resources to create vibrant, equitable and sustainable rural communities".

Sprinkhuizen and Masangu (2016) noted that the CRDP has created short-term job opportunities with low wages, such as Public Works Programmes (PWPs), for people in rural areas. Through

the PWPs, some poor communities can generate income in addition to the social system grants being offered by the government. A lack of political and administrative commitments, lack of restructuring and coordination, and insufficient financial resources were highlighted by Siyo-Pepetheka (2014) as major concerns when it comes to the success of the CRDP. A 2015 evaluation of the implementation of the CRDP by the Department of Performance, Monitoring & Evaluation found that there are still numerous challenges that the DRDLR has to deal with to ensure proper implementation of the CRDP. The report mentioned, amongst others, that the CRDP has had limited success in the following areas: community empowerment, job creation, closing the communication gap between various CRDP institutions, providing extension services to smallholder producers, supplying water, improving road quality, providing access to land, creating ICT centres for youth, and speeding up the delivery of RDP houses.

2.4.5 Integrated Food and Nutrition Programme.

Poverty is predominant in both the urban and rural areas of South Africa. Poor South African communities face numerous challenges, including a lack of basic services such as adequate sanitation, clean water, proper roads and energy sources. The establishment of the Integrated Food and Nutrition Programme (IFNP) was the result of the Nations World Conference on Sustainable Development that was held in South Africa in 2002. The reduction of hunger, malnutrition and food insecurity were three of the goals of the conference, with a focus on increasing household food production and income-generating initiatives to assist poor communities (Pillay, 2010). The formulation of the IFNP was made possible, through a joint effort, by the National Department of Social Development and the Gauteng Provincial Department of Social Development. The IFNP was defined as a strategy to encourage poor communities to establish community food gardens to generate wealth for addressing poverty. In the study conducted by Pillay (2010) on the impact of the IFNP in Kungwini, it was noted that the lack of interdepartmental and civil society collaboration and programme sustainability were the main factors that adversely affected the achievement of the IFNP's objective to address poverty effectively.

Post-1994, the government of South Africa initiated numerous programmes that intended to address the unfairness of the apartheid government system. The agricultural sector was one of the sectors that were targeted for transformation, as agricultural support programmes play an essential role in tackling poverty when they are implemented effectively. Any increase in agricultural production and productivity depends on the ability of farmers to access agricultural support services. It is therefore essential to note that the role of government in assisting or supporting the

agriculture sector is essential to the generation of employment, the development of the sector, and the economic development of the country. Within the African context, governments have "realised the need to foster and strengthen agricultural development" (Xaba & Dlamini, 2015: 153). As was acknowledged by the SADC in the Regional Agricultural Policy, "more than 70% of the population in the SADC depends on agriculture for employment, income and food" (Xaba & Dlamini, 2015: 153). The success or failure of government support programmes depends on several factors. For instance, planning, management, coordination and integration with other key actors regarding smallholder producers' programmes is crucial for the effective implementation of such programmes and the growth of this sector. The failure of government programmes or projects to achieve developmental impacts further perpetuates the socio-economic issues within the society.

The South African government has initiated numerous policies and programmes to support smallholder producers and ensure food security within the country, however these have not produced the benefits that were intended. Furthermore, as noted above regarding the policies and programmes that the government has implemented, their focus is on the following issues: addressing hunger, malnutrition and food insecurity; land reform processes; financial access; market and business development; infrastructural development; advisory and capacity building, and redressing agrarian transformation. The impact of these policies and programmes on the development and growth of the smallholder sector is not clear, therefore it is critical that the government must create clear policies and programmes that will enable smallholder producers to access and participate fully in the agricultural markets. In addition, such programmes or strategies must be integrated into national, provincial and local government departments' planning to ensure effective implementation. The following section discusses the agricultural sector within South Africa in detail.

2.5 THE AGRICULTURAL SECTOR IN SOUTH AFRICA

South Africa is a middle-income emerging market with an ample "supply of natural resources; well-developed financial, legal, communications, energy and transport sectors; and a stock exchange that is Africa's largest and among the top 20 in the world" (DAAF, 2015: n.p.). Despite this, South Africa is a developmental state, with almost half of its population living in rural areas. These rural areas have higher poverty levels than urban areas, not least because employment opportunities are much rarer in those areas (DAAF, 2015). The government is currently experiencing rising pressure from both urban and rural communities to enhance the provision of quality basic services to low-income areas and to stimulate job growth.

The agricultural sector is one of the sectors that is crucial to society in terms of ensuring food security, poverty alleviation and sustained economic growth (Matsane & Oyekale, 2014). A study conducted by the Small Enterprise Development Agency in 2012 on the performance of the agricultural sector revealed that "the contribution of the sector to South Africa's Gross Domestic Product (GDP) has been gradually declining over the past ten years, from 2.7% in 2000 to 2.5% in 2010" (Small Enterprise Development Agency, 2012: 6). Nevertheless, despite the decline of agriculture's contribution to the GDP of the country, the sector remains vital to the South African economy. The Economic Intelligence Unit (2014) conducted comparisons of the actual GDP between 2005 and 2008 and the GDP forecast between 2010 and 2014. In 2018 (Q3), the agriculture, forestry and fishing industry contributed "0.1 of a percentage point to the GDP growth, and the growth came from an increase in the production of field crops, horticultural products, and animal products" (Stats SA, 2018: 3). In the first and second quarters of 2018, the agriculture, forestry, and fishery industry contributed -0.7 and -0.8 percentage points to GDP growth (Stats SA, 2018a). These figures clearly show that the industry is not doing well in terms of its contribution to the country's GDP. The contribution of the agricultural sector in the country is also not stable, as it fluctuates due to various reasons such as inflation, uncertain policies, climate change (particularly droughts and floods), infrastructure development, and the degradation of natural resources. Although the agriculture sector no longer contributes as much to the country's GDP, the sector continues to play a crucial role in the economy, including as a food provider given rising concerns about food security.

Greyling et al. (2015) noted that it is crucial to take into consideration the historical context of the country when reviewing the performance of the agricultural sector over the past years. The authors indicated that "during the 1950s and 1960s, the government invested heavily in research and development, infrastructure, extension services, direct subsidies for conservation works and debt relief, and the settlement of white commercial producers" (2015: 3). Due to these investments, the agricultural output, especially for white commercial producers, progressively started to grow, assisted by guaranteed markets and guaranteed prices for most farm commodities. Since 1994, the agricultural sector has undertaken extensive policy reforms aiming to ensure that the sector represents the entire demographic of the country, create a favourable environment to compete with internationally and for enhanced productivity, and. Unfortunately, these "implementation redistributive land reform and smallholder support programmes have achieved limited access to address the dualism of the sector" (Greyling et al., 2015: 12). To ensure the development of the agriculture industry, the government must continue with its investment in infrastructure, research

and education to sustain productivity and international competitiveness. Hall (2009: 122) noted that there has been less involvement of the government in providing "subsidised credit and bailout programmes, state marketing boards and trade protection, as well as other related reforms including water and labour regulations".

Furthermore, since South Africa created a democratic system, the government has implemented a pre-formulated policy of deregulation of agricultural markets. The Marketing of Agricultural Products Act of 1996 stipulated that the intervention of government in agricultural markets would become almost impossible. This policy on the deregulation of agricultural markets has had numerous negative consequences, however, for example it has increased imports, lowered profitability, and made it more challenging for small emerging farmers to enter the market.

Yet due to the historical background of the country, farming by black people was being undermined while the legislation and subsidies supported white farmers. In other words, the agricultural laws and regulations did not assist black farmers to compete with white farmers effectively and a top-down style was utilised. Such an approach resulted in a highly dualistic agricultural sector, with black farmers experiencing the main challenges, such as a lack of institutional support. Obi *et al.*, (2012) noted that the agricultural dualism has existed in the apartheid era and it remains even today, despite more than a decade of government reforms. The agricultural sector has the potential, as the primary economic activity in the rural areas, to generate "close to one million new jobs by 2030, a significant contribution to the overall employment target" (NDP, 2012: 219). Furthermore, the National Development Plan (2012:

34) stated that South Africa must "realise a food trade surplus, with one-third produced by small-scale farmers or households in 2030". In many African countries, the agricultural sector is the backbone of the economy (Balarane & Oladele, 2012) as most people, especially in rural settings, depend on it for their livelihoods.

South Africa has a well-developed commercial agriculture sub-sector that is largely controlled and managed by the minority white community, and a predominantly subsistence-oriented sector that is controlled and managed by the black community in the rural areas (Senyolo *et al.*, 2009; Antwi & Seahlodi, 2011; Greyling, 2015). The agricultural sector in South Africa is characterised by inequalities between diverse types of farmers, especially among the well- established commercial producers and smallholder producers in the communal areas. An overview of commercial producers and smallholder producers is discussed later in this chapter under separate sub-headings. Although the commercial sub-sector is smaller by number of farmers, it makes an extensive

contribution to total production. As per Schönfeldt, Kirsten and McClachlan (2013: 25), "there are many smallholder producers, but their scale of operations is relatively small, although they are a political and donor priority".

The wide gap (in terms of space, knowledge and resources) between the commercial and smallholder producers further "explain(s) why the unequal distribution of agricultural inputs such as land, farm assets, support services, market access, infrastructure, and income persists in South Africa" (Matsane & Oyekale, 2014: 390). Statistics South Africa (2012) has noted that many rural households in South Africa are still engaging in agricultural activities, despite the drop in numbers of people living in rural people, which is being brought on by urbanisation. In 2016, Stats SA noted that approximately 2.3 million households engaged in agricultural activities. While there are numerous households engaging in agriculture-based activities, several issues like climate change, resources and agricultural information affect their sustainability.

The climate heavily influences the physical performance of South African agriculture. Due to the country's different environments, soil types, natural vegetation, and the types of farming practiced, the country can be partitioned into several farming regions. The activities of the agricultural sector range from "intensive crop production and mixed farming in winter rainfall and high summer rainfall areas, to cattle ranching in the bushveld and sheep farming in the more rapid regions" (DAFF, 2012: 36). In other words, the agricultural sector consists of activities that range from field crops and horticulture to livestock farming. Table 2.1 below indicates the various agricultural activities that exist within South Africa and shows the provinces that are leading in certain agricultural activities. It clearly shows that the Eastern Cape, KwaZulu-Natal and Limpopo Provinces are the agricultural hubs of South Africa when it comes livestock, poultry, grain, industrial crops, fruit and vegetable production.

Furthermore, Table 2.1 shows that each province has a comparative advantage in certain agricultural activities compared to other provinces. These advantages could help provinces to specialise in certain agricultural activities, as they would face a lower opportunity cost when producing select goods or services. Table 2.1 highlights that the majority of households within KZN are actively involved in vegetable production, i.e. KwaZulu-Natal has a comparative advantage when it comes to producing vegetables due to the higher number of households involved than in other provinces.

Table 2.1: Number of agricultural households involved in a specific activity by province

Province	Livestock production	Poultry production	Grain and food crops	Industrial crops	Fruit production	Vegetable production	Other
Western Cape	12 373	17 120	5 068	394	12 399	37 417	4 808
Eastern Cape	323 763	318 621	178 939	2 200	53 242	157 732	5 183
Northern Cape	28 000	26 319	2 047	118	5 681	7 722	580
Free State	40 874	47 296	21 524	633	43 982	86 097	2 793
KwaZulu-Natal	256 045	310 458	143 477	2 358	55 920	188 442	8 449
North West	78 555	92 222	14 674	426	19 508	35 414	1 344
Gauteng	23 277	48 979	29 646	858	39 470	159 326	8 366
Mpumalanga	76 307	104 713	62 125	1 417	41 399	97 330	7 284
Limpopo	151 018	154 503	117 183	2 553	127 550	103 874	6 111
South Africa	990 210	1 120 233	574 684	10 956	399 151	873 355	44 917

Source: Statistics South Africa (2016)

To implement some of the policies of the national government regarding the agricultural sector, the KZN province, with its provincial growth and development plan, has a strategic objective to unleash its agricultural potential.

The KZN Growth and Development Plan notes that the agricultural sector is of critical strategic importance given the comparative advantages that KZN has regarding its land and labour resources (KZN Provincial Planning Commission, 2012). Furthermore, the Growth and Development Plan indicates that agriculture, as a primary sector, "contributes about 4.4% to provincial gross value added. However, the province of KwaZulu-Natal produces almost 30% of national agricultural output and hence contributes significantly towards creating formal and informal employment, while providing food security in South Africa" (KZN Provincial Planning Commission, 2012: 18). The agricultural sector is currently experiencing numerous challenges, which have resulted in a significant decline in production activities and additional job losses. Some of these challenges include a lack of agro-industries and a related inability to value-add; inadequate access to funding for infrastructure; the halting process of land reform; the rise of competition due to subsidisation of international farming; the lack of access to Ingonyama Trust Board Land for agricultural production; climate change; and the ineffective linking of graduates to commercial farms (KZN Provincial Planning Commission, 2012). Research and development, skills development, expertise, a collaboration between all relevant stakeholders, and sustainable agricultural practices are thus needed to ensure the future sustainability of the agricultural sector and address such challenges.

Since 1994, the democratic government has embarked on a comprehensive land reform programme to close the wide gap in land ownership (Van Schalkwyk, 1995; Van Zyl & Binswanger, 1996; Makhura & Mokoena, 2003). According to Obi (2006), due to deep emotions about land matters and the high cultural importance of land, the land reform programme has established an important, if not equal, amount of both media and official attention. Land ownership in South Africa is just one of the problems facing the impoverished communities, considering the politically sensitive history and the seriousness of the land question in this country (Obi, van Schalkwyk & van Tilburg, 2012). The authors further indicated that even though there have been reform measures, there have been minimal changes in the circumstances of the communities in rural settings, particularly the smallholder producers. In other words, the land reform policies have been criticised as being ineffective and often unfavourable to the livelihoods of smallholder producers in the country. The following subsections discuss the two categories of the agricultural sector, starting with the commercial sub-sector followed by the smallholder sub-sector. Finally, a comparison between these two sub-sectors is drawn.

2.5.1 Commercial agricultural sub-sector

The Statistics South Africa (2011) indicated that the commercial farming sector in South Africa is made up of less than 50,000 farms, which are predominantly owned by whites. These cover a production area of around 82 million hectares (StatsSA, 2011). Approximately one million workers are employed in the commercial sector. The main aim of this sub-sector is to earn income from the sale of products (Raphela, 2014). The focus of the commercial sub-sector is to produce goods that are predominantly market-oriented for both domestic and global markets to generate revenue (Louw, 2013). This sub-sector plays a vital role in increasing food supply while possibly improving the nutritional status of households and improving employment opportunities. According to Ortmann (2005: 298), South African commercial producers have "generally adapted well to deregulated markets and have been very innovative in finding markets and adapting their marketing strategies to suit changing circumstances". Some of the commercial producers claim to play a vital role in mentoring smallholder producers, but the outcomes of such a process are not clear. The commercial agricultural sub-sector continues to be crucial to the South African economy.

2.5.2 Agro-smallholder sub-sector

The South African government has identified the smallholder sub-sector as the vehicle through which the goals of poverty reduction and rural development can be achieved. To achieve this, the

government has committed itself to support and expand the number of producers within this sector (Aliber & Hall, 2012; Louw & Lulama, 2015). Machethe (2004: 9) observed that "increasing the contribution of agriculture to poverty alleviation implies raising the incomes of smallholder producers, through supporting and promoting the growth of smallholder agriculture". One of the critical objectives of the government when it comes to the agricultural sector is to support the smallholder farming sector to have access to markets, financing, infrastructural support, training and production inputs. The National Treasury (2014) also noted that the smallholder farming sector is a potential source of job creation. Nevertheless, this sub-sector continues to lack sufficient access to proper markets, financing, and product quantity and quality. In addition, it faces agronomic challenges such as seed quality and disease management, as well as insufficient support from the extension services.

The smallholder sub-sector consists of numerous farmers who engage in agricultural activities. Louw *et al.* (2013) and Raphela (2014) noted that most of the smallholder producers have a desire to work towards commercialising their production. A Community Survey conducted by StatsSA in 2016 found that there were 2.3 million households engaged in the agricultural smallholder sub-sector. Most of these producers operate a small piece of land, which add up to approximately 14 million hectares of agricultural land. Most of the agro-smallholder producers are concentrated in the rural areas, where there is poor productive land with little or no infrastructural support and water resources (Aliber *et al.*, 2006; Mabaya *et al.*, 2011; Obi *et al.*, 2012; Thamaga-Chatja & Morojele, 2014). In addition, Thamaga-Chatja and Morojele (2014: 148) noted that "women are responsible for almost all the productive activities in farming and in the household, and the lack of attention to their empowerment results in serious time poverty among women". This means that many women largely participate in the agricultural smallholder sector. Furthermore, Thamaga-Chatja and Morojele (2014) noted that the feminisation of the smallholder sector is closely related to the domestic tasks that culturally women are supposed to do, particularly in the less developed rural areas.

The smallholder sub-sector in South Africa, like in many developing countries, is experiencing numerous challenges. These include an absence of market information, a lack of market transport, poor or lack of infrastructure, climate change, poor access to financing and a lack of vertical linkages in the marketing agricultural value chain, which affect their participation from the formal markets (Jari & Fraser, 2012). Furthermore, Jari and Fraser (2012: 60) the smallholder farming sub-sector cannot "conclude contractual agreements, and poor organisational support has led to an

inefficient use of markets as well as weak financial and social capital and limited access to legal resources". Due to these challenges, smallholder producers end up stuck in a given market constraint where they are unable to obtain a satisfying income from their products. Their lack of access to low-cost financing also means that they are unable to purchase farm infrastructure and inputs. The state-led micro finance schemes in South Africa have been widely criticised due to their failure to ensure smallholder access to low-cost finance. Authors such as Duvendack et al. (2011) and Van Rooyen et al. (2012) noted that the microfinance schemes do not unilaterally benefit the rural poor or deliver on intended outcomes. According to the International Finance Corporation (2014: 5), smallholders tend to have "little or no access to formal credit, which limits their capacity to invest in the technologies and inputs they need to increase their yields and incomes and reduce hunger and poverty, both their own and that of others". Chisasa (2014) observed that numerous populations in the rural areas who depend on agriculture for their livelihood have little or no access to formal credit in South Africa. Furthermore, Chisasa (2014) noted that the lack of access to formal credit facilities for the smallholder sub-sector is one of the factors that contributes towards the failure of these farmers. A high default risk, uncertainty, and the risk inherent in agricultural production and marketing are some of the reasons why formal credit institutions are not lending to smallholder producers (Owusu-Antwi, 2010).

Proper infrastructure, especially in rural areas, is critical for both sustainable livelihoods and rural development. Selepe, Sabela and Masuku (2014: 2) pointed out that the infrastructure facilitates "production, distribution, consumption and trade, as well as food security, in the rural economy". In many rural parts of South Africa, smallholder producers are unable to move their produce to the markets promptly due to inadequate access to both private and public transport. Furthermore, the lack of storage facilities, modern irrigation systems, and other on-and-off farm infrastructure affects the functioning of the smallholder sector, and also prevents the smallholder sub-sector from changing to a high-value market-oriented production (Pereira, Cunco & Twine, 2014).

The challenges and constraints affecting the smallholder sector have significant implications for the ability of the farmers to gain access to markets, yet despite these problems, the smallholder sector continues to play a vital role in improving household food security, especially in enhancing nutrition (Wiggins & Keats, 2013). Van Rooyen (2011: n.p.) argued that "South Africa has many high-potential areas where small-scale producers operate, the communal lands and old homelands in particular". This means that the smallholder producers must not be overlooked and will always play a crucial role and be relevant for household food security. Van Rooyen (2011) added that the

lack of agricultural support systems and structures and commercial value chain linkages will affect the future and growth of the smallholder farming sector. Van Rooyen (2011) indicated that it is clear that the lack of integrating or coordinating the smallholder sector with the commercial sector will discourage potential growers from participating in the agricultural sector. The smallholder agricultural sub-sector has been in existence for decades, however few improvements have been made since 1994. This slow development shows a lack of commitment from the government to design or redesign strategies, or to introduce plans that will effectively integrate or link the smallholder producers to the agricultural value chain system. Every business, whether large or small, requires access to markets for growth and development. Table 2.2 below offers a comparison between the smallholder and commercial sectors.

Table 2.2: Comparison chart of smallholder and commercial sub-sectors

Basis for comparison	Smallholder sector	Commercial sector	
Objective of production	Cash income and some household consumption	Profit	
Nature	Labour intensive	Capital and labour intensive	
Labour	Largely rely on family labour with few non-family members	Largely use hired labour	
Irrigation	Many use the traditional methods such as garden hosepipes, boreholes, flood irrigation, watering buckets or cans	They use modern methods such as drip irrigation, spray or sprinkler irrigation system	
Mechanisation and capital intensity	Low to medium	High	
Access to finance, market information, infrastructure, inputs and coordinated market-access	Medium to high	Very high	

Source: Author's own (2018)

The development of modern markets and the issue of globalisation have unlocked opportunities but have also introduced challenges to the agricultural sector. The inability of the smallholder sector to access markets prevents it from tapping into new or expanding markets. Furthermore, a lack of in-and-outside infrastructure and integrated government activities, as well as the failure of the extension services to accurately provide support and training to smallholder producers, negatively affect this sector's ability to develop. The following section discusses smallholders' access to the markets for their produce.

2.6 MARKET ACCESS BY SMALLHOLDER PRODUCERS

The national food market system of South Africa is characterised by a formal, well-established, highly sophisticated marketing system as well as an informal marketing system. In the agricultural sector, formal market systems are those markets that are governed by high food safety standards and quality, where the actions of corporations can be observed (Rajiv, 2010; Marumo & Mabuza, 2018). The formal market system includes processing industries, improved efficiency, export chains, supermarkets, chain stores and retail outlets. Any activities related to formal markets are controlled by certain farmers and are subject to taxes (Marumo & Mabuza, 2018). On the other hand, informal markets are found in temporary settings and are not regulated or protected by law, and the street hawkers and traders who "buy agricultural products in bulk for onward sales through informal channels" (Potts, 2008: 154) are some examples of informal markets.

A small number of retail groups dominate the well-established formal marketing system through a variety of supermarket formats that operate mainly in the cities. This marketing system involves formal contractual agreements between the production and distribution channels. Most of the commercial producers participate in the formal markets, with a few smallholder producers. As indicated earlier, the formal marketing system forces quality, quantity, and proper packaging as requirements for all products. These conditions are difficult for many of the smallholder producers to meet, which is why it is difficult for them to participate fully in the formal markets.

On the other hand, "the informal marketing system distributes food through general dealers, cafes, spaza shops, street vendors, tuck shops and street corner stalls in areas like townships and former homelands where supermarket retail outlets are absent or have been absent" (Louw, 2008: n.p.). In other words, the informal marketing system involves sales — mostly of small quantities of products — directly from producers to customers. Furthermore, the informal market system is commonly organised at a central place in a village. These informal markets are found in remote areas where the small surplus of goods is sold to neighbours. The informal trade system plays a crucial role in South Africa, particularly for small-scale enterprises.

Smallholder producers can therefore participate in both formal and informal markets, but have to ensure that all requirements for the formal markets are met. In the case of South Africa, "informal markets include selling products at farm gate or spot markets where transaction costs are high because smallholder producers lack lobbies in the legal environment" (Sikwela, 2013: 48). For an informal transaction to take place, trust and relationships must be developed between the producers and customers. As indicated earlier, formal markets have clearly defined "quality standards, grades

and safety regulations and prices that are formally set" (Henson & Jaffee, 2007). It is, therefore, a challenge for the smallholder sector to penetrate or participate in the formal markets.

Furthermore, it is easier for the commercial sector to access both formal and informal markets due to their ability to produce their goods in high quantity with good quality. Markets enable farmers to contribute to the reduction of socio-economic issues such as poverty through the income generated from the sale of fresh produce. Furthermore, the markets drive production as producers will always want to exceed the expectations and demand of their customers by providing enough and quality products.

The smallholder agricultural sub-sector in South Africa continues to face the challenge of promoting its fresh produce and being integrated within local, regional and international markets (Raphela, 2014). Most producers within the smallholder sub-sector in South Africa sell their produce at local markets while few export their products to the regional and global markets (Jari *et al.*, 2013). Figure 2.1 below clearly shows the marketing channels that the smallholder sector utilise to trade their fresh produce.

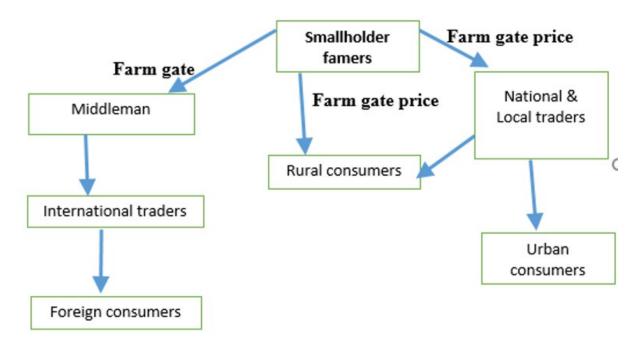


Figure 2.1: Smallholder's marketing channels for produce

Source: Shiferaw et al. (2006); Raphela (2014)

According to Jari and Fraser (2012: 61), the fresh produce from agro-smallholder producers is mostly "traded to consumers and traders at the farm gate, frequently through informal transactions where prices and terms of exchange are unofficially negotiated". Furthermore, the authors

stipulated that these transactions between farmers and traders and between farmers and consumers most often occur in spot markets. Due to the high costs of marketing and transportation, smallholder producers tend to favour farm gate sales (Shiferaw *et al.*, 2009). Bond et al. (2006) commented that the direct marketing of smallholders through their farm gates, roadside stands, and community supported agriculture programmes is fundamental to the prosperity of numerous smallholder fruit and vegetable farms.

In most cases, smallholder producers sell their produce at the farm gate, where they are exposed to different buyers. Shiferaw, Obare and Muricho (2006: 30) indicated that the middlemen are brokers who "procure agricultural products differently from farmers and connect directly with the high-value retailers, processors, and exporters. In other words, middlemen are well organized buyers with the necessary capital and mobility to buy directly from dispersed farmers. In contrast, national or local traders do not buy as much as middlemen on the farm gate mainly because they are less mobile and often require farmers to bring the produce to their trading points". As the smallholder sub-sector operates largely within the rural areas, the farmers tend to target rural consumers as the main consumers of their products. Due to the small quantities they produce, their lack of infrastructure and resources to produce in large quantities, high transportation costs and a lack of information about how to access proper markets affect their growth and development and access to the markets.

Kabelele (2003), Stefano *et al.* (2005), NAMC (2005) and Morris (2007) have claimed that smallholder producers generally lack accurate, reliable and appropriately packaged information to guide them in making strategic decisions, specifically information that would enable them to improve their market participation. Apart from the rural consumers, there are always local traders who conduct businesses within the rural areas who also buy fresh produce products from the smallholder producers. Through the farm gate, the smallholder producers thus expect both local and national traders to purchase their products. This means that smallholder producers sell their produce to traders, who then distribute this to supermarkets, retailers and/or international traders. In most cases, the traders collect the produce from different smallholder producers to ensure a large volume of fresh produce. Numerous challenges mentioned earlier are some of the reasons why the smallholder sector mainly utilises the farm gate as a critical marketing channel for their produce.

Through partnerships or collective action amongst the smallholder producers, access to proper formal markets such as supermarkets could be possible. Sikwela (2013: 52) pointed out that the

"smallholder farmers can better access the restructuring market channels where contracting, and vertical integration and coordination are rife only if they work together to reduce transaction cost". Due to the high levels of poverty in the country, especially in rural areas, there is an urgency to find new solutions to restructure the agricultural sector. This is because most of the smallholder producers within the impoverished areas are unable to sell their produce at a profit. Unlocking markets for smallholder producers is considered to be a critical developmental necessity. However, due to inadequate infrastructure and a lack of market access to sell the produce that will translate into profitability, the rural smallholders' hardship continues.

The agricultural sector plays a vital role in many ways, including contributing to poverty alleviation by creating employment opportunities, reducing food prices, and improving incomes. Empowering citizens to cultivate their food for income generation and/or subsistence will provide potential income and nutrition to many people in the country. For this reason, an increase in investment in agriculture by the government could assist in redressing inequalities as well as alleviating poverty. An increased investment in agriculture is crucial to ensure that there is an adequate supply of food, and that the population has access to that supply. Furthermore, the ability of citizens to access nutritional food promptly at a reasonable cost indicates a country's position on food security. Numerous factors determine the livelihood of the smallholder producers, but reliable and sustainable access to the output market is one of the critical factors. The penetration of supermarkets and the rise of 'modern' markets further makes it difficult for the smallholder subsector to actively participate in the formal markets.

2.7 SUPERMARKETS IN SOUTH AFRICA

Before the increase of the supermarkets in numbers (modern, large retail stores) in South Africa, the Traditional Trade (TT) outlets were more popular. These Traditional Trade outlets are "retail stores that are far smaller and much less sophisticated than the glitter and technology of modern retailing" (Penstone, 2017: n.p.). Traditional Trade can, therefore, be defined as an over-the-counter shopping experience for the customers which does not include a browsing experience like in the modern trade. The food stalls on highways, roadside vendors, spaza shops (small independent grocers, self-service walk-in outlets and countertop formats) are some of the examples of Traditional Trade outlets. It is estimated that there are still 140,000 Traditional Trade outlets in South Africa. The sales through these Traditional Trade outlets amount to R316.5 billion per annum (Nielsen Holdings, 2017). The sales on the Traditional Trade outlets continue to increase while the sales on the modern trade outlets also increase rapidly.

Over the past two decades, the southern hemisphere has experienced a continual increase in the spread and number of supermarkets, notably the spread of "South African supermarkets into southern Africa as well as into the continent as a whole" (das Nair & Chisoro, 2015: 1). The authors noted, however, that the spread of supermarket chains in the region has had severe consequences for local supplier capabilities, consumers, and the competitive landscape. Compared to independent and local retailers, the supermarkets offer a variety of products that come with relatively lower prices. This is because of their local, continental and global strategies, as well as their economies of scale. The supermarket chains are compelled to frequently innovate and recreate their supply chains to compete locally and globally (Louw, 2007). In other words, the supermarkets are also operating in a highly competitive environment. Supermarkets are defined as an "individual retail outlet that sells, primarily by way of self-service, a range of domestic supplies and non-domestic supplies organised into departments" (Matamalas & Ramos, 2009: 5). The supermarkets offer customers a more comprehensive selection of products as they are larger than the Traditional Trade outlets. Supermarkets further offer a browsing experience to their customers.

Due to the increase in the number of supermarkets, South Africa has formally established a market system that is widely dominated by large retail companies, which source their goods and services from the well-established producers. The supermarket industry has evolved over the years in South Africa thanks to an enhanced, contemporary infrastructure, as well as more rigorous economic activities at the retail level. Improved and up-to-date infrastructure in the country has enabled the retail industry to benefit through the efficient distribution of goods to townships, urban centres and rural areas (Chibaya, 2016). The rise of urbanisation, as well as an improved infrastructure in the middle-class market (Stats SA, 2016), have caused an improved development of shopping stores, especially with malls being created in all provinces. "This has resulted not only in an increase in the number of retailers in the country but also a more intensified competition among major players and several smaller aspiring retailers" (Stats SA, 2016: 15).

Currently, there are four significant supermarket chains in South Africa. The large commercial agricultural sub-sector is the main supply of fresh produce to these companies, which Dube and das Nair (2016: 7) noted that it consist of "Shoprite, Pick n' Pay, Spar and Woolworths, which have the most significant shares of the grocery retail market". Shoprite was the leading supermarket in 2015 with a sales growth rate of 10.9%, followed by Spar, Woolworths and Pick n' Pay at 10.4%, 9.6% and 6.1% respectively (Shoprite, Spar, Pick n' Pay & Woolworths, 2016).

These retailers have strict requirements regarding the quality, quantity, consistency and food safety systems of their producers. These stringent requirements do not favour the smallholder producers, however, who find it challenging to meet all of them. The smallholder producers have also been unable to fully participate in competitive markets for their produce due to the centralised procurement systems created by the retail stores (Kodithuwakku & Weerahewa, 2014). This means that the commercial producers have tended to benefit more from the supermarket chains (Louw *et al.*, 2007). According to Ntloedibe (2015: n.p.), the major retail chains are all able to "dictate their buying terms to suppliers who are expected to deliver products to central depots or warehouses". Such a process tends to be a challenge for smallholder producers as most of them do not have their own transportation and storage systems. Ntloedibe (2015) added that many of these major retail chains operate in both rural and urban areas, and they continue to open new stores in different parts of the country. Their expansion has become a massive threat to the development and growth of smallholder producers, as the retail stores tend to utilise the commercial producers to supply them with produce. The following section discusses the role players in the agriculture sector in South Africa.

2.8 AGRICULTURAL ROLE-PLAYERS

While the smallholder sub-sector experiences numerous challenges, the government has tried to support it through the supply of production inputs, extension services, mechanisation, and on-and-off farm infrastructure. This support has not yielded positive results, however, as numerous smallholder producers are still struggling to grow and develop. Multiple role players work with the government to assist the agricultural sector, yet their existence has not improved smallholders' ability to access formal markets, financial resources and integrated support. This is because the focus of the role players is concentrated more on the commercial agricultural sub-sector. Agricultural role players could play a major role in ensuring that the smallholder sub-sector fully participates in the markets due to integrated support being provided to this sector. The following section discusses the role of certain key agricultural actors (in addition to governmental institutions) in the smallholder sub-sector.

2.8.1 Land and Agricultural Development Bank of South Africa (Land Bank)

The Land Bank was established in 1912 as a government-owned development finance institution, with a mandate to finance agricultural development (Land Bank, 2017). In other words, the Land Bank is a "specialist agricultural bank that is guided by a government mandate to provide financial services to the commercial farming sector and agribusiness, and make available new, appropriately

designed financial products that facilitate access to finance by new entrants to agriculture from historically disadvantaged backgrounds" (Department of Agriculture, Forestry & Fisheries, 2012, n.p.). Although the focus of the Land Bank is more on providing finance to commercial producers, it also supports emerging farmers to graduate to commercial status. According to the Land Bank (2017: 47), the Commercial Development and Business Banking division "currently supports more than 1500 historically disadvantaged individuals through its direct lending".

2.8.2 Agri South Africa (AgriSA)

AgriSA is a federation of agricultural organisations that was established in 1904 as the South African Agricultural Union (AgriSA, 2018). It promotes the development, profitability and stability of large and small commercial agriculture through its involvement in, and input at, national and international policy levels. The policy of AgriSA is to promote the "work on trade negotiations, industrial policy, taxation, financing, land reform, labour laws, training, farmer development, environmental affairs, water rights & water pricing, other input-related issues, farm safety, law and order, infrastructure, technology development & transfer, and statistical information & local government" (Department of Agriculture, Forestry & Fisheries, 2014: 35). The organisation is also supposed to ensure that the needs of the smallholder producers are represented when the government is creating policies and programmes aimed at improving the agricultural sector, however it plays a minimal role in ensuring that the support provided by the government (financial, training, infrastructural or inputs) and policies created are of benefit to the smallholder producers. The focus of this organisation is therefore large commercial producers.

2.8.3 Agricultural Business Chamber

The Agricultural Business Chamber is an association of agribusiness, which is dynamic, voluntary and influential. The Chamber's mission is to "negotiate and position for a favourable agribusiness environment where members can perform competitively and profitably, and the core objectives of this association is to improve the commercial and sustainable agribusiness environment through liaison and co-operation with influential groupings within the business environment, both locally and internationally" (Agricultural Business Chamber, 2018: n.p.). The focus area of the association serves the broad and mutual business interests of agribusinesses in South Africa by facilitating considerable networking opportunities. By doing so, this will create a space in which South African agribusinesses can play a dynamic and innovative role within the local and international organised business environment, and are involved in the legislative and policy environment on many fronts. In most cases, smallholder producers are not well represented in this Chamber as

most of them spend their time on their farms, so they end up not benefiting from or participating in the Chamber.

2.7.4 Agricultural Research Council

The South African government has created structures such as the Department of Rural Development and Land Reform, the Department of Agriculture, Forestry and Fisheries, and the Agricultural Research Council to provide support to both emerging and large experienced producers. Research production, skills transfer and farmer development are some of the support being provided by these structures to the farmers. The Agricultural Research Council plays a vital role in giving broad research support to farmers in improving agricultural production. The success of the agricultural sector also depends on useful agricultural research and innovations. As indicated earlier, agriculture can contribute enormously to the development and growth of the country, but it is vital that the key role players and policymakers 'pull together' to improve access for new entrants and existing smallholder producers. Furthermore, key players such as producers, research institutions, industry associations, input suppliers and labour organisations should be involved in the agricultural value chain.

Based on the discussion above regarding role players, it can be seen that they support the Department of Agriculture, Forestry and Fisheries and provide various services to the provincial department of agriculture through research and development, marketing regulations, providing wholesale and retail funds to farmers, creating a favourable business environment, and providing financial services, but such services lack the ability to tackle the challenges facing the smallholder producers. Their main mandate is to continuously ensure that the large commercial sub-sector continues to play a critical role in the production of food for the country.

2.9 CHAPTER SUMMARY

The agricultural sector plays a crucial role in sustaining the well-being of citizens in both the rural and urban areas. The South African agriculture sector is described as a sector consisting of both large commercial farms and smallholder farms. Despite the policies and programmes that the government has created for smallholder producers, this sector continues to experience numerous challenges. In most cases, the failures of government policies and programmes towards the development of the smallholder sub-sector are due to communication gaps, a lack of ownership, and a dearth of integration and coordination between the leading government departments with other institutions.

Many smallholder producers in the country thus do not fully benefit from the support that is being provided by the government or any other structures that support the agricultural sector. Although the agricultural sector contributes to the economic growth of the country, it faces numerous challenges. These challenges include, amongst others, a lack of proper planning within government institutions, a lack of financial and human resources to effectively support the smallholder subsector, a lack of proper infrastructure within the areas that smallholders operate, and a lack of policy coherence concerning agriculture within government departments. Although the government has created different support programmes for the smallholder agricultural sub-sector, little impact has been noted. Ensuring the inclusive participation of smallholder producers and coherent/coordinated support programmes amongst government departments might assist in eliminating some of the challenges faced by the smallholder producers. The next chapter will present the theoretical and conceptual framework that underpins this study.

CHAPTER THREE: THEORETICAL FRAMEWORK

3.1 INTRODUCTION

The previous chapter provided the context in which the study was undertaken. It was highlighted that there are still socio-economic challenges that prevail in the country, some of which, such as poverty and unemployment, force households to join the agricultural sector either as workers or as smallholder producers. This chapter discusses the main theoretical framework that underpins the study. The leading theory that guides this study is the classical theory of organisation, which deals primarily with formal organisational structures that ensure efficiency and effectiveness within an organisation. The administrative theory relates to "principles of administration theory" and is closely linked to "formal organisation theory". Authors such as Mooney, Reiley, Fayol, Gulick, Urwick, Follet and Shelton provide a base for the administrative theory. This chapter first explains the operational terms that are key to this study followed by a discussion on the theoretical framework, which is administrative theory, employed in this study.

3.2 ADMINISTRATIVE THEORY

Nhema (2015: 165) stipulated that the "public organizations that are modeled on the classical organizational management theoretical perspectives have proven remarkably stable in different circumstances around the world". Due to the changing environment, organisations are expected to integrate the lessons learned over the past years with new strategies or ways of doing things in order to also to prepare for unforeseen circumstances. The first expert of the administrative theory was Henry Fayol (1916), who influenced management experts such as Dale, Follet, Gulick, Mooney, Reiley, Shelton and Urwick to contribute to the administrative management theory. Fayol published a French book titled: Administration Générale et Industrielle in the year 1916. In 1930, the text of Fayol's book was translated into English by Coubrough (Hatchuel & Segrestin, 2019). In any organisation, management is the most crucial element, and no organisation can achieve its aims without appropriate management (Murray, 2010). Mahmood, Basharat and Bashir (2012) noted that management is considered to be the hub of any organisation. They commented that management is a "function (planning, organizing, controlling, directing, leading, monitoring, staffing, communicating, and coordinating) to exercise" (Mahmood, Basharat & Bashir, 2012: 513-514). In other words, management is the process of reaching organisational objectives by working with and through people and other organisational resources.

Fayol (1930) made a vital contribution to management studies. Firstly, Fayol believed that organisational life is a combination of technical, commercial, financial, security, accounting and management activities. Secondly, he identified five crucial functions that embrace managerial activity, namely planning, organising, coordinating, commanding and controlling. Thirdly, he put forward 14 principles which are intended to guide the successful manager within an organisation (see Table 3.1) (Parker & Ritson, 2005). The administrative management theory was formulated by Fayol (1930) due to his belief that managers need to have a set of principles to guide, as well as to provide direction to, their management.

Furthermore, Fayol (1930) incorporated the orthodoxy of scientific management and applied it to the government, before presenting the most famous mnemonic in the field: POSDCORB. This mnemonic represents Fayol's theory of the seven major functions of management: Planning, Organising, Staffing, Directing, Coordinating, Reporting and Budgeting. Authors such as Grey (2005), Skaik (2008) and Mahmood *et al.* (2012) stipulated that the functions and principles set out by Fayol are still practiced in organisations today. As shown in the Table 3.1 below, Fayol suggested 14 principles which are intended to guide the successful manager within an organization.

Table 3.1: Fayol's 14 principles of management

Principle	Explanation
Division of work	Reduces the span of attention or effort for any one person or group. Develops practice and familiarity.
Authority	The right to give orders. Should not be considered without reference to responsibility.
Discipline	Outward marks of respect in accordance with formal or informal agreements between a firm and its employees.
Unity of command	One-man [sic] one superior!
Unity of direction	One head and one plan for a group of activities with the same objective.
Subordination of individual interests to the common good	The interests of one individual or one group should not prevail over the general good. This is a difficult area of management.
Remuneration	Pay should be fair to both the employee and the firm.
Centralisation & scalar chain of command	Is always present to a greater or lesser extent, depending on the size of the company and the quality of its managers.
Order	A place for everything and everything in its place; the right man [sic] in the right place.
Equity	A combination of kindness and justice towards employees.
Stability of tenure of personnel	Employees need to be given time to settle into their jobs, even though this may be a lengthy period in the case of some managers.
Initiative	Within the limits of authority and discipline, all levels of staff should be encouraged to show initiative.
Unity of personnel	Harmony is a great strength to an organization; teamwork should be encouraged.

Source: Parker and Riston (2005: 176)

These principles are devoted to the realisation of efficiency within the organisation. Fayol intended that these principles be used as a "general guide to help public servants, particularly the administrators, in understanding their organisational contexts" (Nhema, 2015: 170). Laegaard and Bindslev (2006) noted that if organisations are to adapt to the changing world quickly, they need strong leadership and management, a spirit of cooperation, as well as the ability to implement changes within the organisation.

One of the focuses of administrative theory is the personal duties of management, specifically at the granular level. In other words, the administrative theory is more directed to the management layer (Olum, 2004). It is the responsibility of management to take action, which will enable individuals to contribute towards accomplishing the organisational objectives. This means that management must create an environment whereby people can achieve organisational goals with the least money, materials, time and personal dissatisfaction. A wise exercise of administrative abilities contributes to the success of an organisation (Wren *et al.*, 2002; Agrannof, 2007). Authors such as Mooney and Reiley, who are contributors to the administrative management theory, also emphasised the significance of organisational structure being governed by universal principles (Tompkins, 2005). Although these universal principles do not resolve all problems that are found within the organisation, they play a critical role in the proper functioning of the organisation. Gulick expanded upon the underlying theoretical framework of Fayol, Mooney and Reiley by adding his conceptual distinctions, i.e. due to the high level of interaction between government departments, Gulick saw a more substantial need for coordinating activities.

Finding the right balance between the mission of the organisation and the structure of the administration is the primary aim of the administrative management theory, where organisational efficiency and effectiveness are emphasised to achieve the objectives of the organisation (Agrannof, 2007; Mahmood *et al.*, 2012). According to Mandl *et al.* (2008: 3), the examination of "efficiency and effectiveness is about the relationships between inputs, outputs, and outcomes". As show in figure 3.1 below, it demonstrates the conceptual framework of efficiency and effectiveness, creating a link between input, output and outcome.

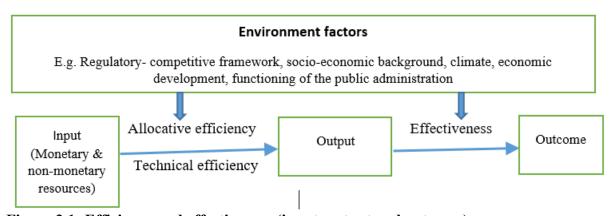


Figure 3.1: Efficiency and effectiveness (input, output and outcome)

Source: Mandl et al. (2008)

For any organisation to work towards achieving its goals, resources are an essential tool. Social and economic issues, legislative frameworks, and the performance of the organisation determine which resources can be utilised, in the form of human skills, production resources and financial resources. In other words, input in the form of monetary and non-monetary resources are required

to produce relevant outputs. The ratio of inputs to outputs gives efficiency, which can be measured according to allocative or technical efficiency. According to Akazili *et al.* (2008: 149), allocative efficiency refers to "how different resources inputs are combined to produce a mix of different outputs while technical efficiency is concerned with achieving maximum outputs with the least cost". Therefore, overall efficiency measures the combined effect of allocative and technical efficiency. Ouattara (2012: 38) stipulated that allocative efficiency is "essential if the organization reduce its costs at a given level of production". Mihaiu, Opreana and Cristescu (2010: 135) stipulated that it is "difficult to measure the efficiency in the public sector due to the inability to quantify the effects (outputs) accurately because they are direct but also indirect due to the externalities which they generate, but also due to the precise and accurate non-statement of the objectives".

Effectiveness implies a relationship between outputs and outcomes. For example, if the Department of Health decides to initiate a programme that aims to encourage people to stop smoking, then the output will be represented by seminars taught, and the number of participants who attended them. On the other hand, the outcomes can be represented by the number of participants who stop smoking and improve their lifestyles due to their attendance on the programme. The indicators for output are usually the performance of the public institutions, in other words, monitoring of the public sector activities' performance could improve information on output. As the main aim of the public sector is to improve the general welfare of citizens, then ensuring value for money and delivering proper services to them is critical. Either structural and institutional factors or other country-specific features can affect the performance of public institutions.

Inefficiency and ineffectiveness might be observed when no positive results are achieved from a planned project or programme. The outcome of any project or programme should cover all the "long-term effects of public programmes in terms of welfare and should capture the various dimensions of society values. Such achievements reflect the effectiveness of different kinds of policy measures" (Mandl *et al.*, 2008: 7). Outcomes are "the ultimate goals that are dependent on the effective use of input or output resources; however, government outcomes are usually related to policy objectives" (Manzoor, 2014: 4). The ability of the government to effectively utilise the resources allocated for service delivery could produce positive impacts on the wellbeing of the citizens.

Robbins, Coulter and Coulter (2005: 7) indicated that management includes the "effective and efficient completion of organisational work activities". To improve administrative efficiency, lines of authority must be present, and those at the top of the administration have the most responsibility for the organisation (Tompkins, 2005). According to Ackroyd and Fleetwood (2002:33), for organisations to exist at all, "human and material resources must be combined in such a way that their integration generates more value than their individual utilization". Therefore, any organisation strives to have low resource wastage while trying to attain its goals (Robbins, Coulter & Coulter, 2005).

As the resources are widely utilised within the organisation, the management must make every effort to ensure that they are used efficiently and effectively. Manzoor (2014: 1) noted that public administration is "traditionally grounded in the achievement of efficiency in the work of public departments in pursuance of goals related to the provision of public goods and services". The ability of the state to maintain the public institutions and deliver goods and services contains accumulative costs (Ziebicki, 2013; Manzoor 2014). According to Mihaiu, Opreana and Cristescu (2010: 135), "efficiency in the public sector must thus be seen as an amount between the economic efficiency and the social-environmental one". An efficient and expertly run administrative apparatus insulated from politics and under the authority of a powerful executive "would increase accountability and promote effectively, competently run public programs and policies" (Frederickson, Smith, Larimer & Licari, 2012: 46). Ziebicki (2013: 106) suggested that the criteria for evaluating organisational effectiveness should include "optimisation of resource use, innovativeness, performance as well as motivation". Curristine, Lonti and Joumard (2007: 9) stipulated that there are several potential institutional drivers of efficiency in the public sector, including:

- practices ensuring improved results, such as budget practices and procedures and performance measurement arrangements;
- arrangements that improve flexibility, including the devolution of functional and fiscal responsibilities from central to sub-national governments, agencification, intragovernmental coordination, human resource management arrangements and e-government;
- methods for strengthening competitive pressures through privatisation and other means; and
- various workforce issues, including workforce size and composition, the extent and nature of unionisation, and the attractiveness of the public sector.

Government institutions must operate as efficiently as possible to implement policies and deliver quality services to the public. Since the 20th century and into the 21st, critics have contended that the central issue of governments is their inability to manage their institutions efficiently. This means that administratively, the majority of public organisations are ineffectively organised and inefficiently run (Frederickson *et al.*, 2012). Authors such as Mouza (2006) and Hookana (2011) stipulated that the central concepts that are utilised in determining and accessing the performance of organisations are both efficiency and effectiveness. The main difference between these is that the key direct influences on efficiency are inputs and outputs. In contrast, the immediate influences on effectiveness are outputs, outcomes and environmental factors. Mandl *et al.* (2008: 2) noted that the difficulties to ensure effective and efficient service delivery continue to increase as "public spending has multiple objectives and because public sector outputs are often not sold on the market, which implies that price data is not available and that the output cannot be quantified". Management functions must be taken into consideration when formulating and implementing decisions to ensure effectiveness and efficiency. Management is a multifaceted task containing several diverse functions, which are discussed below.

3.2.1 Management functions

All businesses, governments and non-profit organisations should use their resources, including equipment, materials, people and money, to the best advantage to obtain the best results in the form of social usefulness, profits, or both. If human resources are to be utilised in the best possible way, there must be a clear set of responsibilities and tasks for everyone, or there will be confusion, a waste of time, and a duplication of effort. An organisation should thus enable its people to function as a unit to work towards achieving a common goal. All organisations have set objectives, and it is the responsibility of management to combine and use the organisation's resources to ensure that the organisation achieves those objectives. The main aim of public institutions is to provide goods and/services for the improvement of the well-being of the public. According to van der Waldt (2016: 184), "as organisational structures, these institutions do not achieve the objectives of their own accord, but a trained and experienced management corps is needed to convert objectives into activities".

As mentioned earlier, the administrative management theory's principles and functions are still widely used in organising and reorganising the institutions today. In other words, the classical functions still represent the most useful way of conceptualising the management job. The classical functions offer clear and discrete approaches of categorising the thousands of diverse activities

that management carries out and the techniques they utilise in terms of the functions they perform for the achievement of organisational goals. Fayol's (1930) contribution to the administrative management theory cannot be overstated. As he suggested, these principles are useful when they are considered as a guide only, and not as immutable principles. As shown in Table 3.2 below, it provides a summary of the management function that forms a crucial part of the administrative management theory.

Table 3.2: Summary of the management function process

Management functions	Description
Planning	Determining organisational goals. Determining the best plans & strategies to achieve goals.
Organising	Systematic coordination of tasks. Grouping of activities & resources. Structure of the organisation —align with goals & objectives
Bugdeting	Administers organisational finances. Attain, distribute, expend & control public finances.
Staffing	Attract, develop & obtain best personnel. Appropriately placed human resources.
Coordinating & directing	Group activities integration. Induce people to use their capabilities. Drafting specific procedures.
Reporting	How the jobs have been done. Progress towards achieving goals.

Source: Author's own (2018)

Fayol (1930) provided a conceptual framework for analysing the management process, which has functions that are overlapping in nature. In other words, each function blends into the others, and each affects the performance of the others. This section will discuss the elements or functions of management, including planning, organising, staffing, directing, coordinating, reporting and budgeting. Managers perform a wide variety of specific activities that can be classified under the functional typology developed by Fayol and others in the classical management school.

3.2.1.1 Planning

Modern organisations operate in a highly dynamic environment where change is a constant factor. As a result, it has become crucial for organisations to define their goals carefully and then systematically create plans for attaining them. Within the organisation, the goals can serve as a basis of inspiration for employees. Furthermore, goals "can provide an effective mechanism for evaluation and control" (Griffin, 2011: 196). The planning management function involves choosing responsibilities and activities that must be performed to achieve organisational objectives, outlining how the tasks must be exercised, and indicating when the tasks should be performed. The focus of planning is on attaining goals. In other words, the planning function clearly outlines what an organisation must do to be successful. Proper planning assists management to be future-oriented, and helps managers in their effort to coordinate their decisions. According to Robbins, Coulter and Coulter (2005: 159), the planning function gives "direction, decreases uncertainty, reduces waste and redundancy, and sets the standards used in controlling". There are specific steps, although they may differ from organisation to organisation, that management follows when creating plans for the organisation. Jeseviciute-Ufartiene (2014: 176) stipulated that the planning process is "connected with the process of the manager's mental activity". As the environment continuously changes, the managers understand the importance of planning for the management and development of an organisation. Usually, the managers utilise the following planning process:

- Self-audit and environmental survey, then state objectives.
- List alternatives ways of reaching objectives.
- Develop premises upon which each alternative is based.
- Choose the best alternative for achieving objectives.
- Develop plans to pursue the chosen alternative.
- Put plans into action.

There are normally two types of organisational plans – standing plans and single-use plans. Standing plans includes policies, procedures and rules, and are used repeatedly because they focus on organisational situations that occur frequently. On the other hand, single-use plans include programmes and budgets, and are only used once or a few times because they focus on dealing with relatively unique situations within the organisation. Robbins, Coulter and Coulter (2005: 162) stated that the "most popular ways to describe organisational plans are by their breadth (strategic versus operational), time frame (short term versus long term), specificity (directional versus specific), and frequency of use (single-use versus standing)".

According to Griffin (2011: 196), the planning function takes place within an environmental context, and managers will be unable to develop effective plans if they do not contextualise their planning. The involvement of personnel from all areas of management in the planning process

fosters a more significant personal commitment to the plan because it develops an attitude toward the plan as "our" plan rather than "their" plan. Carefully considered plans provide a solid basis for delegating duties and for projecting the returns from various combinations of resources. The success of planning efforts depends mostly on the skills and abilities of management. When planning is done appropriately, an organisation can gain the advantage of logical, systematic and purposeful action. From the above, it can be seen that planning is a tool that promotes cooperation between various units, individuals and departments inside and outside of the organisation. Furthermore, it provides direction to the organisation and encourages proactive decision-making.

3.2.1.2 Organising

Assigning tasks that were developed during the planning phase to different individuals or groups within the organisation can be described as organising. This entails the assignment of duties and the coordination of efforts amongst all organisational staff to ensure maximum efficiency in the attainment of predetermined goals. In other words, organising is a process of grouping those activities that are necessary to achieve common goals. This management function generates a mechanism to put organisational plans into action. The organising management function is crucial to the organisation as it is the primary mechanism with which managers activate plans. The objectives and the work that will be necessary to achieve them dictate the skills that will be needed. Furthermore, the organising function produces and upholds connections between all organisational resources by specifying which resources are to be utilised for specified activities, and when, where, and how the resources are to be utilised.

According to Smit, Cronje, Brevis and Vrba (2013: 218), the following are some of the reasons why the organising function is crucial in an organisation:

- Allocation of responsibilities organising leads to an organisational structure that indicates who is responsible for which tasks (Smit *et al.*, 2013: 218).
- Accountability the organising function implies that the responsible employees will be
 expected to account for the outcomes, positive or negative, for the portion of work directly
 under their control, i.e. it links results directly to the actions of an individual, section,
 department or business unit.
- Establishing clear channels of communication it ensures that communication is effective and that all information required by managers and employees at all levels of the organisation effectively reaches them through the correct channels, so that they can perform their jobs effectively.

- Resource deployment the organising function assists managers to deploy resources meaningfully.
- Division of work and departmentalisation the "total workload is divided into activities to be performed by an individual or a group of individuals. The related tasks and activities of employees are grouped meaningfully in specialised sections, departments or business units so that experts in various fields can deal with their specialised tasks" (Smit *et al.*, 2013: 218).

A comprehensive organising effort assists managers to reduce costly weaknesses, such as repetition of effort and unnecessary organisational resources. Based on the administrative management theory, managers should include structure, division of labour, span of management and scalar relationships in their organising efforts. The organising function enables management to decide on the positions to be filled and the duties and responsibilities attached to those positions. In summary, the critical functions of organising within the organisation include the "determination of the activities to be performed; formation of departments, sections & positions to perform those activities; and creating relationships among the various parts of an organisation" (Marume, 2016: 41). The main aim is to generate a framework for the performance of the activities of an organisation in a systematic manner.

3.2.1.3 Staffing

The staffing function involves acquiring and developing personnel for the jobs that have been created by an organising function. The main aim of the staffing function is to obtain the best candidates for the organisation and to develop the skills and abilities of those candidates. Cole (2005) stated that human resources in an organisation are its most valuable resource, while numerous authors such as Morrison and Milliken (2000), Detert and Burris (2007) and Takeuchi et al. (2012) have noted that organisations have become more dependent on their workers as a basis of positive submissions and insightful ideas. An organisation can have machines, money and even materials, but nothing will be done without the workforce. Olaniyan and Ojo (2008: 226) indicated that the "effectiveness and success of an organization, therefore, lies on the people who form and work within the organization. It follows that the employees in an organization to be able to perform their duties and make meaningful contributions to the success of the organizational goals need to acquire the relevant skills and knowledge". Therefore, the "right candidates need to be attracted to the organisation, recruited and selected to join it as well as trained to do their jobs effectively" (Cole, 2005: 22).

According to Thornhill (2012: 227), due to the numerous different functions that are involved in organisations, it is crucial to hire officials with "diverse qualifications and varied experience in the central personnel institutions (offices)". For this reason, staffing involves the recruitment, selection, training and development of individuals for organisational purposes. As organisations operate in a competitive environment, there is always a need for efficient and effective training for employees to improve productivity, which means that the necessity for organisations to "embark on the staff development programmes for employees has become obvious" (Olaniyan & Ojo, 2008: 227).

3.2.1.4 Directing and coordinating

As organisations cannot predict the problems and opportunities that might arise in the day-to-day work, lists of responsibilities and duties must be couched in rather general terms. In other words, managers must give daily direction to their subordinates. They should also make sure that every individual within the organisation is aware of the expectations of each situation and help them improve their skills. Ile (2007) noted that directing as a management function requires the public sector manager to have a strong conceptual understanding of how the various parts of the systems all work towards a common goal. This could assist in reducing "efforts expended in intergovernmental relationship conflicts, including the diffusion of tensions that may exist because of the disputes or competition between units and spheres of government" (Ugwulashi, 2012: 318). Ugwulashi (2012) noted that without directing, the organisation will not properly manage its activities and the roles of the members may conflict. This will lead to a situation where the organisational efforts will not be effectively channeled, and its resources are wasted.

Vanagas and Stankevič (2014: 115) indicated that coordination refers to the creation of "communication channels between people who are executing different work". Furthermore, they stipulated that coordination combines workers with different but interrelated work tasks to achieve organisational goals. Public institutions cannot afford to tolerate excessive levels of incoherence and apparent disorder in government. The institutions must, therefore, try to seize control of such levers as they can and create greater coordination. Eliminating redundant and contradictory programmes or projects and developing priorities more clearly within public institutions are two ways to save resources. It is crucial for public institutions to decide on the priorities of the governing system, rather than trying to focus on the multiple priorities that bubble up from each program and organisation to achieve better coordination.

In South Africa, after 1996, the concept of intergovernmental relations became more complex as the government introduced a system of co-operative governance. According to van der Waldt (2016: 166), programmes developed at the national level can succeed if they are successfully executed through the various executive institutions in the national, provincial and local spheres of government. It is, therefore, crucial that each sphere of government or government department ensures that its functions form a fundamental and co-dependent part of the government. Van der Waldt (2016: 209) stipulated that various factors can cause coordination problems in a public institution, including:

- a lack of cooperation;
- low employee morale with poor motivation (uncertain political climate);
- poor planning;
- poor relations between individuals, divisions or departments;
- ineffective communication; and
- exaggerated importance or urgency associated with one task, which could mean that
 individuals or departments are focusing on completing the task and consequently regard
 the task or activities of others as less vital (prioritisation).

Isac, Voichita and Guta (2009: 337) noted that coordination is attained by synchronising the actions of managers, the decisions taken at various hierarchical echelons, and the actions taken by employees from different structural compartments to achieve efficient projected goals. Coordination can be examined both vertically and horizontally in an organisation. The main aim of vertical coordination is to link the cross-cutting activities at all levels for the attainment of the organisational goals and objectives. The degree of formalisation, hierarchical weighting, centralisation and decentralisation, delegation of powers and division of operational and functional positions are the main parameters that determine the effective exercise of vertical coordination. On the other hand, horizontal coordination intends to synchronise activities in hierarchical levels that are similar or close, but belong to different departments (Isac *et al.*, 2009). Coordination is important within organisations because it assures team spirit, provides appropriate direction, enables motivation, utilises resources, assists in achieving objectives, improves relationships in the organisation, leads to higher efficiency, and increases the goodwill. To ensure the success of coordinating tasks and activities, relevant structures and departments must firstly agree on the goals and prioritisation, and then commit the resources required for accomplishment.

In South Africa, the agricultural function sits in the provincial sphere of government under the Department of Agriculture, Forestry & Fisheries, however the agricultural support provided to

smallholder producers also comes from government departments such as the Department of Rural Development & Land Reform, as well as the local sphere of government. The coordination of the support provided by different institutions is critical for the optimal use of resources, as well as to achieve intended objectives. Coordination is a part of planning because it makes clear what should be included in a good plan and how to execute it. Furthermore, it is part of organising as it takes the first lead. It is also part of staffing as it specifies who will be staff and the rational placement of these employees. Coordination is part of directing because it gives a clear focus, and is also part of reporting. Finally, coordination is part of budgeting because it gives a good appraisal (Osifo, 2012). There must be a precise determination of roles and an emphasis on responsibility so that there will be effective coordination.

3.2.1.5 Reporting

Ugwulashi (2012: 318) indicated that in any organisation the reporting function "creates effective, realistic, good, and unbiased communication that enhances feedback for organizational growth". The reporting function tends to instill trust and confidence among workers towards their work, and includes keeping everyone informed about the performance of the organisation through records, research and inspection (Gulick, 1937). The reporting function further provides an opportunity for monitoring and evaluation within the sphere of intergovernmental relations of various activities undertaken to measure actual against expected outcomes. In addition, reporting checks the quality of services that have been rendered by the organisation, and plays an essential role in promoting communication and gathering of information that may be useful for other organisational activities or managerial decisions. Adebayo (2000) noted that reporting is one of the functions that form the foundation of the responsibilities of government, as it allows for regulating issues of balancing, conciliation, conflict resolution, and compromise in ensuring adequate service delivery.

3.2.1.6 Budgeting

As government departments plan, organise, staff, direct and report, the budgeting function is one of the critical functions within the organisation. According to Ugwulashi (2012: 319), "budgeting involves planning processes of human, material and financial resources while estimating the judicious use of input to achieve results". Given the fact that government resources, in most cases, do not match with the societal needs, the decision around budget allocation becomes crucial for intergovernmental relations to achieve the goals of the government. The budgeting function is one of the main tools of the organisation that is used to control its activities and programmes (Ile, 2007).

Simon (1997) have criticised administrative theory for its neglect of the human element in the organisation and its lack of consistency. Simon's (1997) attacks on Gulick and Urwick principles indicated that they are little more than ambiguous and mutually contradictory proverbs. In his attack, Simon came up with a different approach to administrative theory that emphasises the importance of decision-making processes within the organisation. Nevertheless, other researchers who defended Gulick and Urwick's (1937) work argue that Simon's criticisms were unable to take into consideration the elusiveness and depth of Gulick's (1937) argument. Despite such objections, this theory is still relevant today. Breese (2013) noted that the administrative theory remains relevant as some of its principles, such as coordination, division of work and delegation, are always present and being utilised in numerous organisations. Furthermore, the author stipulated that no organisation can operate without taking into consideration some of the principles of administration. Chalekian (2013: 4), citing Shafritz and Ott (2001), indicated that due to a lack of uncritical evidence of Simon's work by other scholars, the "classical approach persists as the base upon which other theories are built".

3.2.2 Institutional set-up within which municipal markets operate

The main task of the local government is to address the needs of the local communities by utilising public resources. One of the challenges that the national and provincial government has been trying to tackle without success is ensuring market access to smallholder producers. Section 155(6) (a) of the Constitution of RSA of 1996 indicates that markets and municipal abattoirs are part of the local government competency, i.e. it is the responsibility of the municipality to ensure that markets are created not only for agricultural products, but also for other products coming from different sectors. In most cases, the markets fall under Business Support and Markets Units in numerous municipalities. Under such a Unit, the municipality must promote equitable access and participation in markets. The local government is thus responsible for municipal planning, which incorporates planning connected to the spatial, economic and social development of the municipality. The main tool that is used by the municipalities for their long-term plans is an integrated development plan, which should set the priorities for budgets, capital investments and service delivery over a plan's five-year lifespan. Furthermore, a plan must ensure that it addresses the issues that are of national importance which are set by the national and provincial governments. For the municipal plans to be achieved, the municipalities set clear tasks and responsibilities for each municipal department. For example, the municipal markets must provide a trading facility for both formal and informal businesses within eThekwini Metropolitan Municipality, and develop and maintain mutually beneficial relationships with suppliers/ producers.

The Municipal Finance Management Act (Act no. 56 of 2003) stipulate that the municipality must "secure sound and sustainable management of their financial affairs and other institutions in the local spheres". Furthermore, the Constitution of RSA of 1996, S214(1) stipulates that local governments are entitled to an equitable share of revenue raised nationally. On the other hand, the Constitution also requires that the "municipalities raise their revenues from service fees, property rates, surcharges and other taxes, levies and duties". The developmental programmes of municipalities must also be aligned with their budgets. The revenue received from the national government and revenue raised internally should assist municipalities to create proper infrastructure and human resources within the municipal markets. The National Treasury (2018b: 77) reported that "numerous municipalities continue to face institutional and financial problems in breakdowns in service delivery and mounting debts"; most municipalities owe money to institutions such as Eskom and the Water Boards. The inability of the municipalities to pay their debts undermines their financial sustainability and indicates that there are deeper underlying problems, such as "weakness in revenue collection, and underinvestment in maintenance and renewal, which compromise the reliability of basic services" (National Treasury, 2018b: 77).

The inability of the municipalities to adopt credible budgets also affects their ability to implement policies and be financially sustainable. Public servants should ensure that the markets are properly managed and controlled with a given budget by the municipality. Well managed, financially stable municipalities can support economic transformation and strengthen the local economy to accelerate municipal development. When municipalities face capacity issues, it is critical for both the national and provincial governments to strengthen and support their capacity so that they will be in a position to manage their affairs. As the agricultural sector falls under the provincial government competency, sometimes the municipalities discuss issues faced by smallholder producers with the provincial agricultural department so that necessary support through extension services can be provided. Furthermore, it is the responsibility of the provincial agriculture department to coordinate all agricultural activities so as to avoid any duplication in terms of programmes, support and waste of resources. As far as the markets are concerned, the provincial department of agriculture does not have any role to play in terms of ensuring that the agriculture-related markets achieve its goals.

The inability of the national, provincial and local government to properly coordinate the support provided to smallholder producers, such as development planning, allocation of resources, implementation, and monitoring development programmes, highlights its main weakness in addressing the challenges facing smallholder producers. Due to financial and time constraints, this

study considers the practical implication of three administrative principles – planning, organising and coordination. The administrative theory was thus selected for this study because the researcher wanted to intensively investigate the role and actions of government institutions with regard to municipal markets, mainly with relation to their benefits to smallholder producers. In addition, the study incorporated the administrative theory to provide the lenses that were used to explore the types of government influence on municipal markets, the issue of market access by smallholder producers, and growth in eThekwini Metropolitan Municipality, KZN.

By utilising the administrative theory, the researcher was able to break down critical concepts from the administrative functions to understand the underlying effects of municipal markets on smallholder producers in eThekwini Metropolitan Municipality, KZN. Furthermore, the main variables that were critical for this study have been highlighted as planning (developing policies), coordination (integrating different government institutions' efforts towards unity of actions, e.g. infrastructure development and implementation, and projects or programmes aiming to assist agricultural smallholder producers), and organising (determining appropriate resources such as financial and human resources, training of smallholder producers, and training officials who deal directly with smallholder producers. The financial and human resources also link the staffing and budgeting functions of the administrative theory). Hence, only two functions of the administrative theory – directing and reporting were not applied in this study. Directing and reporting are largely an overlapping terms that refer to the application of all basic management activities; that is, one cannot plan, organise, or coordinate without derecting and reporting. Thus, directing and reporting are essentially by definition part of everything a manager does. Numerous authors such as Agranoff (2007), McDonald (2010), Ugboro et al. (2011), Ugwulashi (2012), Chalekian (2013) mentioned that planning, organising, coordinating and budgeting are the four most common management functions which are necessary for successful management of organisations. Information based on the literature that was consulted and reviewed, the theoretical areas that are crucial and relevant for this study, and how the critical variables for the study inter-relate, is shown in Figure 3.2 below.

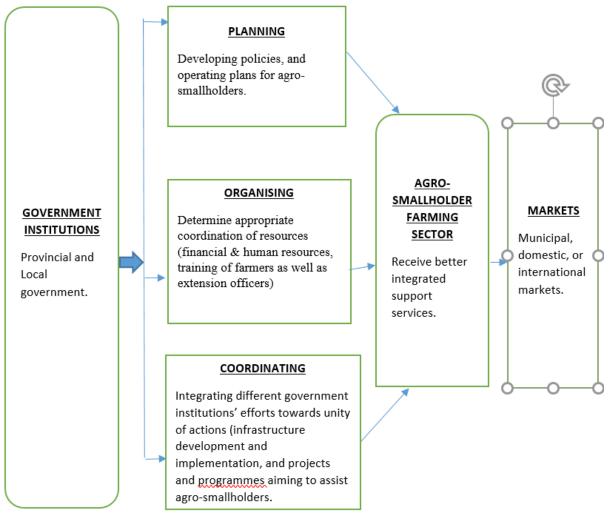


Figure 3.2: Key concepts for the study emanating from the administrative theory Source: Author's own (2016)

Thapa (2009: 12) suggested that the government institutions can support the smallholder farming sub-sector through "policy interventions that create a conducive economic environment for market-led development, and by providing stable economic incentives and necessary public goods and services". On the other hand, Raju and Singh (2014) noted that the growth and development of smallholder producers and their access to the market could be improved if certain factors, such as a lack of capital, poor infrastructure, inadequate farming and extension services, and poor business skills, can be minimised. According to Thapa (2009: 12), the first phase of "government policies and programmes should establish the basics"), with investments in public goods to develop proper infrastructure that will enable the smallholder producers to raise their productivity levels. The ability of both the provincial and local spheres of government to effectively design policies, programmes and projects that support the desires and needs of smallholder producers could assist such spheres to implement support services that could benefit the farmers.

The intervention of government is crucial, especially in providing infrastructure, capacitating smallholders, and providing market information to smallholder producers through different structures such as extension officers (Louw *et al.*, 2007b; Louw *et al.*, 2008; Thapa, 2009; Poulton *et al.*, 2010; Aliber & Hall, 2012; Abdulsamad *et al.*, 2013). Therefore, the ability of both the provincial and local spheres of government to ensure adequate human and financial resources within their agriculture-related departments, as well as to organise trainings for both officials and smallholder producers, could be crucial in supporting and enabling a conducive environment for the smallholder sub-sector.

For smallholder producers to be attractive and competitive within the markets, they need to have access to the necessary knowledge, markets, market information, skills, infrastructure and resources to sustain and succeed in the agricultural sector (Hazell *et al.*, 2007; Nicholls *et al.*, 2013). Obi *et al.* (2012: 18) indicated that smallholder producers continue to experience numerous challenges concerning access to markets, which force them into "exploitative exchange arrangements, which further erode their welfare and drive them deeper into destitution". This situation calls for a robust, integrated and supportive institutional environment to put the agriculture smallholder sub-sector in a position to access markets and obtain profits from their farming operations (Obi *et al.*, 2012).

Van Tilburg and van Schalkwyk (2012) also emphasised that for the agricultural smallholder subsector to operate adequately, there needs to be a positive and robust supportive institutional environment. In this situation, the government is a critical influential environmental actor, which comes into contact with smallholder producers through the provision of infrastructure, by organising human resources to provide training for farmers, and/or by designing programmes or projects for farmers. The support provided by both the provincial and local spheres of government towards the smallholder sub-sector should be integrated or coordinated to have a high impact and enable the smallholder to better access markets. In other words, the coordination of government institutions' efforts, such as the planning of policies, projects or programmes, and the organisation of financial and human resources for the provision of infrastructure and training, is vital for promoting the growth and development of the smallholder sub-sector. Such a coordination effort could assist the government to avoid the duplication and wastage of limited resources towards supporting the smallholder sub-sector.

The key concepts that were investigated in this study include planning policy-making; providing programmes, projects and infrastructure; organising financial and human resources, and

coordinating the effort of government processes to develop the smallholder agricultural sub-sector. The study explored how government institutions plan, organise and coordinate activities to support the agricultural smallholder sub-sector's growth and development. In other words, the research examined the influence of governmental administrative processes when providing financial and human support, as well as the infrastructure necessary for the agricultural smallholder sub-sector. For any institution working with the smallholder sub-sector, the administrative processes must be integrated with those of other actors to achieve the best results from the support provided.

The inability of the smallholder sector to access markets and the lack of governmental assistance to resolve this issue of market access implies that farmers in the smallholder sector must compete for market share on their own in both the domestic and international markets. This situation thus calls for government institutions to create a proper environment in which the agricultural smallholder sub-sector will have the opportunity to access formal markets (Kherallah & Kirsten, 2001; Jari & Fraser, 2009).

3.3 CHAPTER SUMMARY

This chapter has discussed the theoretical framework of the study. The focus was on the most famous mnemonic in the field: POSDCORB. This mnemonic represents Fayol's administrative theory of the seven major functions of management: Planning, Organising, Staffing, Directing, Coordinating, Reporting and Budgeting. As stipulated earlier, management functions refer to those managerial dimensions that contain the conceptual and directive categories of general administrative functions. The establishment of any institution is designed to attain specific objectives.

The attainment of organisational objectives can be realised by ensuring proper planning, coordination and an organisational structure, as well as by providing financial and human resources. Managers within the public sector must thus be able to handle their administration processes through planning, organising, budgeting, staffing and coordinating efficiently and effectively. Tackling the smallholders' challenges depends on the proper execution of the government's management functions. Incoherent planning, a lack of coordinated policies or programmes, and a lack of financial and human resources highlight the need for managers to thoroughly understand the importance of their administrative functions. Furthermore, management functions are not only vital within government institutions, but could also be more beneficial to the smallholder farming sub-sector when they are correctly understood and implemented.

Smallholder producers also need to do proper planning and organising regarding resources that will be required, targeted markets for their produce, and financial resources to ensure that operational and logistical costs are covered. The next chapter examines the literature on the spheres of government, the legislative framework of government, intergovernmental relations, service delivery, infrastructure development, agricultural extension services, food security, municipal markets and financial and human resources for small businesses within the local and international contexts.

CHAPTER FOUR: LITERATURE REVIEW ON AGRICULTURAL SECTOR & RESOURCES

4.1 INTRODUCTION

The previous chapter provided an overview of the theoretical and conceptual framework that underpins this study. This chapter presents a review of the literature on the agricultural sector, as well as the government's role in creating an enabling environment for the agricultural sector. More specifically, the chapter reviews the implications for smallholder producers based on the changes in agricultural development. In most developing countries, the agricultural industry is the largest, with its performance playing an important role in a country's economic growth and development. In other words, the agricultural sector plays a crucial role in addressing some of the socio-economic development needs of countries, such as food security, the environment, poverty, culture as well as social viability. The effective utilisation of agricultural resources can assist in achieving a considerable rate of increase in agricultural production. For this to happen, however, a government's policies, strategies and plans for the agriculture sector should be formulated in such a way that they allow the sector to provide a secure and abundant supply of food.

This chapter examines various issues related to rural development and the agricultural sector as they are directly or indirectly related to the objectives of this study, including: rural development, population growth and food production, agricultural growth influences on poverty, agricultural resources and systems, government spending in the agricultural sector, extension services for smallholders, and the state of intergovernmental relations in promoting the agricultural sector in South Africa.

4.2 RURAL DEVELOPMENT AND SUSTAINABLE LIVELIHOOD

In many countries, the mission of the government is to promote rural development so as to ensure the wellbeing and livelihood of people in the rural areas. Approximately 70% of the world's population lives in rural areas (Centre for the Study of Africa Economies (CSAE), 2014; World Bank, 2016), with agriculture being the main source of income for poor households in these areas. Many of the households operate their own farms, and few individuals are hired as agricultural wage workers. Increasing the profitability and productivity of farms, particularly smallholder farms, is the main way out of poverty ((World Bank, 2008b; Asfaw, Shiferaw, Simtowe & Lipper, 2012). Furthermore, Asfaw *et al.* (2012: 283) stipulated that improvements in technology and

research are vital to the development of agricultural productivity, thereby minimising "poverty and meeting demands for food without irreversible degradation of the natural resource base".

Nwagboso and Duke (2012: 27) indicated that it is regrettable that the "rural population sometimes do not benefit from the over-dramatized rural transformation agenda acclaimed by most countries particularly in the third world social formations". Governments in most countries have developed and implemented policy strategies to deal with issues of rural backwardness and socio-economic challenges, which have resulted in both successes and failures. According to Sam (2014: 14-15), each country must "look inward to design appropriate strategy based on its peculiarities and development antecedents within the framework of any chosen strategy, and utmost consideration must be given to people's empowerment among others".

Local economic development (LED) is one of the tools or strategies that governments use to deal with socio-economic issues in rural settings. The main aim of LED is to "shape up the economic capacity of a local area to improve its economic future and the quality of life of all" (Sam, 2014: 15). LED is a strategy whereby the local actors work together with the local government and other key stakeholders to stimulate and grow the local economy, and ensure that the revenues generated by local businesses circulate amongst the local people before being shared with other external regions. Sam (2014: 15) noted the basic principles underlying LED are to:

- prioritise job creation and poverty alleviation;
- target previously disadvantaged people, marginalised communities and geographical regions to allow them to participate fully in the economic life of the country;
- promote local ownership, community involvement, local leadership and joint decision-making;
- use local resources and maximise opportunities for development;
- involve the integration of diverse economic initiatives in an all-inclusive approach to local development; and
- include different stakeholders so that their views, concerns and issues can be included in the planning process.

For the government to implement LED strategies to lessen poverty and transform rural areas, certain challenges must be addressed, including the below:

- Good governance and LED: this can occur through the promotion and coordination of projects, policies and programmes that represent an extensive range of interests (Sam, 2014).
- Business enabling environment: this entails supporting institutions and strategies that combine governance with culture, clear decision-making, clear rules and procedures, a safe political environment, ease of business entry and efficient regulation enforcement (Sam, 2014).

Sharp *et al.* (2011: 200) stipulated that the "literature on both community development and local food systems identify local organizations as a key element in effecting change". The local participation of citizens is one of the practices of self-development. Participation enables a local community to increase their capacity to add value to community change, become integrated into collective action, be aware of the challenges, and provide alternatives for specific issues. According to Green and Haines (2008: 81-82), the ability of community members to work together and share their input is more "invested in the success of development activities; and social processes that bring people together to discuss concerns can facilitate agreements being reached and plans of action being made and implemented".

The government alone cannot achieve rural development, i.e. the private sector, non-governmental organisations, communities and civil society, together with the public sector, must work together to promote local and rural development. Numerous writers, including Korsching and Allen (2004), Muske, Woods, Swinney and Khoo (2007) and Sharp *et al.* (2011) noted that proper interventions have had significant implications for rural development and the standard of living in rural areas. Well-structured institutions are thus required for tackling all the components of rural development. Neves (2017) indicated that there are four key rural livelihoods:

- Wages: this source of income comes from those who migrated to urban cities to look for jobs, i.e. family members who are based in the urban areas send money 'home'.
- Social grants: in South Africa, numerous grants are received by deserving citizens. The types of grants include those for older people, people with disabilities, war veterans, dependents, foster children, child support, grant-in-aid, and social relief of distress. Due to the high rate of unemployment within the rural areas, the majority of households depend on the pensioner grant.
- Agricultural activities: due to the large sizes of the tracts of land owned by rural residents, they use them to plough, plant and keep livestock. Agricultural subsistence activities play

a crucial role in sustainable livelihoods and ensure food security for rural citizens. Most people who are involved in agricultural activities are middle-aged women, with a few middle-aged men and young people.

• Informal economic activities (small-scale survivalist businesses): in addition to agricultural activities, rural households collect firewood and make mud bricks to sell to sustain their families.

As the rural areas experience high levels of socio-economic challenges, the above-mentioned serve as important sources of income. The rural areas face several developmental challenges, such as infrastructure and services deficit (e.g. a lack of clean water, electricity, proper roads, transportation, libraries, schools and clinics/hospital services). Another issue is the rapid growth in population in South Africa, especially in the urban areas, which is threatening food supplies as the land becomes overcrowded by households, reducing the space for farming activities. The following section discusses the impact of population growth on food production.

4.3 POPULATION GROWTH & FOOD PRODUCTION

Agricultural production gains over the past half-century have assisted many people to escape poverty and have provided a platform to stimulate economic growth in urban and rural areas in many countries. The introduction of the Green Revolution Intensive Plan in 1960 led to the increase of world agricultural production between 1961 and 2007, while the population grew from 3 billion to 6.8 billion. The green revolution intensive plan contributed to this production growth by introducing new varieties, inputs, water management and rural infrastructure (Pretty, Toulmin & Williams, 2011: 6). Unfortunately, Pretty *et al.* (2011) indicated that despite the developments made in African agriculture, "continued population growth means that the per capita availability of domestically grown food has not changed at the continent scale for 50 years and has fallen substantially in three regions. As a result, hunger and poverty remain widespread".

Amongst the United Nations Sustainable Development Goals 2030, tackling poverty and hunger while minimising socio-economic and environmental impacts continue to be critical. According to Sala *et al.* (2017: 387), guaranteeing "sustainable human development means being able to feed an increasing population, decoupling socioeconomic development from environmental impact, and addressing the evolving food and energy demand".

The ongoing population growth has resulted in both negatives and positives for the agricultural sector and food security, such as huge unemployment, particularly among young people. Agricultural development should thus be seen as an opportunity to contribute towards reducing

unemployment and stemming urbanisation. The high population within the urban areas further raises the issue of dealing with poverty reduction, as it forces the agricultural sector to produce more food while placing pressure on natural resources. According to Baudron and Giller (2013) and Gibbs *et al.* (2010), third world countries will be able to meet the challenge of increased production as they are among the most bio-diverse spaces on the planet. The rapid growth of population within the country could result in inadequate agricultural resources or resources that are too difficult to exploit due to remoteness from the population centres, lack of infrastructure, high incidence of diseases, or other circumstances. Thus the scarcity of agricultural resources due to high population growth could be one of the factors that determines food insecurity (Alexandrato, 2005). Pimentel & Pimentel, (2006) noted that the utilisation of resources by more people can harm human life unless the resources are conserved.

Schneider *et al.* (2011: 205) pointed out that the resource scarcity is not only an acute problem in isolated locations, but is also a "global threat because the total use of resources for food production in all countries has reached substantial proportions". Population growth and environmental changes put the essential resources for food production, such as land and water, under pressure. In other words, population growth contributes to the exploitation of natural resources by people. There is increasing pressure on agricultural food industries to "quantify and improve their environmental performance over time, while simultaneously increasing production to meet global demand" (Sala *et al.*, 2017: 390). The continuous increase in population growth and environmental changes will affect future farmers as they will be required to produce more food with limited/fewer resources (Schneider *et al.*, 2011).

Pretty et al. (2011: 11) noted that the ongoing "population growth, rapidly changing consumption patterns, and the impacts of climate change and environmental degradation across the world are driving the limited resources of food, energy, water, and materials towards critical thresholds". In addition, war and conflict are affecting agricultural production. Research by UNEP (2016) and Sala et al. (2017) found that 'resource smart' food systems are of utmost importance, with Sala et al. (2017) arguing that the increasing demand for food may provide new opportunities for the agricultural farming sector.

The rapid population growth in South Africa may force the government to redirect resources away from investment towards providing healthcare for mothers and newborns into food production. Furthermore, the government will have to provide housing, food, sanitation, water and other basic services to the population that will have doubled or even tripled in size. In this way, a population

has the potential to influence all aspects of poverty. As the populations increase in almost all countries, it is therefore crucial to discuss the role of agriculture in addressing poverty.

Even though a lot of people still live in rural areas in South Africa, the population in the urban areas continues to grow at the fastest rate due to rural-urban migration. This will continue in South Africa as urban development is an important part of economic development. According to Nora *et al.* (2011: 15), economic growth is "invariably accompanied by a transition from a predominantly agrarian economy to an economy dominated by the production of non-agricultural goods and services". Furthermore, the authors stipulated that rural migrants tend to be attracted to the urban areas as there is an expectation of higher standards of living, but sometimes they are unable to generate income or find job opportunities in urban cities which tend to lower this expectation (Nora *et al.*, 2011). Although some high-value agriculture is carried out near urban cities, it is more often a sector of last resort due to the small amount of land available.

The primary drivers of rural-to-urban migration include the high rate of unemployment and poverty within rural areas, economic opportunities in urban areas, and social factors such as the search for educational opportunities in urban areas (Nora *et al.* 2011; Arndt, Davies & Thurlow, 2018; Mlambo, 2018). Mlambo (2018: 65) stipulated that the rural-to-urban migration is a "response to the disequilibrium within a country's economic setting". The development of rural areas is entirely dependent on natural resources, therefore the rural economy tends to be limited to a specific number of industries, such as agriculture, forestry, livestock, and cultural and historical tourism. This means that the rural population has fewer choices in social and economic terms when compared to urban residents.

The lack of adequate conditions for intensive development in rural areas makes it a less attractive place to live. In other words, the remoteness of the rural regions from urban centres, as well as poor working and living conditions due to a lack of infrastructure and service delivery to support social and economic development, contribute to rural-to-urban migration in South Africa (Surchev, 2010). Furthermore, most jobs in the rural areas are for unskilled workers, thus skilled workers with higher qualifications migrate to cities for better job opportunities (Surchev, 2010; Mlambo, 2018). As highlighted earlier, the various challenges facing the rural areas affect the population at large within those areas, not just the smallholder producers. Some of the many implications include overpopulation and a resultant lack of government service delivery (a significant population increase may lead to a rise in crime and put more pressure on government resources), and a lack of housing. As the migration rates tend to surpass the urban job creation rates (Mlambo, 2018), the

ability of the government to invest in rural areas and promote agricultural and non-agricultural activities may provide an opportunity to reduce internal migration and provide better income and job opportunities in rural areas.

4.4 AGRICULTURAL GROWTH INFLUENCES ON POVERTY

The inability of developing countries to progressively grow their economies has created ongoing problems with hunger and poverty (Collier 2007; Benno *et al.* 2007; Binswanger-Mkhize, 2009). In fact, poverty levels continue to rise in absolute and relative terms in developing countries. Poverty has made Africa more dependent on food imports, making the continent much more vulnerable than others to recent food price shocks. According to Binswanger-Mkhize (2009: 4), "the failure to grow has retarded the demographic transition that has significantly lowered population growth rates elsewhere".

A growth in agriculture could raise agricultural workers' incomes, improve the sector's profits, increase non-farm benefits and employment, lower food prices, tighten the urban and rural labour markets, and raise unskilled wages countrywide (Calzadilla *et al.*, 2009). The growth of the agricultural sector would thus have a direct impact on rural and urban poverty and hunger amongst poor communities. CSAE (2014) found that the indirect result of agricultural growth and productivity is a reduction in the price of food, which mostly benefits poor people in remote rural areas. Agricultural growth and productivity thus have a considerable influence on nutrition, poverty reduction and/or food security, which are linked to growth in other sectors. For the agricultural sector to contribute positively to tackling poverty, appropriate agricultural resources and systems are needed to ensure the productivity and growth of the sector.

4.5 AGRICULTURAL RESOURCES AND SYSTEMS FOR PRODUCTIVITY

Numerous households in developing countries, particularly in rural areas, directly or indirectly depend on the agricultural sector for a living. According to Matlon (2004), there are at least six ways in which agricultural productivity increases can improve the lives of the rural poor. These include "giving households the means to diversify their diets and thus improve their nutritional status; increasing their production of food; generating new employment and pushing up rural wages; increasing marketable surplus that they can sell to earn income; stimulating non-farm employment through backward and forward linkages tied to agricultural production as well as multiplier effects in the broader economy; and lowering food prices and thus increasing the real incomes of food deficit households" Matlon (2004: 42). Gubbels (2004: 59) stated that

disadvantaged rural citizens must be empowered so as to "contribute to policy-making and to negotiate with a decentralised state to establish a balanced, pro-poor rural development agenda".

Several authors, including Godfray et al. (2010) and the UNPD (2011), noted that the agricultural sector throughout the world faces terrific pressure to produce and supply more food, fuel and fibre, as the universal population is anticipated to increase by three billion people from 2010 to 2050, in parallel with an upsurge in international wealth and per capita consumption. On the other hand, CSAE (2014: 4) stipulated that the agricultural sector's "central role in the economy, combined with its importance for food security and the persistence of low rural living standards, make the agricultural sector a prominent focus for policy in developing countries". According to CSAE (2014: 20), the agricultural sector has definite relations to other sectors of the economy, and "agricultural growth has beneficial economy-wide effects". Furthermore, the author indicated that numerous countries in Asia with smallholders accomplish high levels of productivity, as measured in output per unit of land. This is not the case in sub-Saharan countries, however, where small farms are associated with low levels of output per worker. This is because the majority of smallholder farms are operated by family members/labourers, i.e. the productivity of a farm cannot necessarily be determined by its size, as small farms can be highly productive with high quality. The motivation or encouragement of family members (who normally work as labourers on their farms) to work hard on their farm could increase the level of productivity. Numerous countries are trying to support their smallholder producers so that they will increase their productivity and move towards a market orientation. The following characteristics largely influence the growth and productivity of the agricultural sector:

4.5.1 Land resource base

Land as a resource is one of the basic elements of production for food and other agricultural products, and is also a socio-cultural and ecological resource, as well as an economic factor. Land further provides infrastructure and urban and industrial space, and can be used for cultural, heritage and recreational purposes. Furthermore, land provides a foothold for vegetation, and stores and transfers water and solids (Akinnagbe & Umukoro, 2011). A country's level of economic development has a strong effect on its approaches toward land; when a country is more industrialised, a smaller number of people will participate in its agricultural sector.

The availability of productive land is the most crucial resource for the agricultural sector. The shortage of productive land within a country is one of the main limitations to agricultural growth and production. Agricultural activities may not be possible without involving natural resources,

which are the basis of all production, thus the growing natural and environmental resource degradation is causing a central challenge to economic development. Furthermore, the expansion of urban environments, rising populations, industrialisation, changing patterns of human settlement, and unsustainable land-use systems all pose a severe risk to the environment.

As previously noted, land is a critical resource for agricultural activities. When discussing the issue of land as a resource, it is critical to discuss the history of the country concerning land. Numerous countries that lived under colonial rule have struggled with the issue of the rightful reallocation of land and resources to previously marginalised people (McCusker & Fraser, 2003; Magnusson, 2013). The following section discusses land reform, with an emphasis on the South Africa context.

4.5.1.1 Land reform in South Africa

Land is the most basic need for individuals in both rural and urban areas (Claassen *et al.*, 2014). Different countries implement land reform programmes for various reasons. In South Africa, land reform is implemented for three reasons: Tenure reform, restitution and redistribution which falls under the land reform programme. The ruling white minority stole large amounts of land from black Africans in South Africa under the colonial and apartheid systems. The policies of the apartheid government pushed millions of black South Africans into homelands and townships and overcrowded and impoverished reserves. Due to this history, after 1994, the democratic government created a land reform programme to assist black people to gain access to the land which had been taken from them. The Constitution (1996) provided the legal basis for the state to implement the land reform programme. Although land restitution started in 1994, the bulk of claims involving people within the rural areas remain outstanding (Jacobs, 2003). Atuahene (2011: 121) noted that reclaiming the land was an "urgent rallying cry for the liberation movement in South Africa, but in the years after white minority rule ended, it has been challenging for the new regime to redistribute land impartially and efficiently". Using land for agricultural activities or production is a central point for most land reform beneficiaries.

Reducing poverty, generating employment, attaining an equitable distribution of income, meeting the basic needs of most of the people, transforming racialised patterns of land ownership, and enhancement of equity and social justice are amongst the reasons given for instituting land reform programmes (Turner, 2001; Lahiff, 2008; O'Laughlin *et al.*, 2013). According to Claassen *et al.* (2014: 224), other reasons for undertaking land reform include the "enhancement of crop production and nutritional welfare, reduction of social unrest and instability, wealth creation,

reduction of rural-urban migration, grassroots empowerment, and movement towards more democratic societies".

The South African government's land reform policies have been criticised as being ineffective and often unfavourable to the livelihoods of smallholder producers in the country. In 1994, the main goal of the government was to transfer 30% of land to non-white ownership by 1999 (Moseley, 2007), but the government achieved only 8% of reallocation by 2010 (Atuahene, 2011). Due to the failure of the government to meet the 30% target of land transfer, the new date to achieve it was pushed to 2025 (O'Laughlin et al., 2013). Low political mobilisation, a bureaucratic claims process, and the agricultural farming system still being dominated and controlled by the legacy white farmers, are the main reasons for the slow pace of land reform (Moseley, 2007; Magnusson, 2013). Another issue, according to Claassen et al. (2014), is that challenges such as a lack of human and financial resources, limited administrative skills, the ultimate downscaling of training and development assistance, advanced ages, and a lack of education affect those farmers who have benefited from the land reform programme. The Department of Rural Development & Land Reform's Annual Report of 2016-2017 (8) show that the department has delivered a "total of 201,430 hectares, which is inclusive of land transferred through tenure programmes, redistribution, and the settlement of restitution claims and out of 201,430 hectares, 136,938hectares has been allocated to smallholder producers, contributing to the NDP target of 300,000 smallholder producers by 2030".

The South African government has been using the market-based or 'willing buyer, willing seller' approach to redistribute the land. The market-based approach was promoted in South Africa in 1993. The main features of the market-based approach are "non-interference with land markets and unwillingness by the state to expropriate land for land reform purposes or (until recently) to enter the market as a market-player; reliance on landowners to make available land for sale; self-selection of beneficiaries; and the purchase of land at market price" (Kepe & Hall, 2016: 16). Furthermore, the authors noted that the approach of 'willing buyer, willing seller' had not produced the intended outcomes, as the landowners have been able to inflate prices and, in some instances, have chosen not to sell to land reform applicants. In this market-based approach, the state had become the purchaser of the land to obtain the land for reallocation to the beneficiaries without the transfer of title. The slow progress on the issue of land reform in South Africa has increased pressure on the government to resolve challenges in its land reform programme, as some opposition parties are demanding the expropriation of land without compensation, because the land

policies introduced by the government are being perceived as a failure due to their "slow pace, ineffectiveness in enhancing the livelihoods of beneficiaries and improving their tenure security" (Kepe & Hall, 2016). According to Greenberg (2013: 23), the land reform programme in South Africa has failed to transfer land fast enough to create the basis for small-scale agriculture as an option.

In 2018, the Parliament of South Africa created the Joint Constitutional Review Committee, which facilitated a discussion on land expropriation without compensation with various members of the public. Ngqakamba (2018: n.p.) noted that the "public hearings process formed the foundation for the report's findings, and the Committee received 449,552 authentic written submissions along with thousands of oral submissions". After a rigorous process of public hearings with members of the public, the private sector, other civic entities and farmers' representatives, the Committee recommended that Section 25 of the Constitution be amended to allow land expropriation without compensation (Gerber, 2018). The report of the Joint Constitutional Review Committee was adopted in 2018 by parliament, although a few political parties were against the adoption of the recommendations made by the Committee, claiming that the public participation processes were flawed.

The land question is a sensitive issue. The debate on land expropriation continues within the country, although both houses of Parliament (National Assembly & National Council of Provinces) voted in favour of land expropriation without compensation. Political parties such as the NFP, EFF, ANC and UDM support the expropriation of land without compensation, while political parties such as the DA, IFP, FF Plus, Cope and ACDP oppose it (Gerber, 2018). Furthermore, the non-governmental organisation that is linked to the solidarity trade union, AfriForum, whose aim is to protect the rights of the Afrikaner minority, is also against land expropriation without compensation. Furthermore, AgriSA, a federation of agricultural organisations that mostly represent white farmers, maintains that it would continue to pursue all credible avenues to protect farmers and has vowed to challenge the amendment of Section 25 of the Constitution in court (Ngqakamba, 2018).

The expropriation of land without compensation is seen as a "legitimate option for land reform to address the historical wrongs caused by the arbitrary dispossession of land, and, in so doing, ensure equitable access to land and further empower the majority of South Africans to be productive participants in ownership, food security and agricultural reform programmes" (Gerber, 2018: n.p.). Furthermore, those who support land expropriation without compensation see it as part of uniting

the nation. The expropriation of land without compensation is seen as a tool that will assist smallholder producers to acquire land that will help them increase their production.

In South Africa, the issue of land is, and always has been, linked to political, social and cultural power (Ngqakamba, 2018). The issue of land is elevated, with emotions attached to it and heightened due to the oppressive history of the country. The political parties and other civic and private organisations that oppose land expropriation without compensation argue that this will have negative consequences for the country. The following are the main reasons they are opposing land expropriation with compensation (Ngqakamba, 2018):

- If implemented, "land expropriation without compensation will have a drastic effect on the
 economy, with lower capital formation, a deep recession, and rising budget deficits and
 debt levels." It is pointless to try to implement land reform policies that have repeatedly
 demonstrated a destructive influence on the economy and which threaten the livelihoods
 of the most vulnerable members of society.
- There is no need to amend the Constitution to effect substantial land reform, and the government of the day, which is the ANC, has failed to implement proper land reform policies.
- Land expropriation without compensation could send South Africa's banking industry into a crisis if bonded properties are not protected. When a bonded property is expropriated, it is likely to result in a direct impairment of that land on the balance sheet of a bank.
- Land expropriation without compensation would harm international investments.

At the 54th Congress of the ANC in 2017, the party resolved that to ensure radical socio-economic transformation, both land reform and rural development should be the key part of the programme. To this end, "expropriation of land (and the land is specifically mentioned, not the wider property of the Constitution) without compensation is envisioned as one of the key mechanisms available for the government to give effect to land reform and redistribution" (du Plessis & Dube, 2018, n.p.). The issue of land expropriation without compensation is still a work in progress, therefore, as some citizens are challenging the amendment to the Constitution through the courts of law.

4.5.2 Agricultural water resources and systems

Water is vital for "agricultural production, and in Africa, one-third of the population lives in water-scarce regions, and water resources are coming under increased pressure" (Glatzel, 2015: 18). Factors such as climate change, population growth, urbanisation and industrial development are

putting pressure on water supplies, especially in the semi-arid and arid regions. In addition, factors such as land degradation, poor infrastructural development and market linkages, limited technological inputs, and unreliable rainfall are contributing negatively to agricultural productivity (Tilahun, Teklu, Michael, Fitsum & Awulachew, 2011). Water is critical for all sectors as well as human needs. This means that the agricultural sector competes with other sectors as well as human needs for water. It is thus crucial for all sectors and households to find sustainable ways of preserving water resources. During a water crisis (either through drought or flooding) the agricultural sector is most affected, as this sector depends on water for production.

In most cases, agricultural production largely depends on irrigation and rain-fed systems. In the rain-fed regions, farming is the largest activity. The rain-fed systems assist in ensuring the benefits of precautionary prospects and in coping with the consequences of water shortage. The significance of rain-fed agriculture differs between countries, and "rain-fed agriculture is practiced on 80% of the world's agricultural area and its importance" (Satishkumar, Tevari & Singh, 2013: 23). The rain-fed agricultural system plays an important role in the "production of food for poor communities in developing countries" (Devendra, 2016: 4). Olayide, Tetteh and Popoola (2016: 30) also mentioned that rain-fed agricultural production systems are vulnerable to seasonal variability, which affects the livelihood outcomes of farmers and landless labourers who depend on this system for agricultural production. Sometimes the rain-fed agriculture maintains a vital role in food production.

Proper investments and policy reforms are required to improve the contribution of rain-fed agriculture. In India, most people (an estimated 82%) in rural areas live in rain-fed regions (Devendra, 2016). This means that the farmers who depend on the rain-fed system are entirely dependent on the weather with bimodal rainfall. Farmers who rely on the rain-fed system could yield low crops as the "rainfall could not provide the right amount of water at the time required by the crops throughout the growing period" (Tilahun, 2011: 241). Farmers' dependence on unpredictable rainfall is therefore one of the restraining factors for agricultural productivity (Olayide, Tetteh & Popoola, 2016; Nhamo, Matchaya, Nhemachena & van Koppen, 2016). Furthermore, Nhamo *et al.* (2016: 141) stated that the reliance on "rain-fed agriculture has caused food insecurity at both the household and national level, as the rainy seasons have become unpredictable and shorter, while the recurrence of floods and droughts have been more frequent in the last decades due to climate change and variability".

The smallholder sector typically depends on rain-fed systems, as they do not have resources to utilise both rain-fed and irrigation systems. On the other hand, the large-scale commercial sector utilises both these production systems. It is therefore crucial for the government to ensure that there is proper planning, a careful selection of farm enterprises, and greater investment in infrastructure in those areas where farmers depend heavily on the rain-fed system for production. Throughout the world, numerous countries experience insufficient rainfall. Higher production and yields, lower vulnerability to the seasonality of agricultural output, and a lower risk of crop failure are some of the benefits of the agricultural irrigation system (Olayide, Tetteh & Popoola, 2016). Irrigation enables farmers to adopt more diversified cropping patterns and invest in high-value, market-oriented production. Most large-scale producers utilise irrigation production systems, while few smallholder producers use them as irrigation systems demand high capital investments. Due to climatic conditions that affect the agricultural sector, finding effective measures through the irrigation system to use water efficiency is critical. Therefore, extra technology alongside better agricultural practices is necessary for ensuring greater water-use efficiency (Levidow, Zaccaria, Maia, Vivas, Todorovic & Scardigno, 2014). According to Tilahun et al. (2011: 239), the productivity of large-scale or small-scale irrigated agriculture is higher than rain-fed agriculture.

4.5.3 Infrastructural development

In most cases, agricultural activities are perceived as a rural activity, but the metropolitan areas also play a significant role in food production. The urban regions have both opportunities such as easy access to large markets and infrastructure, and challenges such as contending with large non-farm developments and populations (Sharp, Jackson-Smith, & Smith, 2011). Some of the facilities and activities that assist in sustaining growth in the production and generation of income in the rest of the country's economy is infrastructure. Infrastructure is categorised into soft and hard infrastructure; soft infrastructure are institutions that are needed to the economy such as, in case of smallholder producers, extension services, government, financial system and marketing system, while hard infrastructure are physical things that are critical to the economic activity consists of services such as roads, water and power.

Numerous authors, such as Stevens, Schieb and Andrieu (2006), Masuku (2013) and Wiewiora *et al.* (2016), noted that infrastructure development plays a critical role in the social and economic development of the any country, which means that proper infrastructure ensures that production, distribution and trade activities within the country are facilitated effectively. For instance, the

infrastructure of roads and transport is critical for farmers' procurement of inputs and produce distribution. Furthermore, adequate market infrastructure must be in place to support the production system and trading of the farm produce. Within the agricultural sector, the infrastructure mainly contains an extensive series of services that facilitate production, purchasing, processing, preservation and trade. Therefore, the infrastructure within the sector is categorised as input-based infrastructure, which includes fertiliser, seed, farm equipment and pesticides; physical infrastructure such as storage, processing, transport and road networks; resource-based infrastructure such as water and power; and institutional services such as extension services, research and development services, information and communication services, marketing, and financial services (Patel, 2010). In the smallholder farming sector, investment in infrastructure remains under-resourced.

Numerous authors, such as Merna and Njiru (2002), Mamatzakis (2003), Fan and Zhang (2005) and Adepoju and Salman (2013), maintained that the ability of the government to invest in infrastructure, especially in the rural areas, may contribute to a rapid growth in agricultural production. Andersen and Shimokawa (2006) also noted that adequate markets, appropriate institutions and proper infrastructure are essential for increasing agricultural productivity. On the other hand, infrastructure may also have some less desirable consequences, for example more roads may mean more traffic and accidents, and building dams may result in the destruction of large areas of countryside and the displacement of populations (Stevens *et al.*, 2006: 14). Due to globalisation, it is critical that governments plan, develop and finance infrastructure across national borders to ensure interlinkages among countries. Therefore, long-term thinking and vision about the infrastructure is critical to ensure the long-term outcomes needed to bring about changes in the country.

The ability of any country to increase and maintain the standards of living of the citizens in any economy depends on the quality and quantity of infrastructure services (Andersen & Shimokawa, 2006). In both developed and developing countries, the main traditional source for infrastructural investment is through public finance. Merna & Njiru (2002) noted that the risks associated with infrastructure financing have been the burden of governments. Due to the growing pressure of societal needs, the financing and maintenance of infrastructure by the private sector has become critical. Funding and building infrastructure through innovative public-private partnerships ensures the success of infrastructure projects.

Numerous countries invest on energy, roads, health and school facilities, water and sanitation to ensure proper development in a country. Likewise, the South African government has prioritized such economic and social infrastructure. In trying to improve the welfare of citizens and attracting investors, the public sector spent more than "R2.7 trillion on infrastructure between the year 1998/99 and 2016/17" (National Treasury, 2018a: 139). Mostly, the government uses the money generated from taxes to finance infrastructure development in the country. Although agricultural resources and systems are crucial for production, governments and other stakeholders must also continuously find the best ways of dealing with climate change, as agriculture is climate dependent. Climate change affects not only agricultural productivity, but also agricultural infrastructure and household farm revenues. The following section discusses the impact of climate change on the agricultural sector.

4.6 CLIMATE CHANGE – IMPACT ON AGRICULTURE

The agricultural sector supports between 70% and 80% of employment within the Sub-Saharan African economies (Commission for Africa, 2005; Calzadilla *et al.*, 2009). The key determinant of agricultural productivity is climate, thus climate change directly influences livestock and crop production, input-output supplies, as well as other components of agricultural systems. Climate change factors such as high temperatures, droughts, floods and windstorms directly affect livestock and crop yields. According to Glatzel (2015: 11), under climate change, the "maize, rice and wheat prices in 2050 are projected to be 4%, 7%, and 15% higher respectively". The World Bank (2008) and Nelsona *et al.* (2014) identified changes in temperature, climate variability, precipitation, and surface water runoff as the main factors through which climate change affects agricultural productivity. Satishkumar, Tevari and Singh (2013: 23) noted that the variations in the "mean and the variability of climate parameters have an essential influence on agricultural cropping systems especially under water-limited production such as in the arid and semi-arid regions".

Schellnhuber (2014: 3274) stipulated that the agricultural production is "sensitive to weather and thus directly affected by climate change, and plausible estimates of these climate change impacts require the combined use of climate, crop, and economic models". Climate change affects not only the agricultural sector, but also the general public. For instance, the ability to purchase food and food prices are directly affected by changes in commodity supplies and the resultant price changes. In other words, higher food prices lead to lower consumption levels, which adversely affects consumer and community well-being (Bryan *et al.*, 2013). Glatzel (2015: 11) noted that the

"effects of climate change on global food security will have wide-ranging impacts on health and nutrition, soil quality, and water availability".

According to Porter *et al.* (2014), the fifth Assessment Report of the Intergovernmental Panel on Climate Change states that the adverse effects of climate change affect the smallholder producers who depend on natural resources in developing countries. In response to climate change (changing economic and physical conditions), numerous large commercial agricultural sectors have adapted their agricultural systems and practices. In other words, the commercial agriculture sub-sector has adopted new technologies, invested in genetic improvements, changed their institutional arrangements, and changed their crop mixes to improve and sustain their productivity. Smit and Skinner (2002) stipulated that the agricultural sector is fundamentally sensitive to the conditions of climate, and is one of the most exposed sectors to the threats of climate change (Chen, Chen, & Xu, 2016). Furthermore, Smit and Skimmer (2002: 86) indicated that "adaptation is certainly an important component of any policy response to climate change in this sector". Numerous possible adaptation methods have been suggested. These include, amongst others, various forms of adaptation methods that include managerial, technical and financial; international, regional and local scale; and contributors from industries, government and agricultural producers.

Chen, Chen and Xu (2016: 105) indicated that the development of effective strategies whereby agriculture can adapt to climate change over the coming decades requires farmers, agribusiness, crop scientists, and policymakers to understand potential climate risks posed by climate change. As the agricultural sector remains one of the primary sources of income for most rural communities, "adaptation is imperative to enhance the resilience of the agriculture sector, protect the livelihoods of the poor, and ensure food security" (Bryan *et al.*, 2013: 26). Selecting or identifying proper adaptations are likely to meaningfully improve (or decrease) the magnitude of potentially useful (or contrary) influences on agricultural productivity (Kurukulasuriya & Rosenthal, 2003).

Authors such as Howden *et al.* (2007) and Schlenker and Lobell (2010) noted that the government, in generally, needs a more significant investment in heat and drought-tolerant varieties, disaster relief, irrigation systems, insurance and social protection programmes, and integrated strategies to reduce livelihood risks. On the farm level, adaptations to climate change may include numerous responses to "crop management practices, livestock management practices, land use and land management, and livelihood strategies" (Bryan *et al.*, 2013: 26-27). The links between adaptation and agricultural productivity, as well as net income from agricultural production under climate

change, has been examined by numerous writers (Kurukulasuriya *et al.*, 2006; Seo & Mendelsohn, 2008; Di Falco *et al.*, 2011; Di Falco *et al.*, 2012). Authors such as Maddison (2007), Nhemachena and Hassan (2008), Gbetibouo (2009), Bryan *et al.* (2009), Deressa *et al.* (2009), Hisali *et al.* (2011) and Tambo and Abdoulaye (2012) have focused on the adoption of adaptation strategy factors as well as the support of policymakers regarding adaptation. It is crucial to note that some of the adaptation strategies are based on measures that are appropriate for the short and long term. For instance, short-term adaptation options could include farmers' responses, temporary migration, and insurance. On the other hand, long-term adaptations could consist of changing crop types and locations, developing new technologies and modernisation, improving water management, and labour migration (Kurukulasuriya & Rosenthal, 2003).

Numerous countries, including South Africa, are employing different strategies so that the agricultural sector aligns itself with the changes in climate conditions. One of the ways that was recognised by South Africa's agriculture sector as fostering more viable practices is through reusing farm waste. Countries in Sub-Saharan Africa are particularly vulnerable to adverse impacts from climate change because of their limited capacity to adapt. Numerous writers, including Johnson *et al.* (2003), the World Bank (2008a) and Calzadilla *et al.* (2009), have claimed that the high dependence of Sub-Saharan countries on rain-fed agriculture, along with their lack of infrastructure, low population densities, moderate use of fertilisers, heterogeneity, agro-ecological complexities, and degraded soils, are preventing their agricultural sectors from growing. Numerous countries are trying to find ways to deal with the effects of climate change, not only on the agricultural sector but also on other sectors. It is, therefore, critical to discuss the spending on agriculture by all stakeholders that have an interest in the agricultural sector.

4.7 GOVERNMENT SPENDING IN THE AGRICULTURAL SECTOR

A comparison of different interventions by utilising evidence is critical for designing national agricultural plans to enhance the allocation of public resources within the sector. As the agricultural sector is a major economic sector in numerous developing countries, "agricultural investment plans are expected to consider not only impacts on farming and food security, but also indicate contributions to high-level outcomes (e.g., economic growth, job creation, and poverty reduction) and reflect national development processes and objectives (e.g., urbanization and industrialization)" (Benfica, Cunguara & Thurlow, 2018: n.p.). Authors such as Taylor and Filipski (2014) and Arndt *et al.* (2016) stipulated that economy-wide spillovers linked with investments in the agricultural sector can be substantial, while Lowder and Carisma (20110) mentioned that

investment in the agricultural sector is a crucial factor in productivity growth and is important to meet the growing demands of the sector. The African Union (2003), the World Bank (2007) and the G8 (2009) also noted that investment in the agricultural sector is important for economic growth, poverty reduction, and improved food and nutrition security.

Foreign or domestic investors and institutions in the public or private sectors can invest in the agricultural sector. In low- and middle-income countries, the largest source of investment in agriculture are private domestic investors (mostly farmers and businesses) (Lowder, Carisma & Skoet, 2012). The next largest source of investment are domestic public investors (primarily national governments). This is followed distantly by foreign public investors, such as development partners, and foreign private investors, such as corporations.

In most cases, governments invest broadly in agricultural research and development, which creates intellectual capital – a vital input for raising the long-run productivity of the agricultural sector. The importance of investing in public research and development in the agricultural sector had been recognised by developed countries for more than a century, while developing countries have introduced International Agricultural Research Centres (IARCs) (Schmidhuber & Bruinsma, 2011). Such investments have shown success as global agricultural production has improved and the prevalence of hunger has declined. According to Lowder, Carisma and Skoet (2012: 6), public investments in the agricultural sector help to generate a suitable enabling environment and thereby influence the incentives for farmers to invest and directly create other forms of capital that support the development of a thriving agricultural sector.

In any business, financial resources play a critical role in enhancing the productivity of that business. A lack of access to financial resources thus affects the ability of farmers to boost their agricultural production. Wagan, Jingdong, Shuanxi, Noonari, Memon, Rahman and Pirzado (2016: 64) noted that credit facilities form an integral part of stimulating the rural economy, and "credit is an important tool for getting the inputs in time increasing thereby the productivity of the farms particularly those of small ones". In most cases, the agricultural finance system consists of formal (such as commercial banks, Land and Agricultural Banks, and agricultural cooperatives) and informal sources of credit supply (such as traders, private moneylenders, friends, commission agents and relatives) (Dong *et al.*, 2010).

Dong *et al.* (2010) indicated that one of the limitations of informal credit is that it is "highly segmented, with participants limited to only those with personal relationships". Informal sources

of credit supply remain critical for the smallholder sector, because most do not have formal employment and have inadequate income to access formal sources of credit supply to finance their projects (Masuku, 2013). According to Dong et al. (2010: 3), "formal financial institutions have strict requirements for rural loans and limit lending". In most cases, the formal sources of credit are largely utilised by large-scale commercial producers (Bradstock, 2005), as financial institutions consider smallholder producers to have low levels of production efficiency (Tregurtha & Vink, 2008), and they are regarded as high agricultural lending risks compared to large-scale commercial producers (Tregurtha, Vink & Kirsten, 2010; Owusu-Antwi & Antwi, 2010; Chisasa, 2014). Therefore, a smallholder's ability to secure finance for their operational costs and business growth remains largely underserved by both public and private sector financial institutions (Williams & van Zyl, 2008; Agricultural Business Chamber, 2011). Coetzee and Machette (2011) indicated that over 60% of smallholder producers access credit services from sources other than formal financial institutions, while just 5% acquire capital from formal financial institutions. A lack of access to agricultural credit services by the smallholder sector affects its ability to invest in productivityenhancing technologies and inputs. The availability of credit to the farmers is much more critical than any other factor to increase resource use efficiency in the agricultural sector (Ayaz & Hussain, 2011).

Chisasa (2014: 100) stipulated that the smallholders' ability to "access credit in South Africa remains a confounding problem". As many of the households in rural areas depend on the agricultural sector for their livelihoods, the government must create policies and strategies that will enable them to access formal credit more easily. One of the key elements of development in any business is access to financial services (Hinson, 2011; Chisasa, 2014), while the agricultural sector's growth and development are important for the overall development of the entire country, more especially in the rural areas (Qwabe, 2014). A study by Duy (2012) on the impact of agricultural credit on farm productivity demonstrated that a farmer's education level, access to credit and farm technology positively influence their productivity, while access to formal sources of credit has more effect on production than access to informal sources of credit. Furthermore, Noonari *et al.* (2015) conducted a study on the impact of credit on agricultural productivity and noted that access to credit contributes positively to farm productivity.

As much as financial resources are critical for organisations, human capital is also a significant success factor for sustained organisational performance. For an organisation to improve its performance and therefore achieve its goals, workers who are skilled, knowledgeable, experienced,

and in possession of the required expertise in their professional areas in the organisation are required (Du Plessis, 2016). According to Shaw, Park and Kim (2013: 572), human resources can be viewed as "potentially valuable, rare, and non-substitutable resources because they are scarce, specialised and hold tacit knowledge". Wright and McMahan (2011) defined human capital as the sets of knowledge, information, ideas, skills and institutions that assist individuals to increase their performance and productivity. Human resources are thus a critical asset for organisations. Human capital signifies the human factor in an organisation, whereby a combination of intelligence, skills, knowledge, aptitude and expertise provides the organisation its distinctive character, with those traits contributing to production and profitability, thereby improving organisational performance (Yusuf, 2013; Gazor *et al.*, 2013; Rahim *et al.*, 2017). Employees are the pillar of an organisation, as an organisation cannot survive without its employees (Kucharíková, Tokaríková & Blašková, 2015). According to Contò, Fiore, La Sala and Papapietro (2014: 125), an increase in labour productivity because of the "increased efficiency and skills in a more educated workforce" has a positive effect on the agriculture sector.

For an organisation to gain a competitive advantage and efficiency, human capital has been found to be of the highest importance. Furthermore, the ability of an organisation to gain a competitive advantage requires the selection and retention of talented and skilled personnel. Therefore, an employee's talent, such as flexibility, excellent performance and creativity, play an essential role in creating a competitive advantage for the organisation (Armstrong, 2008). Pasban and Nojedeh (2016: 251) indicated that organisations must raise the level of organizational learning, increase the level of employees' skills and abilities through encouraging them, and provide an atmosphere where knowledge is created, shared, and applied, and learning becomes a habit. Therefore, the individual's abilities, knowledge and skills strongly influence organisational success. While financial and human resources are vital within the agricultural sector, it is also essential to discuss the agricultural extension services as one of the critical supports designed for farmers.

4.8 AGRICULTURAL EXTENSION SERVICES

The agricultural sector is the backbone of most developing countries; it plays an important role in building a strong economy and reducing inequalities while nurturing natural resources (Oladele, 2015). According to Maoba (2016: 167), the agricultural sector is vital to "rural development and contributes significantly to any initiative to alleviate poverty". As numerous households derive their livelihood from agricultural activities, agricultural growth and development is vital for poverty reduction. The need for agricultural extension and advisory services is thus crucial. The

agricultural extension and advisory service is one of the key tools that the government uses to attain its agricultural developmental goals, and is specifically for supporting the smallholder subsector. The achievement of these goals could be through the "provision of appropriate agricultural information and knowledge to enable and capacitate land users and farmers towards improved, sustainable and economic development" (Zwane, Groenewald & Van Niekerk, 2014: 49).

The ability of farmers to adopt new ways of farming, such as new agricultural and resource management practices, technological change, the use of improved seeds, and inputs can sustainably improve agricultural productivity. With the provision of agricultural extension services, farmers can be informed about the latest agricultural technologies, get help in dealing with adverse shocks, as well as acquire guidance on best agricultural practices (Dercon et al., 2006; Hart, 2011; Jouanjean, 2013; Eric et al., 2015; Isaac, 2016). Gêmo, Stevens and Chilonda (2013: 59) defined agriculture extension services as a "function of providing needed and demand-driven knowledge and skills to rural men, women, and youth in a non-formal, participatory manner, to improve their quality of life". Anaeto (2012: 181) noted that agricultural extension and advisory services have three components: "social component (involving better training, leadership development, increased passion for development, better health of the customers); educational component (involving changing the behaviour complex and attitude of the people); and economic component (involving better financial management, increased income of the clientele, increased crop yield)". The agricultural extension services thus incorporate all characteristics of agriculture, which comprise the provision of appropriate information; connecting farmers with sources of farming inputs, markets and credit facilities; and providing education services to producers.

Davis (2015) highlighted the "core competencies" that are required for extension officers around the globe to function effectively. These areas of expertise are broad, however, and extension officers cannot be experts in all technical and functional fields. They must be in a position to know how to broker information needed by the farmers, and they must be backed up by subject matter specialists (Davis & Terblanche, 2016). Table 4.1 below summarises these core competencies.

Table 4.1: Core competencies for extension support services

Area	Competencies needed: Extension officers should be able to	
Changing role of extension in innovation and development	Explain the role of extension in innovation and development, Give an overview of approaches and tools, Select appropriate approaches and tools for a given context.	
Extension programme management	Conduct extension programme planning, implementation, monitoring, and evaluation; Use different types of problems olving techniques; Build strategic partnerships, network, and manage stakeholders; Pluralism in extension and the need for and methods of coordination and linkages.	
Professional ethics	Apply values and good principles such as honesty, respect, accountability inclusion, transparency, integrity; Recognise extension as a science and extension as a profession.	
Communication for innovation	Communicate with all stakeholders in the agricultural innovation system, Manage knowledge effectively, Identify and use appropriate ICTs, Identify cultural and gender implications in communication and innovation.	
Community mobilisation	Conduct livelihoods assets assessment, Use problem solving and decision making approaches, Explain leadership principles and leadership development, Explain implications of culture and diversity, including gender and youth, Mobilise resources.	
Value chain extension	Explain basic concepts and tools for value chain approaches, Link farmers to market (input and output markets), Analyse consumer preferences, Respond to standards certification and regulatory systems.	
A gricultural entrepreneurship	Analyse business opportunities and conduct market analysis Promote farm entrepreneurship	
Gender and youth issues in agricultural extension and rural development	Appreciate gender differences through the following questions: who does what, with what, how and why?, Use gender-sensitive approaches, Engage and retain rural youth.	
Farmer institutional development	Explain or define theory, models, and types of groups and organisations, Manage group dynamics, Explain how the policy environment and "rules of the game" influence organisations.	

Source: Davis (2015)

Such core competencies are critical for extension officers, as government institutions and other agricultural stakeholders view the role of agriculture extension as critical in efforts to raise agricultural production and productivity. In most cases, government institutions utilise a top-down approach instead of a knowledge sharing and facilitated learning approach when delivering extension services to farmers. In this case, as noted by Raidimi and Kabiti (2017: 52), extension officers "regard their clients as partners in the development of new skills and generating innovations rather than assuming the farmers to be mere recipients of externally generated

scientific knowledge which may or may not be suited to their livelihoods and farming context". Abdu-Raheem & Worth, 2016: 217 noted that a change of extension approach from singular, narrowly defined model of public provision transfer services, which is broadly recognised is required in attaining effective and competitive agricultural development.

For agricultural extension officers to achieve more efficiency in reaching farmers, the construction of proper roads and communication infrastructure is critical. As highlighted earlier, such infrastructure is not only vital for agricultural extension officers to deliver regular and reliable services, but are also essential for the development of farmers. Abdu-Raheem and Worth (2016: 217-218) pointed out that the extension and advisory services face numerous challenges of tackling objectives, including:

- promoting environmentally sustainable agricultural practices;
- responsively and efficiently linking farmers to local and international markets;
- reducing the defencelessness of the rural poor and enhancing their voices;
- viewing agriculture as part of an all-embracing set of rural growth strategies, including non-farm employment and enterprise expansion;
- pairing technology transfer with other services relating to both input and output markets;
- the need to develop competence among farmers, including not only training but also a reinforcement of innovation developments, establishment of linkages between farmers and other organisations, as well as development of institutional and organisational supports to strengthen the bargaining power.

Smallholder farmers are the most vulnerable population to weather-related disasters and climatic shocks. Factors such as conflict, poor governance, disease and market fluctuations compound their vulnerability. According to Davis, Babu and Blom (2014: 1), extension services may offer an opportunity for strengthening the resilience of rural smallholder producers by increasing their access to tangible and intangible resources, such as inputs and knowledge.

4.9 ROLE OF WOMEN IN AGRICULTURE

As the agricultural sector acts as a vital engine of growth and poverty reduction in many countries, women are critical resources in this sector and within rural economies. The role of women in households is very multi-faceted, as they pursue multiple livelihood strategies and manage complex households. According to the SOFA Team and Doss (2012: 2), women's activities typically include "producing crops, tending animals, processing and preparing food, working for wages in agricultural or other rural enterprises, collecting fuel and water, engaging in trade and

marketing, caring for family members and maintaining their homes". Furthermore, the authors indicated that numerous of these activities are critical to the welfare of households within rural settings, yet they are still not defined as "economically active employment" in national accounts.

Studies on women in the agricultural sector in India and other developing countries all point to the conclusion that "women contribute far more to agricultural production than has generally been acknowledged" (Lal & Khurana, 2011: 30). The agricultural labour force in sub-Saharan Africa is made up of almost 50% of women. Women and men play a critical role in the agricultural sector, but in "rural areas, the role of women in agriculture is more pronounced, and most of the agricultural activities revolve around them" (Ishaq & Memon, 2016: 1). Although women contribute to the agricultural sector, particularly rural women, their contribution is ignored and unappreciated by policy-makers (Ishaq & Memon, 2016). Fabiyi, Danladi, Akande and Mahmood (2007) stipulated that women account for 70% of agricultural workers and 80% of food producers.

Bandama (2016: n.p.) indicated that within the smallholder sube-sector, "women account for 60% to 80% of farmers in the developing countries". Furthermore, Bandama (2016) highlighted that a lack of the following still presents a challenge for women in the sector: access to markets, inputs, land, assets, knowledge, information, time, access to extension services, decision-making authority, and income. While women play an active role in the smallholder sub-sector, the relationship between various agriculture actors is vital in the growth and development of the agriculture sector. The following section discusses the intergovernmental relations in South Africa.

4.10 INTERGOVERNMENTAL RELATIONS

De Villiers (2012: 672) indicated that intergovernmental relations (IGR) refer, in general, to the "formal and informal processes, institutional arrangements, agreements and structures for bilateral and multilateral cooperation between the respective levels of government". In simple terms, intergovernmental relations mean an inter-reliance between the various spheres of government that facilitate the achievement of mutual goals through cooperation. Intergovernmental relations can occur in multiple governmental bodies at a vertical and a horizontal level. Intergovernmental relations between different government institutions can be either formal or informal. In South Africa, the most significant philosophical foundation for the conduct of intergovernmental relations is found in Chapter Three of the Constitution, which deals with the significance of cooperative government between the respective spheres. As stated in the Constitution of RSA, the philosophical foundation for intergovernmental relations signifies a network of forums where governments meet as equals under the Constitution with the view to jointly formulating policy, as

well as ensuring consultation, coordination and the assessment of policy implementation. According to de Villiers (2012: 691), the IGR must "create an environment for provincial and local governments to be actively involved with the national government in joint planning, policy formulation, assessment, and implementation of legislation".

In South Africa, the Constitution of 1996 (Chapter Three) creates government institutions in a way that assumes constant communication between the three spheres of government at all levels. Within the South African context, intergovernmental relations are the interactions between parts of the state or cooperation amongst the spheres of government (Kanyane & Nazo, 2008). For the achievement of governmental goals, including cooperative government, the Constitution (1996) provides for an intergovernmental relations system that seeks to improve coordination and alignment. It is always essential to understand how relations should be conducted once the interactions between institutions have been recognised. Proper instruments (such as the Intergovernmental Forum and the Intergovernmental Relations Committee of Ministers) should be available to both public servants and political office-bearers to ensure intergovernmental relations. Section 41 of the Constitution (1996) requires that the consultation process at both the vertical and horizontal levels must be ensured before decisions are made on matters of common interest. This will enable the spheres or institutions involved to coordinate their legislation and activities better (Kahn et al., 2011). Coordination is critical in a situation where there is a concurrency of responsibilities. However, the complex environment in which the public institutions operate sometimes affect the process of intergovernmental relations.

Government institutions are created to achieve a specific goal. The main objective of a government is to ensure that the standard of living of its citizens is improved. The excellent interaction and integration between spheres or departmental governments make it easy to work towards achieving the primary goal of government. A lack of integrated strategic planning amongst the spheres of government has been one of the shortcomings of service delivery. This has, in turn, led to the inability of the government to render services in a coordinated manner. According to Kahn, Madue and Kalema (2011: 117), the "strategic planning that cuts across the three spheres of government in South Africa is limited, which leads to fragmented service delivery". The national and provincial spheres of government share the bulk of social services such as health, education, social security and welfare, housing and agriculture. In these areas, the national sphere of government mainly formulates policies, while the provincial sphere implements those policies.

On the other hand, the local government is responsible for the provision of basic services such as refuse removal, water, electricity, municipal markets and municipal infrastructure. The local government performs these functions based on the regulatory frameworks which are set by the national and provincial governments. Post-1994, the South African government committed itself to improve the quality, accountability, efficiency and accessibility of public goods and services to all citizens. While there are pockets of excellence in government delivery, the challenge remains how to ensure that the best basic services are delivered to the public with the aid of an outcomeoriented intergovernmental relations framework. The quality of public services and the pace of improvements in public services do not match the expectations of most citizens, especially in the rural areas.

Planning within the institutions is critical, and it is a broad field. Planning ranges from the high level and long-term, to comprehensive, day-to-day operational planning. At the governmental level, this means that a "broad range of plans are produced with guidance and oversight provided by different parts of the government system" (National Planning Commission, 2015: 31). Numerous benefits can be achieved through a coordinated planning process, including "undertaking cooperative efforts that otherwise could not be done, improving the level of communications amongst the institutions involved, increasing the number of resources and initiatives dedicated to solving significant problems and creating higher, long-term commitment to mutual challenges" (Berman, 2005: 382). The coordination of government activities is difficult without ensuring the participation of different representatives from various government levels in the planning phase. Partnerships with key stakeholders must be formed, and the active role of all stakeholders must be promoted to ensure that the coordination process is successful. The main objectives of coordination in government institutions are to "avoid or minimize duplication or duplicity, avoid inconsistency, minimize both bureaucratic and political conflict, the need for coherence and cohesion and an agreement regarding prioritization, and promoting a comprehensive perspective of the government" (Matei & Dogaru, 2012: 2). The coordination process thus generates a set of actions by several institutions and individuals to create reliable social results.

The establishment of the intergovernmental relation system is emphasised by Sections 40 and 41 of the Constitution (1996), which requires the government to provide public services coherently, transparently and effectively. In other words, the process of integration, communication and coordination amongst all the main parties responsible for policy-making and service delivery are key points of the IGR. Ensuring coherence in service delivery is also emphasised in the

Intergovernmental Relations Framework Act of 2005. Having a robust intergovernmental relation system in place can assist in dealing with poor service delivery.

A lack of quality services and the slow pace of public services have fueled protests all over the country and have put municipalities under the spotlight. Violence, looting, xenophobic attacks and police brutality are some of the high-level characteristics of the protests. The public's unhappiness about service delivery is particularly visible in both the metropoles and local municipalities, i.e. local government is the sphere that is supposed to engage with the public and tend to their needs. Although the democratic government has created numerous policies and strategies that are geared towards improving service delivery to all citizens, there is still an uneven delivery of public services, especially in the rural areas and townships (Campbell, 2016). A lack of skills and capacity to create a municipal plan that is representative of all development concerns is one of the biggest challenges for the local sphere of government. Even though the spheres of government are independent, the municipal area is the space in which the community believes all the policies must be implemented. Therefore, municipal plans must "emerge from all the factors as the instrument for an integrated system of government that brings about development and growth" (Pietersen, 2017: 90). Nevertheless, a clear understanding of the intergovernmental system, the role of each sphere, and the ability of municipalities to engage with and inform national policy are critical for the system to work.

For government institutions to ensure strong intergovernmental relations, their efforts must be aimed towards "outcome-oriented (purposeful) intergovernmental relations which seek to create opportunities for genuine negotiations and the development as well as the sustainability of a shared vision" (Ile, 2010: 56). The spheres of government share the revenues and other resources in the mission for harmonising service delivery (Kahn, Madue & Kalema, 2011). As in the case of South Africa, the spheres of government share revenue that is raised nationally to render services to the public, which indicates a need for a fiscal system that provides for intergovernmental financial transfers (Kahn, Madue & Kalema, 2011).

Since South Africa achieved democracy in 1994, the government has extended the provision of basic services to more deprived areas in many towns, cities and rural areas that had previously been reserved for certain racial groups. Under Section 152 of the South African Constitution of 1996, local government is the engine of basic service delivery. The sphere of local government is charged, among other things, with ensuring the provision of services to communities in a sustainable manner, promoting social and economic development, and promoting a safe and

healthy environment (Constitution, 1996). The core responsibility of the municipalities is to provide services such as water, sanitation, markets, refuse removal and land management. Due to socio-economic challenges and the provisions of the Constitution of 1996 in South Africa, service delivery is seen as a tool and social contract to create social inclusion and improve the standards of living of the poor who were previously excluded by the apartheid government.

The Statistics South Africa General Household Survey 2018 indicated that the electricity mains now reach 84.7% of the population, water access is at 89%, 83% have access to improved sanitation, and only 4% are without a toilet facility, and about two-thirds (65%) have their refuse removed once a week, compared to less before 1994 (Statistics South Africa, 2019b). On the other hand, Afrobarometer conducted a study in 2017 on the public perceptions of service delivery regarding how well or poorly they think their local government is handling the delivery of services such as roads, markets, health standards and cleaning. This study found that "half or more of respondents said their municipalities were performing *fairly badly* or *very badly* at maintaining local roads (56%) and marketplaces (55%), managing the use of land (54%), and maintaining health standards, such as in restaurants and food stalls (50%). Only on one task, keeping the community clean, did a slim majority (52%) assess their local government's performance as *fairly* or *very good*" (Nkomo, 2017: 3).

According to Nkomo (2017: 4), while there have been some improvements in the "percentages of households with access to electricity, water, and sanitation... there are still some households without access, particularly in remote rural areas and informal urban settlements". Morudu (2017) noted that a lack of leadership and low managerial capacity in local government, weak intergovernmental relations, corruption, political infighting, poor public participation, the culture of rate boycotts and a cumbersome legislative environment are major contributing factors to poor service delivery and the proliferation of service delivery protests. In most cases, the protests tend to rise when the provision of basic services is poor or lacking. Several demonstrations and protests in South Africa have highlighted popular perceptions that municipalities have not kept their campaign promises of proper service delivery, i.e. a better life for all citizens (Twala, 2014). As shown in Figure 4.1 below, it clearly shows that South Africa has been experiencing an increase in service delivery protests since 2009. Figure 4.1 further highlights that 2018 eclipsed the previous annual record for a lack of service delivery (Municipal IQ, 2019).

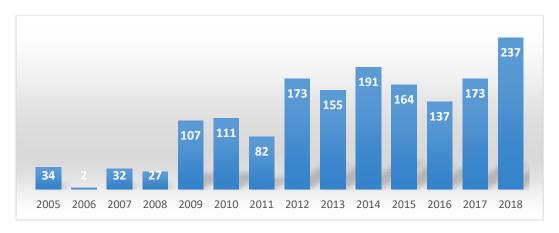


Figure 4.1: Major Service delivery protests, by year (2004 –2018)

Source: Municipal IQ (2019)

As mentioned earlier, South Africa is experiencing high levels of poverty, unemployment, corruption, maladministration, crime, inequality, economic greed, mismanagement and inefficient governance. Mlambo (2019) commented that over the last decade, these issues have led to unprecedented service delivery protests, which are an indication of the service delivery issues confronting the government.

In any country, the public sector forms an essential component of the economy, and it plays a critical role in the economic growth and development of a nation. Governments need to "meet many challenges, both simple and complex, relating to service delivery" (Curristine, 2005: 128). This is because the mandate of the government is to improve the wellbeing of society by delivering public goods and services to everyone (Linna *et al.*, 2010). The government has a wide range of stakeholders, such as civic organisations, the private sector, and individual members of the community. These stakeholders have different interests, which results in a variety of expectations being imposed on the government. It is thus critical for the government to be effective and efficient in fulfilling its responsibilities to address the needs and expectations of all these stakeholders (Fourie & Poggenpoel, 2017).

Based on the literature review conducted, numerous studies have been conducted on the growth and development of the smallholder sub-sector regarding their access to input and output markets, their role in tackling socio-economic challenges, their contribution to food security, the availability of land, and the impact of supermarkets. In addition, many studies have investigated the role of extension services towards the smallholder sub-sector, and a few studies have examined government processes with regard to the smallholder sub-sector accessing municipal markets. Studies concerning market access by smallholders have focused on the state of the fresh produce

markets; direct marketing; factors affecting farmers' choices of marketing channels and produce, or institutional and technical factors regarding market choices; the innovative system approach; alternative marketing options; farmers' constraints in terms of the agri-business value chain; farmer support and linkages to markets, strategies and empowerment programmes; market access and socio-economic issues; land grant resources; food security; the commercialisation of emerging farmers; cooperative or collective action to improve access; sources of credit for smallholder producers; measuring and tracking access; direct and indirect economic contribution; and the contribution of ICT (Masuku et al., 2001; Louw et al., 2005; Bond et al., 2006; Chikazunga, et al., 2008; Louw et al., 2008; Louw, 2008; Randela et al., 2008; Baloyi, 2010; Salami et al., 2010; Ostrom et al., 2010; Owusu-Antwi & Antwi, 2010; Fischer & Qaim, 2011; Torero, 2011; Aliber & Hall, 2012; Jari & Fraser, 2012; Hounkonnou et al., 2012; Moobi & Oladele, 2012; Obi et al., 2012; Panda & Sreekumar, 2012; van Tilburg & van Schalkwyk, 2012; Abdulsamad et al., 2013; Arias et al., 2013; Fan et al., 2013; Greenberg, 2013; Msimango & Oladele, 2013; Muhongayire et al., 2013; Sikwela, 2013; Wiggins & Keats, 2013; Xaba & Masuku, 2013; Wiggins & Keats, 2013; Chisasa, 2014; Fischer and Qaim, 2014; Gyau, 2014; Mpandeli & Maponya, 2014; Matsane & Oyekale, 2014; Mukwevho & Anim, 2014; Qwabe 2014; Raphela, 2014; Raju & Singh, 2014; Shange, 2014; Thamaga-Chitja, & Morojele, 2014; Arinloye et al., 2015; Aliber & Mdoda, 2015; Battersby et al., 2015; Koech et al., 2015; Louw and Lulama, 2015; Njelekela & Sanga, 2015; Devaux et al., 2016; Kepe & Hall, 2016; Khapayi & Celliers, 2016; Nesamvuni et al., 2016; Ngqangweni, 2016; Poole, 2017; Range, 2017).

Other researchers have investigated the role of the extension services towards the smallholder subsector (Dercon *et al.*, 2006; Mmbengwa *et al.*, 2009; Van der Heijden, 2010; Hart, 2011; Kibet, 2011; Anaeto, 2012; Jouanjean, 2013; Sanga *et al.*, 2013; Davis *et al.*, 2014; Zwane *et al.*, 2014; Afful *et al.*, 2015; Davis, 2015; Rapsomanikis, 2015; Davis & Terblanche, 2016; Isaac, 2016; Abdu-Raheem & Worth, 2016; Sebeho & Stevens, 2019), and the impact of the supermarkets on the smallholder sub-sector (Cooper, 2002; Weatherspoon & Reardon, 2003; Chowdhury *et al.*, 2005; Louw *et al.*, 2007a; Emongor & Kirsten, 2009; Haantuba & de Graaf, 2009; Ortmann & King, 2010; Muchopa, 2013; van der Heijden & Vink, 2013; Kodithuwakku & Weerahewa, 2014; Pereira *et al.*, 2014; Peyton *et al.*, 2015).

Furthermore, some researchers have generally investigated the government processes that they directly relate to smallholders, while others have researched service delivery in general, such as participatory local government planning processes to accelerate service delivery; good governance

and planning on service delivery challenges; intergovernmental relations in strategic planning; horizontal bureaucrats' influence on politicians and political decisions via their crucial role in preparing, coordinating and formulating policy; interdepartmental networks of coordinative action; network governance and coordination; coordination and organisational performance; the state of collaboration between municipalities; conflict in local-provincial intergovernmental relations; public infrastructure; public expenditure and contradictions between the policy priority placed on small-scale farming and the adequacy of support provided to small-scale producers; the business-oriented approach to strategic planning of farmers markets; and government policies (Merna & Njiru, 2002; Mamatzakis, 2003; Fan & Zhang, 2005; Andersen & Shimokawa, 2006; Stevens *et al.*, 2006; Louw, 2006; Hall and Aliber, 2010; Keast & Brown, 2010; Mubangizi, 2010; Patel, 2010; Kahn *et al.*, 2011; De Villiers, 2012; Osifo, 2012; Adepoju & Salman, 2013; Masuku, 2013; Mubangizi, 2013; Mubangizi *et al.*, 2013; Connell & Hergesheimer, 2014; Kanyane, 2014; Selepe *et al.*, 2014; Muchara & Mbatha, 2016; Wiewiora *et al.*, 2016; Mamabolo, 2017; Biyela *et al.*, 2018; Hegele, 2018; Peters, 2018; Lowatcharin *et al.*, 2019; Magagula *et al.*, 2019; Ubisi *et al.*, 2019; Bayu, 2020; Phakathi, 2020).

Although several studies have been conducted on the smallholder sub-sector market access, there is a lack of studies that holistically investigate the government processes on the smallholder sub-sector's access to municipal markets, and which explore the influences of municipal markets on smallholder growth and development in South Africa. Therefore, this study investigated the government administrative processes and examined the influence of municipal markets on agrosmallholders' growth within a decentralised state.

4.11 CHAPTER SUMMARY

The history of the agricultural sector, especially the development of the agricultural smallholder sector, is well documented in the literature. Furthermore, it is also documented in the literature that the smallholder sector plays a significant role in the livelihoods of rural households, as numerous rural people are directly or indirectly linked to agriculture. Various authors have highlighted the importance of the agricultural sector, especially the smallholder sub-sector in rural development, in part due to its contribution to household nutrition and food security. Although the role of the agricultural sector has been widely recognised, the implications of climate change are affecting the performance of this sector. On the other hand, the lack of proper skills amongst extension officers to support the diverse types of farmers and reach the large volume of smallholder producers contributes to the sector's inability to grow.

While several studies have been conducted on the smallholder sub-sector, further studies must be undertaken to provide recommendations that can be utilised by the sector and supporting stakeholders for the purpose of the development of the smallholder sub-sector. Furthermore, the support that has been provided by the government towards the smallholder sub-sector also necessitates studies that investigate the effectiveness and impact of these government processes. The following chapter discusses the research methodology that was adopted by this study.

CHAPTER FIVE: RESEARCH METHODOLOGY

5.1 INTRODUCTION

This chapter on research methodology commences with a description of the research design, which was exploratory and qualitative. The chapter then presents the logic behind the methodology used and the reasons for choosing the specific research methods. Furthermore, this chapter explores the literature that is available on the chosen research methodology and other instruments of data collection. In terms of data collection, interviews (semi-structured interviews) and focus group methods were employed in the study. An explanation and motivation for the selection of the data collection methods are provided, before a detailed description of population and sampling is presented, with purposive sampling being given more attention. Finally, the chapter concludes with an exploration of the study's ethical considerations and limitations.

5.2 STUDY SITE

The study was conducted in KwaZulu-Natal, specifically the eThekwini Metropolitan Municipality. eThekwini Municipality is one of the eight metropolitan municipalities in South Africa; it is located on the "east coast of South Africa in the Province of KwaZulu-Natal (KZN) which spans an area of approximately 2297 km² and it is home to some 3.6 million people in 2016 of different ethnic and cultural backgrounds that face various economic, social, environmental and governance challenges" (eThekwini Municipality, 2018: 32). Regarding satisfaction with municipal services, a study conducted by Statwise Consulting in 2011 revealed that "41% of residents were satisfied with the delivery of services, while the 22% were not satisfied and 37% were highlighting lack of transparency, promises not kept, responding late to their issues factors that affect service delivery" (eThekwini Municipality, 2018: 32).

Under this metropolitan municipality, the Black African community constitutes a large part of the population, followed by the Indian community. The White community and the Coloured community represent a smaller percentage within the municipality. In terms of gender, "the population statistics indicate a gender difference where females outnumber males by 51% to 49%" (eThekwini Municipality, 2018: 39). The economic powerhouse of KwaZulu-Natal is the eThekwini region, which has a critical influence on the South African economy. According to the eThekwini Municipality (2018: 56), it is a vital link "between the regional economies of Pietermaritzburg (and onward to Gauteng) and Richards Bay, and ranks as the second-largest

economic centre, with the second most significant industrial region, in South Africa". Some of the critical development challenges facing the eThekwini Municipality include high rates of unemployment and low economic growth, high levels of poverty, unsustainable development practices, a high level of unskilled and illiterate people, infrastructure degradation, climate change, ensuring an adequate energy and water supply, limited access to basic household and community services, and ensuring food security. The ineffectiveness and inefficiency of inward-looking local governments are still prevalent in the municipality (eThekwini Municipality, 2018). This municipality was chosen as a study site because it has both retail and municipal markets, and many smallholder producers operate in this municipality, which is mainly located in the rural areas far away from both the metropolitan markets.

The eThekwini Municipality (2018: 62) noted that about "68% of the municipal area is considered rural, with pockets of dense settlement, and about 10% of the rural areas comprise commercial farms and metropolitan open space, and about 90% of the rural area is defined by its geospatial features, such as hilly, rugged terrain, dispersed settlement patterns in traditional dwellings and communal landholdings under the Ingonyama Trust". The eThekwini Municipality has numerous tribal communities with 17 Traditional Councils (TCs), and covers 32 wards. The Traditional Councils are established in terms of the Traditional Leadership and Governance Framework Act 41 of 2003. Administering the affairs of the traditional community and supporting the municipality in the identification of community needs are some of the functions of the Traditional Council, according to the Ac. This study was based on those areas falling under TCs within the eThekwini Municipality. The smallholder producers (three smallholder farms per area) from Mbumbulu TC, Qadi TC, Mnini TC, Shangase TC and Ximba TC were selected for this study. A detailed discussion of the research methodology underpinning this study follows.

5.3 RESEARCH METHODOLOGY

Under the umbrella of research methodologies, there are various methodologies that a researcher can utilise. The two best known and recognised approaches to research are qualitative and quantitative. According to de Vos, Strydom, Fouche and Delport (2011: 6), each approach has its "own purposes, methods for conducting an inquiry, strategies for collecting and analysing data, and criteria for judging quality".

This section discusses the research methodology employed in this study. Firstly, the research paradigm/traditions are explored, followed by the research design and research approaches.

5.3.1 Research paradigm or traditions

Bryman (2012: 630) stipulated that a paradigm is "a cluster of beliefs and dictates which for scientists in a discipline influence what should be studied, how research should be done, and how results should be interpreted". Instead of 'paradigm', which is more used in the natural sciences, the social sciences call it a research tradition. The most critical element with a research tradition or paradigm is that the researcher adopts a particular way of studying the phenomena related to their field by following a tradition or paradigm. Understanding what tradition or paradigm the researcher ascribes to is vital since it "determine(s) what questions are considered worthy of investigation and what processes are required for the answers to these questions to be acceptable" (du Plooy-Cilliers, Davis & Bezuidenhout, 2014: 19).

This study followed the interpretivism research tradition, because the focus of the study was on agro-smallholder producers who operate in a changing environment full of complex issues. The researcher wanted to gain an in-depth understanding of the problems that prevent the agro-smallholder producers from accessing the municipal markets for their produce, while exploring municipal administrative matters that impact the agro-smallholder producers. Furthermore, interpretivism was adopted in this study as it allows for subjectivity and qualitative related methods are used when utilising this research tradition. As face-to-face interviews were used to collect data, this allowed the researcher to have direct contact with the participants, enabled him to appreciate how they experience their daily lives, and allowed him to get an understanding of what is meaningful and relevant to them. Hence, this research tradition was choosen to enable the researcher to understand and describe social action and experiences of the participants that were involved in this study.

5.3.2 Research approaches

In the simplest terms, a research approach is a general orientation to the conduct of research (Bryman & Cramer, 2011). The aim, research objectives and questions involved are critical when choosing a research approach for a study, as they provide the researcher with some guidelines in this regard (du Plooy-Cilliers, Davis & Bezuidenhout, 2014). For instance, if a researcher aims to explore people's actions, behaviours, attitudes and trends, or the relationships between people's behaviours and actions, then a qualitative research approach and its methods are suitable. There are three common types of research approaches: qualitative, quantitative and mixed-method. The following section provides an in-depth discussion on the qualitative approach as it was applied in

this study, and provides a comparison between the qualitative and quantitative research approaches.

5.3.2.1 Qualitative approach

The qualitative research methodology explores the behaviour, attitudes and experiences of participants by utilising research methods such as interviews or focus groups, and attempts to get in-depth opinions from the participants (Dawson, 2002). Creswell (2009) and Kumar (2011) identified the following as the characteristics of the qualitative research methodology:

- A study is qualitative if the purpose of the study is primarily to describe a situation, phenomenon, problem or event; "the information is gathered using variables measured on nominal or ordinal levels; and if analysis is done to establish the variation in the situation, phenomenon or problem without quantifying it" (Kumar, 2011: 12).
- Qualitative researchers tend to "collect data in the field at the site where participants experience the issue or problem under study" (Creswell, 2009: 37).
- In the entire qualitative research process, the researchers keep focusing on "learning the meaning that the participants hold about the problem or issue, not the meaning that the researcher brings to the research or writers from the literature" (Creswell, 2009: 38).
- Qualitative research is a form of inquiry in which researchers make an "interpretation of what they see, hear, and understand, and the researchers' analysis cannot be separated from their background, history, context, and prior understandings" (Creswell, 2009: 38).

Given the above characteristics, qualitative research can be seen as an approach that produces descriptive data in the participants' own written and spoken words (de Vos *et al.*, 2011). According to Babbie (2010), the concern of the researcher when conducting qualitative research is to describe and understand, rather than to explain or predict human behaviour.

5.3.2.2 Comparison between qualitative and quantitative approaches

As shown below in Table 5.2, it present the comparison between the qualitative and quantitative research approaches. This comparison does not mean that these research approaches are mutually exclusive.

Table 5.2: Comparison between the quantitative and qualitative research approaches

Qualitative approach	Quantitative approach
Epistemological roots in phenomenology.	Epistemological roots in positivism.
Purpose is constructing detailed descriptions of social reality.	Purpose is testing predictive and cause-effect hypothesis about social reality.
Methods utilise inductive logic.	Methods utilise deductive logic
Suitable for a study of a relatively unknown terrain; seeks to understand phenomena.	Suitable for a study of phenomena which are conceptually and theoretically well developed; seeks to control phenomena.
Participants' natural language is used to come to genuine understanding of their word.	Concepts are converted into operational definitions; results appear in numerical form and are eventually reported in statistical language.
The research design is flexible and unique and evolves throughout the research process. There are no fixed steps that should be followed, and design cannot be exactly replicated.	The research design is standardised according to a fixed procedure and can be replicated.
Data sources are determined by information richness of settings; types of observation are modified to enrich understanding.	Data are obtained systematically and in a standardised manner.
The unit of analysis is holistic, concentrating on the relationships between elements, contexts etc. the whole is always more than the sum.	The unit of analysis is variables which are atomistic (elements that form part of the whole).

Source: de Vos et al. (2011: 66).

Leedy and Ormrod (2005), Alasuutari et al. (2008), Bergman (2008) and Kumar (2011) agree that researchers often need to use these two approaches together to conduct a study; this is called a mixed method. This study utilised a qualitative methodology because it allowed the researcher to understand how figures and themes are created through social processes. As was outlined earlier, the qualitative method allows a researcher to study how people understand concepts. In other

words, a researcher is able to comprehend inconsistent behavior and actions of the participants through the utilisation of qualitative research methods. By employing the qualitative research approach, a researcher gains new understanding, develops new concepts or theoretical perspectives, and discovers the problems that exist within the phenomena.

5.3.3 Research Design

Bryman (2008: 31) indicated that a research design provides a "framework for the collection and analysis of data". Furthermore, the author indicated that decisions about the priority being given to a range of dimensions of a research process determine the choice of the research design. Flick, von Kardorff and Steinke (2004) viewed research design as a means of achieving the goals of the research. In other words, the research design links the research questions, theoretical framework, generalisation, research methods and resources available under the focus of goal achievement (Flick *et al.*, 2004).

There are many ways to classify research designs. Researchers may use a case study, exploratory, descriptive, experimental, longitudinal, comparative or cross-sectional research design. According to Sekaran and Bougie (2010: 103), the "nature of the study depends on the stage to which knowledge about the research topic has advanced". This study employed an exploratory research design, which enabled the researcher to collect extensive data on the individual(s), organisation(s), institution(s), programme(s) and event(s) the investigation was focused on. These kinds of data often include observation, interviews, documents, records and audio-visual materials (Leedy & Ormrod, 2005).

According to Sekarab and Bougie (2010: 103), an exploratory study is undertaken "when not much is known about the situation at hand, or no information is available on how similar problems or research issues have been solved in the past". Furthermore, exploratory studies are undertaken to comprehend the nature of the problem better since very few studies might have been conducted in that area. Exploratory studies are also necessary when some facts are known – in this case, studies by Alber *et al.* (2010), Alber *et al.* (2012), Louw *et al.* (2007a), Louw *et al.* (2008) and Salami *et al.* (2010) – but more information is needed for developing a viable theoretical framework on precisely the aspect of public administrative processes within a decentralised state. Therefore, the exploratory research design was utilised in this study in order to investigate the problem of agrosmallholders' access to municipal markets, which has not been thoroughly investigated in the past. The adoption of this research design into the study was needed in order to assist future researchers

to find out possible causes for the problem, based on this study's results, which can be further investigated in detail to find out which are the most likely cause of the problem.

5.4 DATA COLLECTION METHODS

For a researcher to properly investigate the problem, data become the basic material that are crucial for the study. To be able to draw a valid conclusion from the research undertaken, it is vital to obtain sound data for interpretation and analysis (Terre Blanche *et al.*, 2006).

Before deciding on the research instruments for the study, a researcher needs to find out a little more about research tools or methods. Research methods refer to the tools that the researcher utilises to collect data, which can be obtained from primary or secondary sources. According to Sekaran and Bougie (2010: 180), primary data refer to "information obtained first-hand by the researcher on the variable interest for the study while secondary data refer to information gathered from sources that already exist". In most cases, primary data are obtained from individuals within an organisation or society, and secondary data are obtained from journal articles, government publications, company records, archives, industry analyses, the media, and the internet.

There are many ways in which data can be collected for qualitative research in the social sciences, including individual interviews, focus groups and observation methods. Semi-structured interviews and focus group interviews, as the primary tools for data collection, were used for this study. Both interviews and focus groups were chosen for this study because they assisted the researcher to interact extensively with the participants to receive in-depth information about the issue under investigation. In addition to the primary data collection methods, the researcher also retrieved data from secondary sources. The primary data assisted the researcher to generate new information about the research problem at hand, which added to the existing store of social knowledge. Once the material was created and stored, it became available for use by the general research community, i.e. secondary data. The secondary data used in this research were sourced from both published and unpublished documents. Secondary data, including a literature review on local government and local economic development, the agricultural sector, agricultural markets, the smallholder farming sector and rural informal microenterprises, were used in the analysis of the study. By reviewing literature, the researcher gained knowledge that assisted in the analysis and interpretation of the findings for this study. Furthermore, the secondary data enabled the researcher to provide an informed assessment and critical analysis of the existing research on the topic under investigation. These two research methods are discussed in more detail below.

5.4.1 Interviews

Several researchers, such as Creswell (2012), DePoy and Gilson (2008) and de Vos *et al.* (2011), claimed that interviewing is the most common research method for data collection in qualitative research. Investigators receive data from participants through a direct interchange with an organisation, group or individual that is expected to hold the knowledge they seek. A strength of qualitative interviewing is its capacity to access self-reference among participants, leading to the higher likelihood of the telling of collective stories:

"Respondents may reveal feelings, beliefs, and private doubts that contradict or conflict with 'what everyone thinks,' including sentiments that break the dominant feeling rules... In other cases, the interviewer will discover the anxiety, ambivalence, and uncertainty that lie behind respondents' conformity" (Silverman, 2004: 130).

Interviews, as a data collection method, provide a way of generating empirical data about the social world by asking the subjects to talk about their lives. Furthermore, interviews provide the researcher with an opportunity to probe during the interview process. The main aim of probing is to obtain clarification, elaboration, explanation and understanding. Monette, Sullivan and Dejong (2008: 181) noted that there are several advantages of collecting data through interviews:

- Interviews can allow participants to give more accurate and complete information.
- Interviewing offers an opportunity to explain questions that the participants may not otherwise understand.
- The presence of an interviewer or researcher allows control over factors that are uncontrollable with mailed questionnaires.
- Interviewing is a more flexible form of data collection than questionnaires.
- The interviewer or researcher can add observational information to the responses.

When conducting an interview, there are skills and abilities that the researcher must have; this includes an ability to be non-judgmental, an ability to listen, a good memory, and the ability to think on his/her feet. There are many types of interviews in social research studies, the most common of which are structured, semi-structured and unstructured interviews. The qualitative research approaches typically utilise semi-structured or unstructured interviews. A brief discussion of these types of interviews follows:

5.4.1.1 Unstructured interviews

A researcher who employs unstructured interviews attempts to achieve a holistic understanding of the participants' points of view or situations. Unstructured or in-depth interviews are sometimes referred to as life-history interviews. This type of interview enables the participants to freely talk about what they deem vital, with little directional influence from the researcher. When utilising this type of interview, the researcher must remain alert, recognise important information and probe for more detail.

5.4.1.2 Semi-structured interviews

This type of interview is commonly used in qualitative social research. According to Dawson (2002: 28), the "researcher wants to know specific information which can be compared and contrasted with information gained in other interviews". When the researcher employs semi-structured interviews, the same questions need to be asked in each interview (Holloway & Wheeler, 2010). On the other hand, the researcher needs to ensure that the interview remains flexible to allow additional crucial information to arise. Several researchers, such as Dicicco-Bloom and Crabtree (2006), Jarbandhan and Schutte (2006), Hox and Boeije (2005) and Doody and Noonan (2013), commented that semi-structured interviews are those interviews that are structured around areas of specific interest, while still permitting significant flexibility in scope and depth.

A researcher produces an interview schedule for this type of interview, which is taken to each interview to ensure continuity. Furthermore, the interview schedule enables the researcher to think about all the areas which need to be covered in the study. The interview schedule provides the researcher with a set of predetermined questions, which do not dictate the schedule but to guide and engage the participants. Patton (2002: 343) indicated that the interview schedule provides "topics or subject areas within which the interviewer is free to explore, probe, and ask questions that will elucidate and illuminate that particular subject". This study used one-on-one, semi-structured interviews to collect data from managers at the eThekwini Municipality and managers from the KZN Department of Agriculture and Land Reform. In total, seven face-to-face interviews were held with the government officials.

For participants at the eThekwini Metropolitan Municipality, the data were collected from one of the seven clusters, namely Sustainable Development and City Enterprises. This cluster consists of four departments/units, which include Development Planning, Environment & Management; Economic Development & Facilitation; Parks & Leisure; and Business Support and Markets. An

effort to secure an interview with the Manager from the Department of Development Planning, Environment & Management was unsuccessful, despite several attempts to make appointments via email and telephone. The face-to-face individual interviews were conducted with Managers from the Business Support & Market Unit, the Parks & Leisure Unit, and the Economic Development & Facilitation Unit. The Business Support & Markets Unit has two sub-units — Fresh Produce Markets and Retail Markets — thus a manager from each sub-unit was interviewed. A total of four managers from the units mentioned above were thus selected and interviewed for the study. Three managers were selected and interviewed from the KZN Department of Agriculture and Rural Development. These managers were from Extension & Advisory Support, Integrated Rural Development, and Rural Enterprise and Industry Development. All these clusters were selected because they are directly involved in the support of smallholder producers, and they have specific programmes that aim to assist the growth and development of the smallholder sector.

First, the researcher made an appointment with the government officials identified as participants of this study. Although the majority of them postponed their appointments, the researcher managed to interview all of them. The face-to-face individual interviews took place in their offices, and most of the interviews lasted approximately 1 hour and 20 minutes. These individual, face-to-face interviews took place between March and July 2018. The interviews with the KZN Department of Agriculture and Rural Development's officials were conducted at Cedara, Pietermaritzburg, where the departmental offices are located. The interviews with the officials of the eThekwini Municipality took place in central Durban and the Bluff, where their offices are located.

5.4.2 Focus group

This research method allows a researcher to group participants together to discuss a particular issue. The researcher facilitates the discussion by introducing the topic, asking specific questions, controlling digressions, and stopping break-away conversations (Dawson, 2002). Furthermore, the facilitator must ensure that all participants contribute and that no one participant dominates the discussion. A focus group may also be called a group interview or discussion group. Dawson (2002: 30) noted that the focus group method has the following advantages:

- It can receive a wide range of responses during one meeting.
- Participants can ask questions of each other, lessening the impact of researcher bias.
- It assists participants to remember issues they might otherwise have forgotten.
- It assists participants to overcome inhibitions, especially if they know other people in the group.

• Participant interaction is useful to analyse, and the group effect is a valuable resource in data analysis.

Although one-on-one interviews generate data, the use of focus group discussions can also open up an opportunity to obtain more data at another level (King & Horrocks, 2010). According to de Vos et al. (2011: 341), "things that are not likely to emerge on one-on-one interviews are more likely to come out during the focus group discussions" as participants tend to probe each other for more clarification. Thus, a focus group is a qualitative research instrument that is used to gather rich "descriptive data in a small group format from participants who have agreed to 'focus' on a topic of mutual interest" (Wilkinson & Birmingham, 2003: 90). A focus group thus uses interactions between participants to stimulate ideas and to encourage group members to participate (Monette et al., 2008). Focus group discussions were used to collect data from smallholder farms in the identified areas of Mnini Traditional Council, Shangase Traditional Council, Qadi Traditional Council, Ximba Traditional Council, and Mbumbulu Traditional Council. These are the areas that have *Amakhosi* (traditional leaders) who manage and provide leadership. Initially, the researcher planned to have five focus group discussions per area, but due to data saturation, the researcher ended up conducting three focus group discussions under each identified area. Fifteen focus groups were held, three per each area identified. The number of people per focus group were between four and ten, with the total number of participants across all focus groups reaching 79. With the assistance of the Development Facilitation Officer at KZN Cooperative Governance and Traditional Affairs (CoGTA), an announcement was made by the traditional leaders so that the farmers were made aware that someone would come to conduct research with them. The focus group discussions were conducted on farms, and the researcher took pictures of the farms that were visited. The focus groups with the smallholders were conducted between August and November 2018.

Data collected using open-ended questions can include participants' opinions about specific issues; reasons for specific behaviours; descriptions of certain practices; and perceptions or guidelines with which the researcher and the public are not familiar (Degu & Yigzaw, 2006). Furthermore, semi-structured individual interviews enable the researcher to "explore and probe several factors in a situation that might be central to the broad problem guided by the interview guide" (Sekaran & Bougie, 2010: 189). On the other hand, employing focus groups as an additional research method affords a space whereby the participants can agree or disagree on the topics, thus enabling the researcher to see what views are widely shared versus opinions that are more idiosyncratic

(Remler & Van Ryzin, 2011). This method assisted the researcher to understand the generalisability of the qualitative findings better, provided him with an opportunity to see how the participants responded to each other's views, and enabled him to build up a view from the interactions that took place within the groups.

Collecting data from both individual semi-structured interviews and focus group discussions were critical for the researcher to be able to probe and seek clarification on certain issues, as well as for the participants, especially the farmers, to probe each other's ideas for holding a particular belief (Sekaran and Bougie, 2010). In all the interviews, the researcher was given permission to audio record the interviewes. During the interviews and focus group discussions, the researcher also used a field notebook to note down things that were not planned, i.e. the expressions of the participants, gender representative, and the behaviour of the farmers. For the focus group discussions, the researcher used the home language of the farmers, which was IsiZulu, which is also a home language for the researcher. For this reason, the researcher did not need an interpreter. While the data collection methods are critical for any study, equally important is the population and sample of the study. The following section discusses all elements related to population and sampling utilsed in this study.

5.5 POPULATION AND SAMPLING

This section discusses the study population and sample. In the first sub-section, target population is discussed, followed by the sampling strategies and size.

5.5.1 Target population

Trochim and Donnelley (2006) stipulated that a target population is the group of cases or units with the exact features the researcher is interested in collecting data about. Nardi (2006), meanwhile, viewed a target population as the total collection of elements or subjects a researcher wants to analyse. In other words, the target population is made up of items or individuals that have standard features from which data can be collected and examined by a researcher. Therefore, the population is the total unit about which an investigator wants to conduct a study; it is the larger set from which a sample is drawn. The target population for this study was composed of officials from the KZN Department of Agriculture and Rural Development, eThekwini Metropolitan Municipality and agro-smallholder producers within the areas under traditional leadership within the jurisdiction of the eThekwini Metropolitan Municipality.

According to a 2016 Community Survey conducted by Stats SA on agricultural households, the number of South African households engaged in agricultural activities decreased in 2016 to 2.33 million agricultural households compared to 2.88 million agricultural households in the year 2011. The main factor that contributed to the decline of households participating in agricultural activities was drought, which was experienced throughout the country during 2014 and 2015. In 2011, the census reported that there were 2.9 million households involved in agricultural activities nationally, with 24.9%, 20.7% and 16.3% of agricultural households located in KwaZulu-Natal, the Eastern Cape and Limpopo respectively (Stats SA, 2011).

In KZN, specifically in the eThekwini Metropolitan Municipality, most households (38.6%) were involved in producing vegetables, followed by 20.9% of households producing poultry, while 12.8%, 12.3% and 15.4% were engaged in livestock, other cops and other respectively (StatSA, 2011). In most cases, agricultural households involved in producing vegetables form part of the large agro-smallholder producers who require proper assistance from stakeholders such as the government to move from the smallholder sub-sector to the commercial sub-sector.

5.5.2 Sampling strategies and size

When researchers conduct a study, one of their main aims is to explain, describe, explore and predict the characteristics of the population. Numerous researchers such as de Vos et al. (2011: 223), Denscombe (2008: 141) and DePoy and Gilson (2008: 234-235) defined sampling as a smaller number of subjects of a population who are representative of that total population. As a population is large, it is very unlikely that a researcher would be able to collect data from every person in a population. For this reason, a researcher is compelled to select only a few elements in a population, which is called sampling. In other words, the main reason for the researcher to study samples rather than the entire population is that the whole population is so large that studying it is not feasible. Furthermore, sampling enables the researcher to get better data from carefully drawn samples than the entire population; sampling allows the researcher to overcome the research problem by selecting a more manageable number of participants or respondents to participate in the study (Honette, Sullivan & Dejong, 2008). The main types of sampling are probability and non-probability sampling (see Table 5.3). According to Trochim and Donnelley (2006), these twosampling designs differ from each other as non-probability sampling does not include a random selection of participants, while probability sampling contains a random selection of participants. This section discusses only non-probability sampling as it is the sampling that the study utilised, and it is associated with the qualitative research approach.

Table 5.3: Types of probability and non-probability sampling

Probability sampling	Non-probability sampling	
Simple: select people based on a true random procedure.	Haphazard: select anyone who is convenient.	
Systematic: select every kth person (quasi-random).	Quota: select anyone in predetermined groups.	
Stratified: randomly select people in predetermined groups.	Purposive: select anyone in a hard-to-find target population.	
Cluster: take multistage random samples in each of several levels.	Snowball: select people connected to one another.	

Source: Neuman (2011) and de Vos et al. (2013)

5.5.2.1 Non-probability sampling

In qualitative research studies, there are no rules for sample size (de Vos *et al.*, 2011). In other words, sample size depends on what the researcher wants to know, the "purpose of the study, what is at stake, what will be useful, what will have credibility, and what can be done with available time and resources" (Patton, 2002: 244). The small sample size in qualitative research can generate more in-depth and valuable information, especially when the participants are information-rich (Gravetter and Forzano, 2003 and Salkind, 2006). Participants who are particularly knowledgeable about the investigation setting and articulate about their knowledge are normally referred to as key informants.

De Vos *et al.* (2013: 231) stipulated that the "odds of selecting participants in a non-probability sampling are not known due to the reason that the investigator does not know the population size or the members of the population". In this type of sampling, not all the subjects have an equal chance of being selected to participate in the study. Non-probability sampling methods are divided into two broad types: purposive and convenience sampling. Convenience sampling occurs when the researcher selects participants because they are easy to reach, convenient or readily available (Neuman, 2011). Sekaran (2006: 235) described purposive sampling as being used in a "situation where instead of obtaining information from those who are most conveniently available, it might sometimes become necessary to obtain information from specific targets, that is, specific types of people who will be able to provide the desired information, either because they are the only ones who can give the needed information, or because they conform to some criteria set by the researcher". Due to the broad geographical location that the researcher had to cover, this study utilised a non-probability, purposive sampling method. Authors such as Trochim and Donnelley

(2006), Stewart (2007), Gravetter and Forzano (2010) and Neuman (2011) indicated that non-probability sampling is a frequently utilised sampling method since it is more effective to use in qualitative studies compared to other non-probability sampling methods. Purposive sampling method was also chosen for this study because the researcher wanted to conduct interviews with the key informants. According to Hox and Boeije (2005: 594), participants are purposively selected because they are "formal or informal nodes of information and therefore in a position to provide the researcher with informative responses to the interview questions or to point the researcher to other sources of information".

5.5.2.2 Sampling size

The participants who took part in the different research activities were selected according to multiple purposive selection criteria, which included:

- *critical cases* who focused on those individuals whose roles are clear in relation to the phenomenon to be investigated, and who are particularly crucial to the study under investigation (Patton, 2002). In other words, critical cases focus on those individuals that are likely to "yield the most information and have the greatest impact on the development of knowledge" (Flick, 2009: 117);
- *criteria of convenience*, which focus on selecting participants who are the easiest to access under the given conditions. This may simply be to reduce the effort of recruiting participants, however from time to time it may be the only way to do an evaluation given limited resources of time and people (Flick, 2009);
- *a homogenous sample*, which simply means selecting a small, homogenous sample, with the "purpose of describing some particular subgroup in depth" (Patton, 2002: 235), e.g. agro-smallholder producers are involved in different production, however this study specifically investigated those who deal with the production of fresh produce only, i.e. vegetables. Homogenous samples can facilitate meaningful comparisons across studies (Suri, 2011).

In addition to the strategies mentioned above, Flick (2009), citing Morse (1998), stated that there are general criteria for selecting meaningful and excellent participants. Such criteria include selecting participants who have the relevant information and experience of the issue at their disposal for answering the questions in the interview, and selecting participants who can fluently reflect, have time to be asked (or observed), and are ready to participate in the study.

Bryman (2008: 179) noted that a decision about sample size in the qualitative research approach is "affected by considerations of time and cost to conduct the study". Unlike the quantitative methods, the sample size in a qualitative study should not be too large as it will be challenging to extract thick and rich data. On the other hand, the sample size should not be too small, as it will be difficult to achieve data saturation (Onwuegbuzie & Leech, 2007). Furthermore, an emphasis on a small sample size in the qualitative studies allows a more intensive portrait of activities. According to Mason (2010) indicates that the sample size for qualitative studies varies in terms of the number of participants, and the ideal sample size for qualitative studies is still up for debate. The sample size in this research consisted of four managers from the eThekwini Municipality, three directos from KZN Department of Agriculture & Rural Development, as well as 15 smallholder agricultural farms in the eThekwini Metropolitan Municipality. Table 5.4 below provides details of the participants in this study.

Table 5.4: Categories of study participants

Category	Label	Gender represantation	Total number of interviews/ focus groups	Number of
EThekwini Metropolitan Municipality	Manager: Economic Development & Facilitation Unit 2. Manager: Business Support Unit (Retail Market) 3. Manager: Business Support Unit (Fresh Produce Market) 4. Manager: Parks & Leisure	Three male and one female officials	Four individual face-to-face interviews	4
KZN Department of Agriculture & Rural Development	Manager: Rural Enterprise & Industry Development Manager: Integrated Rural Development Manager: Extension & Advisory Support	Two female and one male officials	Three individual face-toface interviews	3
Smallholder farmers	Smallholder producers under the areas of Amakhosi (Traditional Leaders within eThekwini Municipality). Three focus groups per area.	Ninety-two middle-aged women of farm members, thirteen middle-aged men of farm members, and twelve young women of farm members. Hence, the total number of farms' members participated in the study were 117.	Fifteen focus group discussions	79
TOTAL			22	86

Source: Researcher's own (2018)

5.6 ETHICAL REQUIREMENTS

Several researchers (Punch, 2005; Berg, 2009; Hesse-Biber & Leavy, 2011) have outlined that investigators need to be aware of any ethical issues that may arise during their research. This is because the research includes gathering data from organisations and people. The interaction between the researcher and participants, animals and the environment raises ethical issues, particularly at the "point where there is a potential or actual conflict of interest" (Mouton 2001: 239). This compels the researcher to always maintain integrity and objectivity when conducting a study.

Creswell (2012: 131) noted that the investigators need to "protect their research participants; develop a trust with them; promote the integrity of research; guard against misconduct and impropriety that might reflect on their organizations or institutions; and cope with new, challenging problems". The researcher must understand that throughout the research process, ethical issues will exist and emerge (King & Horrocks, 2010). As highlighted in Table 5.5 below, a researcher needs to focus on ethical issues before conducting their research; when initiating their research; during data collection and analysis of the data; and in reporting, sharing and storing the data. The researcher faces many ethical dilemmas and must decide how to act. There are codes of ethics that the researcher must follow, but ethical conduct ultimately depends on the individual researcher. In other words, a researcher's moral code is the most vigorous defence against unethical behaviour.

Table 5.5: Ethical issues in research approaches

Stages in research where ethical issues occurs	Kind/s of ethical issue	Way/s to address the issue	
Before conducting a research	 Seek university approval (proposal approval through Higher Degrees Committee). Gain local permission from organisations and participants. 	Submit & present the proposal for approval. Identify and go through local approvals; find gatekeepers or key personnel to help.	
Initiating the research	 Identify a research problem that will benefit participants. Disclose the aim of the study. Do not pressure participants into signing consent forms. Respect norms and charters of indigenous societies. 	 Conduct a needs assessment or informal conversation with participants about their need Contact participants and inform them of the general aim of the study. Tell the participants that they do not have to sign the form if they don't want to do so. Find out about cultural, religious, gender, and other differences that need to be respected. Put into place wait list provisions for treatme for controls. Discuss the purpose of the study and how the data will be used. Avoid leading questions. Withhold sharing personal impressions. Avoid disclosing sensiti information. Involve participants as collaborators. Stay to questions stated in an interview 	
Data collection	Make certain that all participants receive the same treatment. Avoid deceiving participants Respect potential power imbalances and exploitation of participants (e.g., interviewing, observing). Do not "use" participants by gathering data and leaving site. Avoid collecting harmful information.		
Data analysis	Avoid siding with participants (going native). Avoid disclosing only positive results. Respect the privacy and anonymity of participants.	Report multiple perspectives. Report contrary findings. Assign fictitious names or aliases; develop composite profiles of participants.	
Reporting, sharing & storing the data	 Avoid falsifying authorship, evidence, data, findings & conclusions. Do not plagiarise. Avoid disclosing information that would harm participants. Communicate in clear, straightforward, appropriate language. Share data with others. Keep raw data and other materials. Provide complete proof of compliance with ethical issues and lack of conflict of interest, if requested. 	Report honestly. Check referencing/ APA guidelines for permissions needed to reprint r adapt work of others. Use composite stories so that individuals cannot be identified. Use unbiased language appropriate for audience of research. Provide copies of report to participants and stakeholders. Share results with other researchers. Consider publishing the results of the study to peer reviewed journals. Store data and materials for at least five years. Disclose funders for research. Disclose who will profit from the research.	

Source: Creswell (2014)

5.6.1 Ethical issues involving research subjects

Ethical research requires balancing the value of advancing knowledge against the value of non-interference in the lives of others. Giving research subjects the absolute rights of non-interference could make empirical study impossible, but giving researchers absolute rights of inquiry could nullify subjects' fundamental human rights. A researcher thus needs to ensure that the anonymity

and confidentiality of participants are ensured, and informed consent has been provided before the participants engage in a study. According to Monette *et al.* (2008: 52), basic ethical issues arise in social research include: privacy, anonymity and confidentiality; informed consent; deception; problems in sponsored research; physical distress; mental distress; scientific misconduct; and scientific advocacy. In most cases during data collection, most researchers believe that privacy, anonymity, confidentiality and informed consent are crucial. These ethical considerations are discussed below:

5.6.1.1 Informed consent

The essential ethical principle of social research is that a researcher should not force any subject to participate in a study, i.e. participation must be voluntary. Getting permission from participants is not enough, however — a researcher needs to clearly explain why they are being asked to participate in the study so that they can make an informed decision. Participants can become aware of their rights and what they are getting involved in when they read and sign a statement giving informed consent, which is a written agreement to participate that is provided by subjects after they learn something about the research procedure. The informed consent should contain at least the following:

- A brief description of the purpose and procedure of the research.
- A statement of any risks or discomfort associated with participation.
- A guarantee of anonymity and the confidentiality of records.
- A statement that participation is completely voluntary and can be terminated at any time without penalty.
- The identification of the researcher and where to receive information about subjects' rights or to ask questions about the study.

According to de Vos *et al.* (2011: 118), informed consent is essential even if the participants do not listen to the investigator's explanation or are not really interested in knowing more. It is, therefore, the responsibility of the researcher to adequately explain the entire study.

5.6.1.2 The right to privacy, anonymity and confidentiality

As some social researchers invade the privacy of subjects to study social behaviour, they must take precautions to protect their subjects' privacy. It is crucial that a researcher preserve the confidentiality of their participants by not disclosing their subjects' identities after the data have been collected. The right to privacy is a critical ethical value when conducting research (Monette *et al.*, 2008). Anonymity and confidentiality are two essential means of ensuring participants'

privacy, thus a researcher should ensure that information is not released in a way that permits linking specific individuals to specific responses, and is only publicly presented in an aggregated form. According to Mouton (2001: 243), the conditions of anonymity apply to the collection of data by tape recorders and other data gathering devices, as well as to data collected in face-to-face interviews or participant conversations.

A researcher must ensure that all necessary ethical measures are strictly followed when conducting research. For this study, the researcher secured gatekeeper letters from the relevant organisations that were involved in the study, which granted the researcher permission to conduct the study. The organisations that provided the gatekeeper letters included the KZN Department of Agriculture and Rural Development, the eThekwini Metro Municipality as well as KZN Cooperative Governance & Traditional Affairs. The gatekeepers' letters are attached under Appendices. Secondly, in terms of the university's General Rules (GR32), the researcher was required to get ethical clearance from the Ethics Committee of UKZN before conducting his study. The researcher familiarised himself with all UKZN policies about ethics so to ensure that they were properly followed throughout the entire study. The Ethical Clearance received from UKZN is attached under Appendices.

In the field, the researcher requested the permission of the participants to include them in the study by signing the consent forms. The informed consent clearly explained the aspects of the study to the participants and asked for their voluntary agreement to participate before the study began. The purpose and objectives of the study were also clearly explained to the participants by the researcher. Furthermore, the issues of privacy, anonymity and confidentiality were thoroughly explained. The template for informed consent is attached under Appendices.

5.7 DATA PRESENTATION, FINDINGS & ANALYSIS

Creswell (2009: 183) indicated that the process of "data analysis involves making sense out of text and image data being collected". In qualitative research, the data presentation or findings and the interpretation or analysis are core when doing research. The methods that the researcher utilises to present and analyse the data depend on the research approach that has been employed. For instance, the issues of validity and reliability in a quantitative research approach are crucial because the researchers want to make sure that "their measurements are stable and consistent and there are no errors or bias present, either from the respondents or from the researcher" (Dawson, 2002: 110). The analysis of data in the qualitative research approach is a very personal process. In other words,

the participants are influenced by participating in a study, while the researcher brings their own experiences and preferences to the study.

The analysis of data in the qualitative approach might take place as the research progresses, with the researcher continually refining and re-organising, considering the emerging results. Qualitative data analysis often involves dealing with large volumes of data, such as transcripts, recordings and field notes. For this study, the qualitative data collected through semi-structured interviews and focus groups were transcribed, coded and analysed using the thematic analysis (TA) techniques. According to Vaismoradi, Turunen and Bondas (2013: 399), the characteristics of the thematic analysis approach (Figure 5.1) in a qualitative descriptive study are as follows:

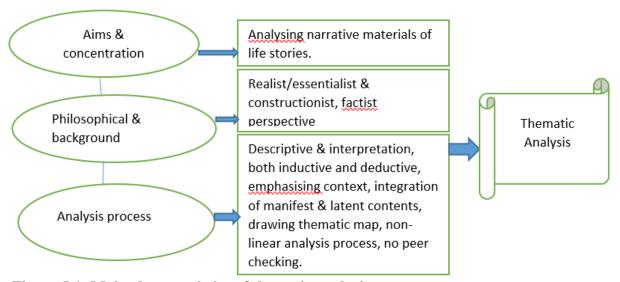


Figure 5.1: Main characteristics of thematic analysis

Source: Vaismoradi, Turunen and Bondas (2013)

The thematic analysis technique is highly inductive, that is, the themes emerge from the data and are not imposed upon them by the researcher (Fugard & Potts, 2015). Fereday and Muir-Cochrane (2006: 4) emphasised this point by stating that the thematic analysis process encompasses the "identification of themes through careful reading and re-reading of the data". In other words, thematic analysis focuses on identifiable themes and patterns of living and behaviour. Braun and Clarke (2006: 82) also stipulated that the thematic analysis technique is a qualitative method for "uncovering a collection of themes, some level of patterned response or meaning within a data-set". Furthermore, Guest, MacQueen and Namey (2012: 10) indicated that the thematic analysis technique "goes beyond word or phrase counting to analyses involving identifying and describing both implicit and explicit ideas". When applying this type of analysis, the collection and analysis

of data take place concurrently. According to Dawson (2002: 116), background reading can even form part of the "analysis process, especially if it can help to explain an emerging theme". The transcription of individuals' interviews was done following the interview process. In other words, the individual interviews and field notes were transcribed after all the interviews had been undertaken. This allowed the researcher to recognise all the data that related to the already classified patterns. Furthermore, the researcher combined and catalogued related patterns into subthemes. The ability of the researcher to be able to observe behavior and quickly identify related themes during the interviews and group discussions was the main reason behind the adoption of thematic analyses for this study.

Themes are defined as units derived from patterns such as "conversation topics, vocabulary, recurring activities, meanings, feelings, or folk sayings and proverbs" (Marks & Yardley, 2004). Bringing together components or fragments of ideas or experiences, which are often meaningless when viewed alone, helps to identify themes. The themes that emerge from the participants' stories are pieced together to form a comprehensive picture of their collective experience. The coherence of ideas rests with the researcher analysis, who has rigorously studied how different ideas or components fit together in a meaningful way when linked together. When gathering sub-themes to obtain a comprehensive view of the information, it is easy to see a pattern emerging. Once the themes and sub-themes have been identified, the researcher builds a valid argument for choosing the themes (Marks & Yardley, 2004). This could also be done by reading the related literature. By referring to the literature, the researcher gains information that allows him or herself to make inferences from the interview sessions. Once the themes have been collected and the literature has been studied, the researcher is ready to formulate theme statements to develop a storyline. When the literature is interwoven with the findings, the story that the interviewer constructs is one that stands with merit. An expanded storyline helps the reader to comprehend the process, understanding and motivation of the interviewer.

5.8 LIMITATIONS OF THE STUDY

The main limitation of this study is that it was only conducted in Durban, not the entire province of KwaZulu-Natal. Furthermore, the study did not cover all the agro-smallholder producers who deal with crop farming, but only those who produce vegetables. This makes it difficult to generalise the findings of this study to the entire population of agro-smallholders within KZN. Time and financial factors were additional limitations that affected the researcher's decision when selecting the population and sample for this study. Furthermore, one official from the municipal side could

not give the researcher relevant information as they did not seem to understand the issues, despite managing a critical division related to the agricultural smallholder sub-sector. The researcher anticipated that it will be not easy to arrange the interviews with the government officials, especially the participants from eThekwini Municipality, taking into account their seniority within their respective departments as they always have the busiest schedule. The remedial measure that the researcher put in place was to do a presentation of the proposed research with the eThekwini Municipal Academy. This assisted the researcher to be able to have interviews with the participants, as the Municipal Academy was also assisting in ensuring that the participants avail themselves for interviews. On the other hand, as the participants of the study were geographically spread, financial constraint was a major factor. The remedial measure the researcher put in place was to apply for funding. The researcher successfully received funding from the National Research Foundation for two consecutive years. Lastly, the wide scope of the administrative theory was also a factor as the researcher didn't apply all the functions of management in this study. But the researcher ensured that the main functions of management were utilised in order to thoroughly invistagate problem under the study.

5.9 CHAPTER SUMMARY

This chapter dealt with the research methodology and the research design applied in the study. The qualitative research approaches have been described, with an emphasis on the one that was employed in the study. The research instruments that were utilised have also been explained, and their importance for this study was explained. Furthermore, the population, sampling and data analysis techniques and methods were explained, as was the rationale for their use. Finally, the chapter concluded with a broader description of ethical considerations as well as the limitations of the study. The following chapter provides the data presentation and analysis.

CHAPTER SIX: EMPIRICAL ANALYSIS AND DISCUSSION OF DATA

6.1 INTRODUCTION

In this chapter, the empirical research results are outlined, before the research data are presented, interpreted and analysed. A discussion of the results is based on the collected primary data, with corresponding illustrations, and the relevant literature. During the transcription of the data, related themes were created to provide a detailed discussion and analysis of the investigated problem. Six themes were developed for a discussion and analysis of the study results:

- Theme one: availability of on-farm and off-farm infrastructure for the agro-smallholder sub-sector.
- Theme two: the attitude of agro-smallholder producers towards the extension services.
- Theme three: agro-smallholder engagement with the municipal markets.
- Theme four: agro-smallholder farmer involvement in the municipal planning processes.
- Theme five: inadequate cultural, political and administrative commitment towards coordination by government institutions.
- Theme six: organising financial and human resources for the operation and sustainability of the municipal markets.

This chapter first breaks down the responses from the various categories of participants, followed by a summary of the study results, and finally, a discussion and analysis of all the data collected.

6.2 BREAKDOWN OF RESPONSES FROM THE VARIOUS CATEGORIES OF PARTICIPANTS

As highlighted earlier in the Research Methodology chapter, this study purposively selected participants from the government level and smallholder producers who operate within the eThekwini Metropolitan Municipality jurisdiction. Semi-structured, face-to-face interviews and focus group discussions were the primary data collection instruments. All the interviews and focus group discussions took place in environmental settings agreed to by the participants; the focus group discussions took place on participant farms while the government officials' interviews took place at their offices. Initially, the researcher planned to have five interviews with officials from eThekwini Municipality, but due to the unavailability of the Manager in the Department of Development Planning, Environment & Management, the researcher ended up conducting interviews with four Managers from the other identified departments. Furthermore, the researcher planned to hold five focus group discussions per area with the smallholder producers, but only

three focus groups were needed due to data saturation. Table 6.1 below highlights the number of participants who were part of this study and the data collection methods that were used in each case.

Table 6.1: Categories of study participants

Category	Label	Gender represantation	Total number of interviews/ focus groups	Number of
EThekwini Metropolitan Municipality	Manager: Economic Development & Facilitation Unit 2. Manager: Business Support Unit (Retail Market) Manager: Business Support Unit (Fresh Produce Market) Manager: Parks & Leisure	Three male and one female officials	Four individual face-to-face interviews	4
KZN Department of Agriculture & Rural Development	Manager: Rural Enterprise & Industry Development Manager: Integrated Rural Development Manager: Extension & Advisory Support	Two female and one male officials	Three individual face-toface interviews	3
Smallholder farmers	Smallholder producers under the areas of Amakhosi (Traditional Leaders within eThekwini Municipality). Three focus groups per area.	Ninety-two middle-aged women of farm members, thirteen middle-aged men of farm members, and twelve young women of farm members. Hence, the total number of farms' members participated in the study were 117.	Fifteen focus group discussions	79
TOTAL			22	86

Source: Researcher's own (2019)

The summary of the results from the various categories of participants is presented below, with the first set of results from the government officials, followed by the agro-smallholder producers' results.

A. Government officials

The municipal markets are divided into two: the retail market and bulk or fresh produce markets. The retail market consists of 17 markets within the municipality's jurisdiction and includes numerous small spaces for trading. The retail markets are scattered around eThekwini municipality, including Tongaat, Verulam, Clairwood, Chatsworth and Bangladesh. The retail markets do not have enough capacity to accommodate numerous agricultural smallholders, as various products are sold. Some retail markets sell products related to arts and crafts, while others only sell fruit and vegetables, second-hand clothing,

or traditional herbs. Any individuals that trade in these markets are required to pay for space as per the market rates.

The municipality has one fresh produce market, which is also called the bulk market or commission market, which functions on a commission basis. On behalf of the suppliers (farmers or speculators), the market agents play a critical role in updating the suppliers on what has been sold, how much has been sold, prices and how much has been left in the cold room. The agro-smallholder producers can avoid using the market agents by selling their fresh produce directly to customers, as the average commission that is payable (from the profit of sales) is 5% to the market and 7.5% to the market agents. The bulk market also has cold rooms that can be utilised by the suppliers, but there are separate charges that the suppliers must pay to use them.

The municipality's by-laws govern the municipal markets by determining who owns, manages, controls, and administers the municipal markets. The by-laws further describe the trading systems, duties and functions of the municipal markets and the agents. However, the by-laws do not specify the farmers' role in the formulation of the municipal market policies.

The municipal markets are maintained annually to ensure that they are in good condition for trading and ensure sellers and buyers' safety. There is a lack of infrastructural support in the retail markets compared to the bulk markets, such as cold rooms. The large commercial producers supply their fresh produce to the bulk markets while few agrosmallholder producers sell their produce to the retail markets. For the municipal markets to be sustainable, they receive a budget from the municipality and they generate revenue through the nominal fees they charge for rental space, cold rooms and commission.

The municipal markets accommodate all the producers across the country, especially the bulk markets, however 99% of the fresh produce comes from the large commercial sector. The bulk market is open 24 hours a day for deliveries, while trading activities occur between 5am and 11am. There is no stipulation in terms of the farm size and quantity of produce for a farmer to be able to supply the bulk market. However, issues such as transportation and financing cost negatively affect smallholder producers from supplying the bulk market. The municipal markets do not have any direct relationships with

producers, but programmes across the agricultural sector are offered by different actors to empower and develop the smallholder sector. There are no mechanisms in place within the municipal markets to disseminate or distribute information to agro-smallholder producers about the municipal markets' operations.

The agro-smallholder producers' participation in the municipal markets, especially those operating under areas with traditional leadership, is very low. The main listed reasons were the volume of the produce to trade, the quality of the produce, packaging of the produce, logistics costs, labour force (not enough to delegate the tasks), grading (by size), and a lack of information in terms of pricing the different grades correctly. These challenges prevent the rural agro-smallholder producers from supplying to the municipal markets. On the other hand, the municipality does not have the smallholder producers' database who participates in the municipal markets.

There is no planning, coordination or relationship between the eThekwini Municipality and the KZN Department of Agriculture and Rural Development on the issues related to the promotion and development of smallholder producers. There is partial municipal internal coordination of activities with other departments that deal with the smallholder sector however, for example in most cases, the Department of Parks & Leisure organises business management workshops on topics such as business finance, bookkeeping and marketing. Through such workshops, the producers who require space to sell their products are referred to the retail market for further assistance. In this way, a departmental relationship exists for those who deal directly with the same customers. The Business Support Unit also sometimes invites financial institutions to provide a presentation on the financial management and access to adequate financing to the smallholder producers when the Department of Parks & Leisure has organised workshops. Furthermore, the Business Support Unit managers formulate MoUs with the different banks so that it will be easier for the department to contact those banks if they are any related financial workshops organised. Usually, the banks conduct presentations in terms of what they can offer to assist small businesses.

The producers have a huge responsibility to ensure that they supply a quality product to the municipal markets. Quality checks also lie within the KZN Department of Agriculture & Rural Development, as the municipal markets only inspect the products through the Department of Health within the municipality. Condemned products by the inspectors are removed from the market floor so that customers cannot buy them. The producers who supply those condemned products are then given feedback so that they can improve the quality of their fresh produce. In most cases, this process affects the agro-smallholder producers as the majority of them do not conduct quality controls on their products.

Agricultural activities fall within the national and provincial agricultural departments' scope, but not the municipal competency. The municipalities that are involved in supporting certain agricultural activities are thus doing it because of the empowerment and skills transfers to the producers, and are not obliged to allocate budget or resources to rural/urban agricultural development. As the agricultural sector falls under the competence of both the national and provincial governments, this sector has its own public entities or agricultural development agencies, such as the Agriculture Research Council, National Agricultural Marketing Council and Agricultural Produce Agents Council, which have a host of agricultural development programmes for smallholder producers in the country. Unfortunately, there is not much integration of agrarian support programmes between the eThekwini Municipality and the KZN Department of Agriculture & Rural Development.

The municipality, through the municipal markets, has the human capacity to assist the smallholder producers. Municipal officials capacitate themselves by attending workshops, training, or courses to perform their duties better. Managers assess the positive impact that training could bring to both the institution and customers before the staff can be supported financially in attending the training. The municipality also conducts basic in-house training on topics such as IT, government functions, writing skills and report writing.

The municipality has been supporting agro-smallholder producers by providing in-farm infrastructures such as fencing, irrigation systems, water tanks and farming tools, while the KZN Department of Agriculture & Rural Development has assisted them with fencing, irrigation systems, storage facilities and packhouses. The support is always in the community kind of setup where such assistance is provided so that numerous community members can benefit from such support by being involved in the farm.

The extension officers sometimes provide the Department of Agriculture & Rural Development with information that is not up-to-standard, however the department does not

have enough extension officers available to support the smallholder producers effectively. The main challenge facing the extension services is their inability to assist all smallholder producers at the right time. Not every plot of agricultural land has an extension officer, as there are less than 2,000 extension officers in KZN. The extension officers play a critical role in assisting the smallholder producers to make better decisions to increase production by providing technical advice about their fresh produce, yet they play a small part in providing information about the municipal markets.

B. Agro-smallholder producers

Many of the agro-smallholder farms consist of members who range in number from five to 16. They all perform in-and-out farming activities (from ploughing to the sale of fresh produce). Many of the agro-smallholder producers are middle-aged and old women, with the participation of a few young people. Out of 15 agro-smallholder farms' sites visited, only one had two young people actively involved in the farm. The agro-smallholder farms are between one and five hectares of land for production. Almost all the farms (14 out of 15 farms) visited utilised all their space for production, and they all indicated that their space was not enough for them to produce more.

All the producers commented that both the KZN Department of Agriculture & Rural Development and the eThekwini Metropolitan Municipality played an essential role in assisting them with operational tools such as water tanks, water pump engines, fencing, irrigation systems, watering cans, and containers for tools. Most also indicated that continuous support from the government is needed until they can survive independently.

Almost all producers have access to infrastructure such as roads, and water, but most producers do not have electricity on their premises. Furthermore, the majority (14 out of 15 farms) of the farms do not have the cold storage to keep their harvested produce fresh. To sell their fresh produce, they must harvest and transport it on the same day to the market or the farm gates. If they overproduce, it ends up rotting.

All the producers stated that they had never been invited to participate in any municipal planning on agriculture issues, which might affect them. On the other hand, they noted that they are always busy on their farms, so even if they did get an invitation, it would be difficult for them to leave their work to attend those meetings.

Almost all the smallholders (14 out of 15 farms) interviewed do not sell their fresh produce to the municipal markets; their main targeted customers are those who come directly (both local and outside community members/supermarkets) to their farms, while some producers supply their produce to the local schools. Many producers cited issues such as transportation costs, insufficient quantity and a lack of information about the municipal markets as the reasons why they are not trading at those markets.

Agro-smallholder producers understand the role that must be played by the extension officers on their farms. The producers highlighted that the extension officers must be able to provide them with advice on their agricultural activities, but the majority of the agro-smallholder producers (13 out of 15 farms) indicated the following issues regarding the extension officers:

- The producers do everything on their own without the assistance of an extension officer.
- There is a lack of advice from the extension officers.
- Some extension officers visit farms twice a month but most visit once a year.
- The extension officers visit the farms because they want the producers to sign their papers as an indication that they visited.
- Sometimes the extension officers do not come onto the farms to check how progress, and do not ask what challenges the producers are experiencing.
- The extension officers do not spend enough time on the farms they say that they have to attend to other producers as well.

6.4 DISCUSSION AND ANALYSIS OF THE STUDY RESULTS/FINDINGS

This section provides a discussion and analysis of the study results. The data collected were analysed qualitatively using the thematic map analysis tool. All the interviews were tape-recorded. After all the interviews, the researcher manually transcribed the data for easy identification of the themes. In ensuring anonymity and confidentiality, the researcher decided to use "MO" for eThekwini municipal officials; "PO" for the provincial department of agriculture officials; "SFM" for agro-smallholder producers at Mbumbulu TC; "SFQ" for agro-smallholder producers at Qadi TC; "SFMN" for agro-smallholder producers at Mnini TC; "SFS" for agro-smallholder producers

at Shangase TC; and "SFX" for agro-smallholder producers at Ximba TC. All responses from farmers under each area were combined under one code. i.e., farmers' responses from Qadi TC were combined and coded under 'SFQ'. During the transcription, all the repetitive issues were highlighted, pending all collected raw data's finalisation. The discussion and analysis below are based on the six developed themes related to the study's objectives.

6.4.1 Availability of on-farm and off-farm infrastructure for agro-smallholder producers

In the agricultural sector, the availability of on-farm and off-farm infrastructure plays a critical role in ensuring smooth and fast production on the farm. Proper infrastructure is, therefore, a source of profitable development. A lack of or underdeveloped infrastructure within the areas in which smallholder producers operate is one of the constraints that block them from more significant agrarian output markets. This section first discusses the on-farm infrastructures that are critical for production and operations of the producers visited.

6.4.1.1 On-farm infrastructure

A lack of on-farm infrastructures or equipment, such as production tools, cold storage and irrigation, is one of the challenges that the agro-smallholder producers experience as this curbs their production rates. A discussion on on-farm infrastructure is presented below:

i. Production tools

In most cases, the smallholder producers cannot afford mechanically-powered technologies such as tractors, ploughs, threshing or shelling machines, and seeders to produce larger quantities. All the agro-smallholder producers visited do not own or have access to a plough or tractor. A few of the agro-smallholder producers sometimes rent tractors, but otherwise, they use hand-held hoes, spades, watering cans, and other non-mechanised tools to cultivate and irrigate their farms. Most of the agro-smallholder producers indicated that both the municipality and the provincial department of agriculture have assisted them with some tools of production:

The municipality has played an essential role in supporting us with the water tanks, irrigation system, water, pipes, toilets, hoe, spades, wheelbarrows, containers for equipment and sometimes the tractor. (SFQ, SFM, SFMN, SFX, SFS, 2018)

Some of the producers also mentioned that:

The provincial government department of agriculture has assisted with fencing, pumping water engine, tractor, nursery, penthouse with water, and toilets. In contrast,

the municipality has previously supported us with the spades, hoes, opening of boreholes, and sometimes tractors. (SFS, SFQ, SFM, 2018)

The appropriate use of agricultural equipment and production tools by the smallholder producers could contribute to their farms' viability by enhancing production efficiency. This study found that many agro-smallholder producers do not have the appropriate agricultural tools and equipment needed to farm. The main concerns for producers were their inability to secure tractors, their lack of appropriate irrigation systems and insufficient storage for their produce. Such challenges have stopped them from using their land to the fullest potential. Despite this, officials from the municipality indicated that they have been playing a critical role in supporting the smallholder producers. One of the municipality officials interviewed stipulated that:

The municipality has provided support to the smallholder producers in the form of irrigation, water tanks, and fencing. This support is always in the community kind of setup where such assistance is provided so that numerous community members can benefit from such support by being involved in the farms. (MO2, MO4, 2018)

Another municipal official stated that:

The municipality has also assisted the smallholder producers with the identification of small pieces of land where they can use it for crop production, fencing the land, supplying water to the farms, supplying water tanks, and once the producers are in their database then provided with tools and seeds every financial year. (MO3, 2018)

Although the producers have noted and appreciated the government's support, they believe that the government must consult with them first so that they can point out where help is needed most. Numerous authors such as Moloi (2010), who compared socioeconomic characteristics that determine the farm income of emerging livestock and horticultural farmers in South Africa; Ayinke (2011), who researched contract farming amongst developing emerging farmers in South Africa; Chikazunga and Paradza (2012), whose research focused on how smallholder farmers can find a home in South Africa's food system with a focus on the Limpopo province; and Aliber and Hall (2015), whose research focused on support for smallholder farmers in South Africa, stated that the government support system is not strong enough to support smallholder farmers, causing the farmers to be incapable of taking advantage of the numerous opportunities that the government has instituted. One of the critical interventions in the agricultural sector for poverty alleviation, food security, rural development, and income generation of smallholder producers is the provision of support services by the government. Without appropriate farmer support services and

consultation, the sustainability, growth and development of emerging farmers could be challenging to achieve. On the other hand, with adequate access to farmer support services, "emerging agriculture can contribute to increased agricultural growth, rural development and have a positive impact on the farm income" (Khapayi & Celliers, 2016: 36).

The agricultural activities amongst many smallholder producers within the rural settings continue to be the primary source of their livelihoods. In most cases, the smallholder producers' knowledge when it comes to producing crops is based mainly on indigenous agriculture passed from generation to generation through experience and careful observation. The lack of financial, natural and physical resources of smallholder producers also cause them to follow traditional farming methods to produce their crops. Many smallholders interviewed still plant their crops manually, given their limited access to tractors and implements for cultivation. The households' members dominate the pool of labour, and women carry out the bulk of farming activities. Most of the agrosmallholder producers use hoes to overturn the soil and dig small holes.

ii. Irrigation system

One of the critical productive assets in the agricultural sector, which leads to substantial upsurges in yields, is irrigation. Rapsomanikis (2015: 17) noted that the "irrigated land is twice as productive as rain-fed land". Some of the benefits of irrigation include a reduced risk of crop failure, higher yields, and higher income. It also enables smallholders to adopt more "diversified cropping patterns and to switch from low-value subsistence production to high-value market-oriented production" (Rapsomanikis, 2015: 17). In most cases, most smallholder producers cannot finance expensive irrigation equipment such as sprinklers. Almost all the producers (14 out of 15 farms) interviewed do not have proper or modern irrigation systems in place, but still use traditional methods such as watering cans, buckets and water pipes to irrigate their crops. Such traditional methods are cheaper than modern techniques, but are also more time-consuming and depend on humans to function. The responses from the producers below clearly indicate that they are still using traditional methods to irrigate their crops:

The municipality assisted us with the water tanks, and they used to supply us with water through a water tank truck as there is a water shortage in the area. Furthermore, the the municipality gave us the pumping water engine, but it was not working. This case was reported to the municipality, but the technician failed to fix it. As this engine is not working, we usually contribute money (which cost R1,000) so that we can hire the pumping water engines to get water to the tanks for our crops. (SFX, SFMN, 2018)

The Department of Agriculture has supported us with pipe water connection to our farms and the water tanks. We usually connect pipe water to the tap water to irrigate. Sometimes if the water is not coming out from the tab, we then use the water stored in the tank. As one person cannot irrigate the entire farm using the pipe water, the others use buckets and watering cans also to irrigate the crops. (SFS, SFQ, SFM, 2018)

For smallholder producers to produce more, they also need efficient irrigation systems that will save time and grow crops on a consistent schedule to create more reliable food supplies.

iii. Office and storage space

When a large number of products have been produced, they must often be stored before they can be transported. As the quality of perishable products declines if they are stored improperly, it is critical for producers, especially those who sell weekly, to find a good way to store their products. Another advantage of properly storing produce is that it can be sold at higher prices after the harvest season, where the supply is lower. The need for an office space for smallholder producers is critical for three reasons: for meetings, performing administrative tasks, and keeping a record of the daily operations of the farm. An office space thus makes the entire operation of a farm run more effectively. This study found that only 4 out of 15 of the farms visited had offices on their farms, and none of them had cold storage space:

We do not have a storage facility for our produced crops. We harvest when we want to sell or when there are customers who want to buy at the farm gate due to storage issues. The challenge of harvesting more produce crops but with no storage and market to sell is that the crops (as they are perishable) end up being rotten within our farm. Hence, we do not have storage to put our equipment and harvested products. (SFMN, SFS, SFM, 2018)

We have a packaging house and storeroom. Although we have these structures, we do not have electricity within the farm. The lack of electricity affects us in a way that we cannot harvest or operate until late as we do not have lights within our structures. This affects us more during the winter as it gets darker early, and we tend not to finish our operation. Due to storage issues being small, for us to collect the products to be sold to the market, we harvest and prepare it the same day for the market which takes our time. (SFQ, SFX, 2018)

Based on this finding, critical questions can be raised, such as: if the smallholder producers do not have office spaces, where are they going to operate from, especially when it comes to keeping and filing critical information for their farms? And if they do not have cold rooms or storerooms, how can they introduce a stock control system or avoid deterioration of their produce? According to

Dioula, Deret, Morel, du Vachat and Kiaya (2013, n.p.), the best practices in harvesting, storage, and processing are crucial in maximising agricultural interventions' benefits. Furthermore, Dioula *et al.* (2013, n.p.) stipulated that over 20% of the physical harvest of produce is lost due to inadequate storage and handling practices. Larson *et al.* (2014) also indicated that smallholder producers must have the right storage facilities to avoid product deterioration and wastage. As noted by the farmers, a lack of storage facilities has led to products being sold directly from their farms and has caused a decline in their produce quality. Therefore, the lack of such critical infrastructure could negatively contribute to farmers' demotivation in further participating in the agricultural sector as time and money invested is lost.

Yet those farms (11 out of 15) who do not have offices on their farms could not see any value from installing one, due to a lack of connectivity (electricity), computer/s and computer literacy. This indicates that the farmers lack specific business or entrepreneurial skills, as offices could play an essential role in their farms' functioning. The active participation of youth in agricultural activities could assist in closing specific gaps that are being overlooked by the senior farmers, as they could come up with innovative ways of running the farms. As with any other business, the internal processes should be dealt with by individuals within the institution. Thus, it is the responsibility of the smallholder producers to ensure that they have the appropriate on-farm infrastructure for a smooth operation. On the other hand, some factors will always be beyond the farmers' control, which might directly or indirectly affect their growth and development.

6.4.1.2 Off-farm infrastructure

The government's ability to prioritise and improve road networks, water supply, and energy in rural areas is critical for the agricultural sector. Authors such as Faiz (2012) and Chambers (2014) claimed that improving and prioritising such services might significantly impact agricultural productivity, attract new development activities, and smooth the movement of labour between their residences and the workplace. Such off-farm infrastructures are discussed below within the same sub-heading. This study found that the government has played a critical role in providing such infrastructure within the areas around the farms in question.

i. Road network, water and electricity

The proper investment and provision of services such as electricity, water and road networks are some of the critical tools for both social and economic development in the urban and rural areas. The availability of proper road networks in the rural regions plays an essential role in moving fresh

produce from a farm to markets. Almost all the producers (14 out of 15 farms) interviewed have noted that the government has succeeded in providing quality roads. Thus, the agro-smallholder producers have access to paved roads that connect to different road networks for their products to be transported to markets. Although road networks play a critical role in the agricultural sector, one should note that it will be difficult for agro-smallholder producers to produce without enough rainfall or water.

The South African government has made notable progress towards providing proper roads and quality water for all. However, many still do not have access to sufficient and quality water, especially those who live in rural areas (South African Human Research Council, 2018). Water is critical for all sectors as well as human needs, which means that the agricultural sector competes with other industries as well as human needs for water. Almost all the producers (10 out of 5 farms) interviewed indicated that they have water taps on their farms, while the other 5 out of 15 farms use an engine to pump water. Those producers who mainly use the engines to pump water further indicated that they are more dependent on the rainfall for water as the cost of maintaining and refuelling the engines is high. Those producers who have tap water on their farms highlighted the importance of rainfall as sometimes the taps run dry. Authors such as Olayide, Tetteh and Popoola (2016) and Nhamo, Matchaya, Nhemachena and van Koppen (2016) noted that farmers' dependence on unpredictable rainfall is one of the restraining factors for agricultural productivity. The government must ensure that there is proper planning, a careful selection of farmers who will receive support, and more significant investment in infrastructure in those areas where producers depend heavily on the rain-fed system for production. While water availability and an adequate road network are vital, electricity is also of paramount importance.

Although there is electricity in all the communal areas that the researcher visited, most producers (12 out of 15 farms) do not have electricity on their farms. Ensuring that there is power is the responsibility of the producers. The agro-smallholder producers are supposed to find financial assistance or make financial contributions to ensure that power is available on their farms. The lack of electricity on the farms means that they will not have cold storage for their harvested produce, landlines for communication purposes, or computers for storing critical information about their farms' operations. On the other hand, smallholder producers lack the ability to secure financing from both public and private sector financial institutions for their operational costs and business growth. Tregurtha and Vink (2008), Tregurtha *et al.* (2010), Owusu-Antwi and Antwi (2010) and Chisasa (2014) noted that the lack of access to financing is due to the fact that the financial institutions consider smallholder producers to have low levels of production efficiency,

and they regard them as a high agricultural lending risk compared to large-scale commercial producers.

Based on this study's results concerning infrastructure, it is clear that the government has played an essential role in ensuring that the necessary off-farm infrastructure is in place to allow smallholder producers to operate. On the other hand, smallholder producers are not taking certain actions that would ensure that their farms perform at the optimal level. Therefore, better access to on-and off-farm infrastructure could produce positive benefits, such as increasing farmers' investment in production as well as strengthening their profitability and accessibility to the markets. Furthermore, the off-farm infrastructure that the government has provided within the areas in which the producers operate has provided them with an opportunity to connect with different markets for their output. On the other side, the lack of on-farm infrastructure affects the ability of the smallholder farmers to produce and store large amounts of quality crops and effectively keep their farms running. While infrastructure is critical for the smallholders to access markets easily, their ability to obtain information about the markets, gain advice on their produce, and apply technology, is critical. The following section assesses the attitude of the agrosmallholder producers towards the agricultural extension services.

6.4.2 The attitude of agro-smallholder producers towards the extension and advisory services

The agricultural extension and advisory services have a critical role to play in the context of sustainable agricultural productivity growth. According to Rapsomanikis (2015: 30), although the focus of the agricultural extension and advisory services should remain on transferring appropriate agricultural technologies and good farming practices, there is a need to go beyond this and support smallholders in adopting a more market-oriented approach, prioritising marketing, food safety, and linkages with agri-food industries. The agro-smallholder producers' perceptions about the extension services show that these extension officers are not doing their job correctly. The responses below from smallholders about the extension services show that the government must re-look the programme if smallholders are to benefit from it:

The extension officer occasionally comes to provide advice related to agriculture, but we don't see the benefit out of it as she is not always around when we need her. The extension officer's service is not that helpful due to the lack of much broader knowledge or information about what we are doing here on our farm. (SFM, 2018)

The extension officer should provide us with relevant information about the agricultural sector and make a positive contribution to our farms. It should also be someone who can check whether what we are doing is right or not from the beginning during ploughing till the end when we sell our produce. On this farm, the extension officer only comes twice a week, providing us with advice on how to use compost and where we can get the growers. (SFQ, 2018)

The extension officer must provide us with technical advice on the seeds we can use on different seasons to ensure a quality product and minimise the risk of producing less. On this farm, we use our traditional knowledge of farming without the assistance of the extension officer. Hence, the extension officer is not helpful as we are not receiving any advice related to our agricultural activities. (SFMN, 2018)

The extension officer should be a person who gives clear information on our farm regarding our production. Someone who can tell us that we can do better if we employ specific methods to our farm. The extension officer doesn't help us with anything, as we are still benefiting from the training that we had received from one of the companies that assisted us previously. (SFS & SFX, 2018)

The findings of this study are in line with a study conducted by von Loeper, Musango, Brent and Drimie (2016: 751) on the challenges facing smallholder farmers, where they found that the "extension officers in KwaZulu-Natal in South Africa only visit the smallholder farmers once a year, and the educational levels of such officers remain low". Furthermore, the findings of this study are also in line with those of Sebeho and Stevens (2019: 64) on farmers' perceptions and attitudes towards extension service delivery, where the researchers found that from 200 farmers surveyed, "47% of farmers meet their extension officers once a month, while 10.5% of farmers indicated they did not have any contact with their extension officer at all". Finally, the findings of this study match those of a study conducted by Myeni, Moeletsi, Thavhana, Randela and Mokoena (2019: 17) on the barriers affecting the sustainable agricultural productivity of smallholder farmers in the Eastern Free State in South Africa, where they discovered that many "farmers (99%) did not have access to extension services, with only 1% having access to extension advisory on crop production". According to one of the participants in this study from the Department of Agriculture and Land Reform:

The department does not have enough human resources when it comes to extension officers. Not every plot of agricultural land has the extension officer, and they are close to 2000 extension officers in the province of KwaZulu-Natal. (PO1, 2018)

Based on the above, one could say that the extension officers' lack of visibility on the smallholders' farms remains a significant challenge. The producers' responses imply that they are not receiving good guidance from the extension officers, and they do not value the assistance that is provided to them. Furthermore, this study's findings and those of the researchers mentioned earlier are disturbing as institutional and technical support such as extension and advisory services are critical components for the smallholder farming sector's success. A common challenge for the extension and advisory services created by the government to support the smallholder sector relates to their lack of human resources capacity and the lack of knowledge of the extension officers.

Disseminating knowledge to smallholder producers is one of the critical roles that the agricultural extension officers must play in assisting the producers in optimising returns (Hart, 2011; Kibet, 2011; Afful *et al.*, 2015; Isaac, 2016). Gido, Sibiko, Ayuya and Mwangi (2015: 178) observed that during extension visits, "extension providers deliver information based on the farming calendar, such that preliminary messages create a foundation for messages to be delivered during subsequent visits". Some of the agricultural extension officers' visits must provide information that will assist the producers in improving their basic production techniques, land preparation, timeliness of farm operations, market opportunities, crop spacing, plant population size, and the use of improved seed varieties. Based on the above findings, it is clear that the extension officers only play a minor role in disseminating information about the municipal markets or any other markets to the smallholder producers to ensure that they participate and access the markets available to them.

Davis (2015) highlighted the "core competencies" that are required for extension officers around the globe to function effectively. Such competencies include the ability of the extension officers to build a strategic partnership and networks; to manage stakeholders; to manage knowledge effectively for the benefits of the smallholders; to identify and use appropriate ICT; to use problem-solving and decision making approaches; to explain the implication of culture and diversity, including gender and youth; and to apply values and sound principles (Hart, 2011; Davis, 2015). When the extension officers possess such competencies and perform their duties effectively, producers' perception towards the extension services might change. While Davis and Terblanche (2016) noted that extension officers could not be experts in all technical and functional fields, they

must be in a position to know how to advise and communicate information needed by the producers.

Developing mechanisms that will strengthen the agricultural extension service can enable the governments to provide significant support to smallholder development. The official from the KZN Department of Agriculture highlighted that:

Through the extension officers, the smallholder producers should get help not only on the issues of their products but also on critical aspects such as formulation of business plan and grant funding application through another external stakeholder's assistance. Sometimes the department, through the units of Rural Development and Agriculture Advisory and Extension Services, also tries to give the farmers training around compliance if they want to supply specific markets. (PO3, 2018).

On the other hand, one of the officials from the KZN Department of Agriculture indicated that:

Some of the challenges that the department is facing about the extension services include the ability of the extension officers to supply the department with up-to-date information about smallholder farmers; the inability of extension officers to attend or be available to all smallholder farmers due to shortage of extension officers - therefore a high number of smallholder farmers end-up being serviced through a low extension. (PO2, 2018)

In South Africa, the Department of Agriculture expects the extension services to be the critical tool for delivering on its agricultural agenda. Yet, the extension officers are not well enough equipped or skilled to ensure that this agenda is successful. Furthermore, the government's ability to hire enough knowledgeable and capable extension officers and provide appropriate training to the existing extension officers remains a challenge (Aliber & Hall, 2010). The study's findings show that the extension officers are spread too thin to cover all of the agro-smallholder producers effectively, hence their inability to be available timeously to all producers. On the other hand, the findings show that the extension officers require appropriate training to provide the necessary support and advice to the smallholders and relevant information to the Department of Agriculture regarding smallholders for policy formulation purposes. Therefore, organising training for existing extension officers and hiring new extension officers could assist in closing the gaps that the smallholders experience with the extension officers. New strategies and capacity are critical for extension support services (Isaac, 2016; Davis, Lion & Arokoyo, 2019), as they are supposed to play a much more significant role such as "brokering and facilitating links and relationships within

the agricultural innovation system" (Sulaiman & Davis, 2012). The National Planning Commission (2012: 206) indicated that it is critical that the training in the agricultural sector also include entrepreneurial skills development to the extension officers so that they will respond and contribute effectively to the integration of smallholders into the agriculture value chain. It is also critical for the government, from time-to-time, to investigate whether the support services provided to the smallholder sector are appropriate. An efficient and effective extension support service is essential to ensure the promotion of the smallholder sector.

Davis and Terblanche (2016: 232) argued that the main challenge facing the agricultural extension services in "developing countries is the use of a 'one-size-fits-all' approach for sustainable extension and rural development programmes". The authors further indicated that developing location-specific extension approaches is critical and in line with developing situation-specific food security strategies. The extension service should be able to provide information about the market opportunities available to the smallholder producers, or link the producers to markets. The discussions in the following two sections are centred on the participation of smallholder producers in municipal markets and municipal planning processes.

6.4.3 Agro-smallholders' engagement with the municipal markets

In developing countries, globalisation and urbanisation in food processing have led to a rise in private investments, both domestic and foreign. Furthermore, the methods and requirements of procurement for agricultural products have been reformed, and markets have become more competitive. According to FAO (2010b), the contemporary procurement systems are progressively characterised by a shift from traditional wholesale markets towards vertically coordinated supply chains, and the transactions are based more on stringent private standards. Within this increasingly transformed market environment, numerous smallholders remain marginalised, without access to the formal food markets. Smallholders must therefore develop specific skills such as management, negotiation and communication skills to ensure their effective participation in different markets. Furthermore, the involvement of young people in smallholder farming sub-sector is critical to provide certain skills that are missing. The following section discusses these issues.

6.4.3.1 Transportation costs (transport)

Poor transportation, a lack of public transport and the distance between markets and smallholders' farms are some of the significant constraints on smallholder producers, which lead to high

transaction costs when it comes to accessing formal markets. All the agro-smallholder producers interviewed mentioned that they do not have a vehicle to transport their products, and they depend either on public transport or on neighbours for transporting their produce to market. Furthermore, all the producers mentioned that the distance between their farms and the markets is great, which largely contributes to high transportation costs. If the producers manage to arrange transport for their produce, it is critical that it not get damaged, hence producers need to know what the right transportation method is. With all these issues, the majority of the agro-smallholder producers find it difficult and expensive to transport their products to the markets.

Almost all the agro-smallholder producers indicated that although there are municipal markets available to them to sell their products, particularly the bulk market, they must supply goods in large quantities so that they can make a profit and cover their costs. Furthermore, they stipulated that they do not produce in large amounts because of the farming space and shortage of mechanised production materials and tools. All the producers indicated that:

It is not that we don't produce enough, but issues such as lack of storages, production equipment or materials, and transportation costs remain the significant challenges affecting us as farmers in terms of growth and accessing the municipal markets. We sometimes produce more but fail to sell all their products immediately, and those left get damaged or rotten quickly- as we usually sell locally, not to the municipal markets due to transportation costs involved. (SFM, SFQ, SFMN, SFX, SFS, 2018)

Wiggins and Sharada (2013) and Mukwevho and Anim (2014) mentioned factors such as insufficient knowledge, a lack of technology, high transport costs and underlying economics as the critical reasons why most of the smallholder producers are so disengaged from the markets. Based on the producers responses during the interviews, the underlying transaction costs is one of the main issues that limit the agro-smallholder producers from participating in the municipal markets and other formalised markets fully.

In the literature, one of the proposed interventions to deal with the transaction costs is through collective action (cooperatives) by the smallholder producers. It is assumed by scholars and government alike that through collective action, the smallholder producers' bargaining power can be improved and overcome market barriers (Markelova, Meinzen-Dick, Hellin & Dohrn, 2009; Fischer & Qaim, 2011; Fischer & Qaim, 2014; Gyau *et al.*, 2014; Hao, 2018), yet research by Ntuli (2010) on cooperatives found that there is inadequate institutional capacity for these to work, and government officials have limited understanding of the cooperatives as a form of government.

Despite this, the government continues to support the idea of cooperatives without dealing with the issues identified by Ntuli. In South Africa, through the 2012-2022 Integrated Strategy on the Development of Cooperatives of the Department of Trade and Industry, the government is continuing to promote cooperatives as an essential approach to overcome unemployment and ensure the smallholder sector's bargaining power.

Although there are numerous benefits associated with collective action, it seems as if most of the smallholder producers are not employing such an intervention strategy, as the issues related to market access, transaction costs and the quantity of products are still affecting the sector. During the focus group discussions, many of the producers (12 out of 15 farms) highlighted that it is not easy to enter into collective action with other farmers at their level because it is difficult to manage, coordinate and organise individuals who come from different backgrounds, cultures and knowledge bases. Ekepu, Tirivanhu and Nampala (2017:119) noted some of the challenges associated with collective action include "establishing rules to guide the operations of the groups, securing commitments on the part of the group members to abide by collectively agreed rules, and monitoring and enforcing compliance with the rules". On the other hand, Wessels and Nel (2016) found that a lack of business skills, an inability to compete with both the formal and informal sectors, the conflict between members of cooperatives, the poor quality of the produce, and no contracts with the government, are the main reasons for the high failure rate of the smallholder producers that are involved in a cooperative model in South Africa. One of the significant challenges that many of the producers highlighted, which contributes to the failure of collective action, is the conflict between members of the different farms that form a cooperative. The conflict between members not only leads to the failure of a collective action strategy, but it also contributes to the failure of numerous smallholders' growth and sustainability. Out of 15 producers visited and interviewed, seven indicated that their farms had many members when they started farming, but now only a few remain. Only three indicated that they still have the same number since the creation of their farms. The conflict between members was highlighted as the main contributing factor for individuals leaving the farms. The researcher thus noted that some of the members of the farms must possess leadership skills to ensure that they devise necessary strategies to avoid conflict amongst the members and to ensure the growth and development of the farm.

6.4.3.2 Communication and negotiation skills

Communication and negotiation are the main verbal interaction between smallholder producers and potential buyers. They are one of the vehicles through which selling and buying occur, either

at the formal or informal markets. The smallholder producers must be able to explain, persuade, be confident, influence adequately, and be ready to exchange information clearly with buyers at the markets. For smallholder producers to effectively negotiate and communicate appropriately with the buyers, market information is crucial. In most cases, the majority of smallholder producers lack access to market information. Given the dearth of agricultural market information and traders' opportunistic behaviour, middlemen and other market actors tend to negotiate low prices with the farmers for their produce. Njelekela and Sanga (2015: 58) noted that such "behaviour encompasses cheating on quality and quantity (especially the use of scales that are not standard), which in turn fail the traders to establish long-term business relations with farmers".

A lack of market information is not supposed to be an issue for smallholders as the extension service was designed to provide access to the knowledge, technology and information critical for smallholder producers to improve their productivity, profitability and the quality of their lives. Based on the study's findings, a lack of agricultural information will continue to be a problem, as the extension officers can not accommodate and service all smallholder producers. All the agrosmallholder producers highlighted that the extension service is the primary structure that is supposed to assist them concerning agricultural information. Sanga et al. (2013) noted that it is vital that the extension services provide face-to-face, smallholder farmers with relevant agricultural information and knowledge in a quality and timely manner so that they can make an informed decision. Njelekela and Sanga (2015: 57) indicated that the "availability of markets and market information gives farmers the power to bargain and improve their incomes, to seize market opportunities through adjustment of production plans and better allocation of production factors, and also, to use the information to make informed choices about marketing". In addition to the extension services as one of the communication channels, almost all the agro-smallholder producers (12 out of 15 farms) mentioned that they sometimes (due to the unavailability of extension officers) rely on relatives or friends for agricultural market information. However, faceto-face communication through the extension services surpassed all other modes of communication amongst the smallholder producers. Mubangizi (2011: 2) noted that the local sphere of government could rectify "government failures in agriculture by, among others, ensuring greater access to local information and by mobilising local social capital for policy reinforcement". Besides agricultural market information, smallholder producers need to receive information over an entire crop cycle, including information on fertilisers, pesticides, government schemes and policies, best farming practices, crop diseases, land availability, farming machinery or equipment, transportation, buyers and traders (Davis & Addom, 2010; Lokanathan & Kapugama, 2012).

Having access to information on prices, volumes and characteristics of products provide farmers with a better opportunity to participate in the markets. Without the support of the extension service to provide information, it is difficult for the smallholder producers to get this information, as most of their labour concentrates on producing crops. The researcher observed that agro-smallholder producers' inability to communicate with the markets effectively affects their growth and development. Although the provincial and municipal institutions associated with agricultural activities provide training around the issues of business management skills, financial skills, and marketing, the smallholder producers' inability to communicate with the markets effectively remains a considerable challenge. The language of business is unknown to many of the smallholder producers, for instance, if the buyer negotiates with the producers and uses terms like 'volumes', 'quantity' and 'margins', the buyer will get a polite nod of the head but are unlikely to be understood. The low purchasing power and income, illiteracy, non-existence or inadequate infrastructure, and lack of information are some of the factors contributing to the lack of business langue to many smallholder farmers (FAO, 2016b). In the literature, it has been noted that numerous smallholder farmers have limited education. In a recent study, Myeni et al. (2019: 17) found that "about 37% of farmers had attained secondary education, 29% had attained primary education, 28% had no formal education, 4% had attained tertiary education, and only 2% had attained adult education". The literacy levels amongst the smallholder producers have an indirect and direct impact on their productivity, as new information and environmental changes require a certain level of formal training and education (Kolawole, Wolski, Ngwenya & Mmopelwa, 2014).

Furthermore, the researcher observed that on almost all the farms visited, middle-age women are heavily involved in the production of crops, with no one focusing on the activities related to marketing, networking or bookkeeping. Fan and Garcia (2018) indicated that smallholders' geographical isolation from the markets could be one of the barriers to obtaining market-related information. Below are some of the responses from the producers related to their knowledge about the municipal markets and areas where they sell their fresh produce products:

We sell the fresh produce to the local agri-hub, which is located +/- 80km from our farms. We organised the local transport to transport fresh produce products to the agri-hub centre. The agri-hub centre sometimes assists us with the arrangement of izimbewu (seeds) but not for free as we buy it from them. We don't know anything about the municipal markets where we can sell our products and profit from it. (SFM, 2018)

We regularly transport and sell our products to Pietermaritzburg fresh produce market, and we don't make much profit due to costs related to transportation and paying the commission to the market agent. (SFX, 2018)

We never took our fresh produce products to the municipal markets because we are always busy here on the farm, ensuring that the crops are in good quality (SFM, 2018). We don't have someone who can go and sell to the markets other than selling through the farm gate. We can appreciate it if anyone can come and purchase the bulk of the fresh produce products directly on our farm. (SFMN, 2018)

We don't know anything about the municipal markets- in terms of how it works, what is required to supply the bulk market, what is needed to have space in one of the municipal markets to sell the fresh produce. (SFS, 2018)

We sell our fresh produce to the local community, and sometimes other customers (from both local and outside the area) come to collect the fresh produce products in bulk at our farm-gates, then they sell it on their own to other markets. (SFMN, SFM, SFS, 2018).

We sell our fresh produce product to the local community, local supermarkets, and one of the municipal retail markets. The provincial department of agriculture once provided us with information about the operation of the municipal fresh produce markets, primarily how market agents work. Although we received such information, we never participated in the bulk market due to transportation costs. Although there is a bulk market, they also require a large volume of fresh produce products to supply or participate in this market. On the other hand, we don't produce in large quantities because of the space and shortage of production materials and tools at our farm. (SFX, SFQ, 2018)

We once participated in the bulk market, and we still utilise the space (renting it from the municipality) in one of the municipal retail markets to sell our products. But the problem with this market is that the municipality allows the sales of the products to take place on Mondays and Thursdays - these are the days when it is quiet, we don't generate much profit from it. On the other hand, we are aware of the municipal fresh produce market, which is dominated mainly by municipal agents. We have the challenges with the municipal fresh produce market: we lack packaging for our product, transportation issues, and sometimes quality issues with our products. For instance, transport takes R1,200, the municipality charges 5% for us to supply or sell within the municipal market, and the agents charge 7% for marketing and selling our products. Hence, it doesn't make sense for us to participate

in this fresh produce market as we don't see its value (we end-up losing money instead of generating the profit from the sold produce) to our farmers' growth and development. It is, therefore, one of the reasons why many of the smallholder farmers don't want to participate in the municipal fresh produce markets as it becomes expensive for us. (SFQ, 2018)

The inability of the smallholder producers to gain information regarding prices in urban areas or any other markets often forces them to sell to the local communities or traders at farm gate prices. Numerous researchers such as Shiferaw *et al.* (2009), Jari and Fraser (2012), Jari (2013) and Raphela (2014) found that due to issues related to a lack of information, marketing and transportation, the smallholder producers tend to favour farm gate sales. Gyau *et al.* (2014) noted that selling at the farm gate affects the smallholder producers' profitability, as local traders have access to price and market information. According to Rapsomanikis (2015:27), as smallholders are geographically dispersed, and their supply is both small and inconsistent, private traders either do not source from them or require high margins to cover their costs. Jari and Fraser (2012) and Arinloye *et al.* (2015) indicated that factors such as a lack of transport, small farm sizes, a lack of expertise regarding managing quality and contractual agreements, insufficient market information, and unavailability of infrastructure facilities affect farmers' selection decisions regarding market choices for their produce.

Through joint initiatives or collaborative processes amongst the different key stakeholders such as the KZN Department of Agriculture & Rural Development through extension services and eThekwini Municipality through the Business Support unit, the producers' inability to speak the language of business could be tackled by empowering and capacitating the smallholder producers in both business and management skills. Furthermore, when the government creates strategies for the smallholder sector, the down-up approach must be employed to fully capture the input from producers for effective strategy implementation and the promotion, development and sustainability of this sector. In addition, the perception of the government officials about the smallholder subsector must change, as the majority of them view this sector as consisting of producers who mainly produce for consumption, i.e. they should support them to become a large commercial sector.

6.4.3.3 Management/appropriate skills

Every organisation requires enterprise or management skills to manage, control and calculate the risks of changing their patterns and methods of production and to take advantage of growing markets. For smallholder producers to play a central role in improving their agricultural

productivity, they need to be better equipped with business management skills such as financial management, agricultural marketing, record keeping, production management, diversification and new markets, business and project plan preparation, preparation for approaches to a financial institution, and negotiation skills (Mohit, 2012).

The ability of the smallholders to ensure sales through sophisticated channels such as supermarkets depends on them developing excellent managerial and logistics skills, and an ability to deliver continuity of supply and to meet challenging quality and food safety requirements. Through the interviews, the researcher noted that one of the challenges that the agro-smallholder producers face is a lack of the essential business and management skills needed to ensure that the farms are managed successfully. This lack affects their ability to source and supply relevant markets that are available to them. According to the municipal officials, the municipality organises training that aims at assisting the small-scale businesses to understand the basic concepts of business management. The participant at the municipality level indicated that:

The smallholder farmers receive training from the municipality through the Parks & Leisure and Business Support Units. Such Units offer basic training on business management such as business finance, bookkeeping, business plan, and marketing. The practice of such nature is not only limited to smallholder farmers but for anyone who is selling under the municipal retail markets. (MO2, M3, 2018)

For any business to focus on more innovative practices, skills in marketing, financial knowledge, enterprise management, negotiation and communication, decision-making, information communication technology, change orientation, production knowledge, infrastructure knowledge and utilisation are crucial. In other words, technical, personal entrepreneurial and business management skills are vital for the smallholder sector's growth and development. Researchers such as Dewen (2010), Mohit (2012), Obayelu (2012), World Bank (2013), Babu *et al.* (2016) and Wiafe and Yona (2016) indicated that business and financial management capacity among smallholder producers is critical if they are to play a central role in improving, sustaining and developing the smallholder sector. Due to this lack of capacity, the smallholder producers experience innumerable challenges such as limited access to loans from commercial banks, financial options and formal savings accounts (Fan *et al.*, 2013). Commercial banks are sometimes reluctant to lend to the smallholder producers because they always doubt if the loans will be effectively used, administered and repaid. For the smallholder sector to transform into a profitable

industry that is able to participate in different markets, it is critical that farmers are capacitated on the financial, business and managerial aspects associated with agriculture, "including market linkages which all require strengthened efforts" (Llanto, 2010: 120).

Although the municipal markets were designed to benefit the smallholder sub-sector, the inability of agro-smallholder producers to supply or participate in such markets clearly shows that it is even more difficult for them to participate in the value chain of supermarkets. The main requirements in the value chain of the supermarkets, such as quality and quantity of produce, food safety requirements, contracts and consistency of supply, are the main stumbling blocks that keep smallholder producers from actively participating in the formal markets (Rapsomanikis, 2015). One of the municipal officials commented that:

The producers/farmers across the country supply this bulk market daily. The supply of fresh produce products to the market is open to all producers/farmers and speculators across the country regardless of the size of the farms. There are no regulations that prevent farmers from gaining entry to supply this market. Speculators are individuals who have the company and have access to the products of the smallholder farmers and supply the bulk markets. Speculators collect the produce from the smallholder farmers' gates and supply the markets. Due to lack of capacity (transportation and finance issues) from smallholder farmers, then the speculators buy directly from them to supply the bulk markets. Hence, the smallholder farmers compete on an equal footing with the large commercial farmers and other non-farmers individuals (speculators) on providing the bulk market with the quality and fresh produce. Therefore, it critical for every farmers and non-farmers to ensure that they provide quality fresh produce products because the main consequence of sending the poor-quality produce is that the customers won't buy it and it will be removed from the floor sale as the municipal inspectors will condemn them if they are of poor quality for human consumption. Therefore, the removal of products from the sales will mean loss as no income will be generated, and costs associated with transportation, packaging, and labour will not be recovered. This majority (99%) of fresh produce products comes from the large commercial farmers, with only 1% from smallholder farmers and speculators. (MO3, 2018)

The intention for the fresh produce markets is to enable equal trade opportunities for all farmers, regardless of the size and quantity of produce (Chikazunga *et al.*, 2008). However, the findings

of the study are similar to the results of Louw (2008: 2) on the role of fresh produce markets in South Africa, i.e., that smallholder farmers find it "difficult to supply to the fresh produce markets, and the large scale commercial producers still dominate the majority of the supply to the fresh produce markets with between 80 and 90 percent while small scale producers supply the remaining variable volumes". Louw *et al.* 's (2013: 141) findings regarding an Alternative Service Delivery Mechanism for the Tshwane Fresh Produce Market show that a "significant 23% of the value of sales is ascribed to sellers selling under R1.2 million per annum, and only 3% of turnover comes from sellers selling less than R100,000 per annum". This study's findings and those of other researchers show that the large-resource scale producers largely dominate the Fresh Produce Markets, and such markets do not provide an easily accessible market for smallholder farmers to trade their produce. Furthermore, these findings show that the local government policies have failed to ensure the full participation of the smallholder sub-sector in the municipal markets, especially the local fresh produce market.

Ngqangweni, Mmbengwa, Myeki, Sotsha and Khoza (2016: 2) indicated that most of the smallholder producers are excluded from lucrative markets due to a "lack of management skills, small quantities produced, low quality of the produce, lack of suitable storage facilities, little value addition to their products, transport constraints and ineffective dissemination of information". Although the bulk markets are open for smallholder producers to supply their fresh produce, they employ the retailing model, which favours the well-established, large commercial producers. The emphasis of the retailing model is on high standards for food quality and safety, consumer assurance, sometimes low prices, and consistency of supply. Even though the bulk market is open to anyone, it seeks out large commercial producers to supply the market so that it will generate profits to sustain itself. One of the participants from the municipality said that:

The retail markets don't advertise such markets to smallholder farmers. But if there is an association that wants us, as the retail market, to come and present to them, then we are at liberty to do so. On another side, the bulk market sometimes reaches out to the farmers/producers. They usually refer to individuals/farmers that produce at a lower rate, or that can't supply the bulk market to us so that 'we,' retail market, can provide them with space to trade their products. (MO3, 2018)

A considerable number of studies about management skills or capacity, such as those by Dewen (2010) in China and Obayelu (2012) in Nigeria, have been conducted in countries where smallholder farming is the core of rural socio-economic development. Wiafe and Yona (2016: 57)

indicated that these studies "provide a more generalised account of the state of business and financial management skills among smallholder farmers in developing countries". To transform the smallholder sub-sector into a profitable enterprise, farmers need to be empowered with capacity in the business, financial and managerial aspects of agriculture, including market linkages, which all require strengthened efforts from different agricultural actors (Llanto, 2010).

6.4.3.4 Age and gender

Even though the government assists smallholder producers, their policies and strategies tend to overlook the gender disparities in this sector. Equal access to the markets for women, in particular, is still limited. In most cases, it is likely to be men rather than women who abandon agricultural work at home and migrate to seek income in other sectors. In this way, women are being left to carry the full burden of agricultural production. Producers who have access to information and resources, and have more education and capacity to cope with market demands, tend to be favoured by any changes in the agricultural sector. This means that any agricultural changes may increase the vulnerability of women, as many of them have little access to critical resources due to traditional social, cultural and political biases.

Furthermore, some agricultural activities are believed community members to be best suited to a certain gender, i.e. it is believed that women are better at producing and trading grain and vegetables, while men are better at livestock farming and trading (Mume *et al.*, 2014; Akanle *et al.*, 2019). This study found that at almost all of the smallholder farms (14 out of 15) visited, middle-aged women were the majority. The results of this study correspond with research conducted by Mume *et al.* (2014) and Akanle *et al.* (2019), who found that women are more involved in crop farming. This division between male and female participation in certain agricultural activities is rooted in Africa's traditional agricultural systems, which further perpetuate gender disparities in the agricultural sector. Critical productive assets and services such as land, financial services, rural infrastructure and technology are the main contributors to gender inequality in the agricultural sector. Indeed, the World Bank (2009: 2) found that the "distribution of land ownership is heavily skewed toward men".

A land audit report conducted in South Africa in 2017 analysed the entire country and found that "women own minimal land compared with men; of the land directly owned by individuals, women own 13% and couples 11%" (Nhlabathi & Van Rensburg, 2018: n.p.). Women play an essential role in food production, however, as they supply most of the labour needed to produce crops and they control the sale of fresh produce grown on the plots they manage. Yet a lack of ownership or

access to and control of land, financing, information and water negatively affects women's food production, as well as their ability to access the markets for their produce. Governments must ensure that the gender perspective is taken into consideration when undertaking economic and agricultural reforms. If it is not, there is a danger that the differential impact of new programmes and policies on both men and women will go unnoticed (FAO, 2016). For effective and sustainable government planning and reform processes, "they should be grounded in empirical information that accurately reflects the differing realities of women and men, in other words, in gender statistics" (FAO, 2016: 3).

Furthermore, the lack of youth participation in the agricultural sector is an issue that must be considered. As highlighted earlier, almost all smallholder farms visited 14 out of 15) were dominated by middle-aged women, with no participation by middle-aged men and young people. Some of the producers discussed the lack of youth participation on their farms:

Youth involvement is limited to our farm. They don't like this kind of business. They tend to think that it is only for older people. (SFS, 2018)

They sometimes come – young people, but they are not much involved in our farm. They rather go search for jobs elsewhere rather than being involved here. (SFQ, 2018)

In most cases, the young people, after completing their matric or tertiary institutions, tend to go to cities such as Johannesburg, Cape Town, and Durban to look for job opportunities instead of assisting us on the farms while searching for jobs. Others don't even go to those cities but live with us here in the village, and their contribution to our farms is minimal. (SFX, 2018)

This sector doesn't require lazy people but hardworking individuals. Young people have this tendency of rushing money. They are not patient, so that is why they are not participating in agricultural farming. Planting crops, everyday irrigating them, making sure that the inserts are not destroying the crops, harvesting, and then looking for buyers is not easy, and young people don't want to be involved in such activities. (SFMN, 2018)

If there is full participation of young people on our farm, we believe that certain things might change as others have higher education compared to us. For instance, they could assist us with marketing our products, accessing different markets, providing us with relevant information about our crops, market prices, and other information that is crucial for this sector to grow. This is because 'we,' as middle-aged women, tend to focus more on

our farms, ensuring that our crops are of good quality than anything else – and this affects our farm to grow and develop as other aspects are not given enough attention. (SFM, 2018)

The lack of youth participation in the agricultural sector has long been a significant concern, and the agricultural institutions/authorities are failing to attract young people into the sector. Although the government stresses the importance of agriculture for the economy, youth involvement has been a challenge, especially in the rural areas where there are spaces available for agri-business. The lack of young people's participation in the agricultural sector is worrying when considering the high unemployment rate amongst youth in South Africa.

The StatsSA (2019) noted that South Africa has an unemployment rate of 29.1%. This rate is higher amongst young people, i.e. the unemployment rates of the age group between 15-24 years and 25-43 years is 58.2% and 36.1%, respectively (StatsSA, 2019). Although unemployment cannot be eradicated through youth participating in the agricultural sector, positive outcomes can be achieved, and their unemployment rate could be reduced. Woolard (2013) and Adesina and Favour (2016) noted that young people in South Africa tend to migrate to the urban areas to look for jobs, partly due to the low status attached to farming. This rural-urban migration puts more pressure on urban areas by leading to the unbalanced distribution of resources, a heavy load for those remaining in agriculture, and congested cities (Mathivah, 2012). Several researchers, including Naamwintome and Bagson (2013), Kimaro, Towo and Moshi (2015) and Anania and Kimaro (2016), examined which issues affect youth participation in agricultural activities. The authors found that socio-economic factors such as poverty, low-income and low self-esteem are some of the factors that influence youth participation in agriculture. Adesina and Favour (2016) mentioned that the low self-esteem linked to young people raises the negative perceptions they have about agriculture, leading to non-participation.

According to FAO (2017), making agriculture more attractive to young farmers and creating decent employment opportunities in rural areas could reverse youth migration to urban centres. As indicated earlier, most young people do not want to participate or work in the core agriculture sector because they consider it unattractive. The government must thus encourage young people to participate in agricultural activities as they are an important resource for sustaining agricultural productivity, which is fundamental for economic development (Afande *et al.*, 2015). Naamwintome and Bagson (2013) and Kwenye and Sichone (2015) were of the view that young people are among the most productive in any society, given that they are persevering, resilient and resourceful stakeholders in developmental processes. Most young people live in rural areas where

there are limited opportunities, yet they have "untapped potential to transform the agricultural sector through innovation and entrepreneurship" (Yami *et al.*, 2019: n.p.).

In most cases, young people come from families that are involved in subsistence or smallholder farming. Their involvement in the agricultural sector, especially in the smallholder sector, could thus be beneficial in tackling the issues that this sector experiences. i.e. they could assist in terms of marketing, sourcing information, applying for grants or loans, negotiating contracts with potential buyers, bookkeeping and budgeting. Cheteni (2016) and Kising'u (2016) identified that most young people possess a secondary qualification, with some having a tertiary qualification. As the South African government continues to support the smallholder sector, they must encourage or engage the young people within their communities to be involved in the agricultural sector.

6.4.4 Agro-smallholder producers' involvement or participation in municipal planning processes

The White Paper on Local Government of 1998 indicates that municipalities as developmental local governments should play an integrating and coordinating role to ensure alignment between public and private investment within the municipal area. For local government to fulfill its mandate, a long-term visionary strategy that strives to guide planning at the local level must be devised. To promote governance and integrate planning strategies at all government levels, stakeholders' involvement in the planning process is critical. This means that the development of the governmental plan should include the participation of other spheres of government, the private sector, interest groups, and community members before resource allocation for implementation. Based on the findings of the study, the participation of the smallholder sector in municipal planning is minimal. Almost all the producers visited stipulated that the municipality has never organised meetings where only smallholder producers or both smallholder and commercial producers are invited, so that they can voice their issues concerning the sub-sector for it to be included or represented in the IDP.

Furthermore, the producers indicated that the only meetings that have been organised by the municipality are where every community member is invited to participate during the IDP formulation process. The input provided by the community members is not always represented in the IDP, however. On the side of the municipality, the officials stipulated the following:

In terms of legislation, one thing that is governing this bulk market is market bylaws-Currently, the market is reviewing the existing by-law that regulate this market as they are dating back since the apartheid regime. Currently, the by-law essentially outlines the governance of the bulk market. The by-law specifically determines who owns, manages, controls, and administers the market. Furthermore, it clearly outlines the trading system, duties, and functions of the market and the agents. The by-law does not mention anything about the involvement of growers or producers in the formulation of policies. Meaning, the producers do not participate in any formulation of the bulk market policies. Therefore, the municipality has created the market for the producers to supply the market but not involving them in creating procedures or policy-making. It is a facility for the producers to distribute and market their products. The smallholder farmers can participate in the wide community meetings that the municipality arranges for getting views of the community about the IDP. Hence, the bulk market creates operating processes and procedures to ensure the smooth operation of the market. (MO3, 2018)

The procedures that govern the retail markets are not specific concerning the involvement of the smallholder farmers on issues that may affect them. But they provide direction about the operation, management, and control of the retail markets. Although the municipality at a wider scope emphasises the inclusiveness of the smallholder farmers during policymaking processes, there is no guidance in terms of how the retail market could ensure the participation of smallholder farmers in their processes. Usually, there will be terms of reference that the municipality will formulate with an independent person who will have to ensure that the views of affected groups concerning the proposed policy or strategies are captured as well. The management must do a follow-up on the work of the independent contractor. There are committees within the markets, and we always have a meeting with the committees every week. If the independent contractor didn't consult them, the management would know as the committees also engage with stakeholders. Furthermore, some of the committees also include smallholder growers as the members of the committee (some of the small-growers form part of the committees. So, those small growers can provide information on whether the independent contractors have consulted them. However, it is not easy to verify from people or stakeholders that are outside the market, whether they have been invited to participate or not. (MO3, 2018)

The findings of the study show that there is a lack of smallholder involvement in the design, planning and implementation of by-laws on the issues concerning the smallholder producers. This is contrary to the Constitution (1996), the Municipal System Act of 2000 and the White Paper on Local Government (1998), which emphasise the participation of community members (in this case, smallholder producers) in policy-making processes so that their needs, desires, capacities, and

indigenous institutions are recognised, understood and given major weight. The involvement of producers on the issues that only relate to the internal structures of the municipal markets is not necessary. However, the participation of producers at the earlier stages of planning is critical when the issues or problems to be addressed, either through by-laws or procedures, will directly affect the producers' operations. For the sustainable smallholder agricultural sub-sector in the rural areas, farmers' participation in government planning processes at all levels is a crucial factor.

Based on the findings of this study, it is clear that the municipality is still using a highly centralised top-down approach that considers agro-smallholder producers to be passive accepters of change rather than active participants. A lack of institutional preparedness and a lack of understanding of the concept of planning instruments in the municipalities are two of the factors preventing an integrated approach to planning. Without producers' involvement, there can be no proper relationships, developments and programmes that could have an impact on this sub-sector (Aref *et al.*, 2010). A lack of farmer involvement in the decision to implement agricultural policies or strategies could lead to a failure in smallholder agricultural development. According to Aref (2011: 157), the participation of farmers in agricultural development faces numerous barriers, such as decisions being taken by bureaucrats in a highly centralised system; planners believing that local people are uneducated and too ignorant to be involved; and a belief that the local people do not have the requisite knowledge to participate. At all levels of government, farmers' participation could yield positive results in decision making or planning processes in many ways, e.g. by collecting local knowledge and expertise, by establishing acceptance of and/or support for decisions, and by inducing social learning (Caroline *et al.*, 2019).

Although the different spheres of government must utilise coherent planning instruments, intergovernmental planning has proven to be a challenge for South Africa. Even though the South African government has created numerous policies and planning strategies over the years, intergovernmental and interdepartmental coordination and integration have remained impractical to achieve. The spheres of government in South Africa make enormous economic and social investments, however to maximise the impact of these investments, improve the provision of services, and avoid resource wastage and duplication of functions, it is critical that the investment is coordinated.

According to the administrative theory, the senior management within an institution must develop an outline for tasks that need to be done and a method for doing them. In addition, officers on every level must develop and manage plans for their areas of responsibility. When the structures within the organisation do their part and are then aligned with other structures or levels concerning planning, then the institution's operation improves. Based on the findings/discussion of this study, the municipality seems to be inadequate in the agro-smallholder producers' eyes because of its poor planning and lack of inclusion in the planning processes, leading to inadequate attention and prioritisation by the government to address their concerns. Although the administrative theory does not emphasise the inclusion of external stakeholders in the planning processes of the government institutions, the views of external stakeholders are critical to ensure that any plans or strategies developed will address their needs and improve the institutions' image. Therefore, the findings of the study link to the administrative theory in the sense that planning as a management function should be a collective activity to enable the maximum accomplishment of the stated objectives and goals with the limited resources. Hence, as planning is the hallmark of government success, politicians and officials must carry out an in-depth analysis of all institutional activities involving agro-smallholder producers and other relevant stakeholders in planned actions. This will ensure good community relationships and the collection of adequate information for proper implementation. The following section discusses government coordination activities to maximise the impact of support provided towards the smallholder sub-sector.

6.4.5 Inadequate culture, political, and administrative commitment towards coordination by government institutions

The importance of coordination or cooperative governance amongst the spheres of government has been highlighted in the Constitution (1996) and the Intergovernmental Relations Framework Act of 2005. Although there are these legislative frameworks in place, there is still a lack of cooperation between government spheres. The responses of participants from both the provincial and local spheres of government clearly show that there is a lack of collaboration or integration between these two spheres, and even interdepartmental cooperation within the same level remains a challenge. In other words, there are no coordination mechanisms in place that can be used by the eThekwini Metropolitan Municipality and the Provincial Department of Agriculture to ensure that the services or support provided to the smallholder producers are inclusive and integrated.

Furthermore, the senior officials also indicated that neither sphere has measures in place to ensure a comprehensive and integrated support system for the smallholder sector. Every governmental sphere and department formulates and implements their own programmes, aiming to help the smallholder sub-sector without involving other stakeholders. Responses from provincial and municipal officials concerning the coordination of their actions towards the smallholder producers are set out below:

The department is lacking on the issue of ensuring the integration of the policies/projects/programmes. There is a real lack of incorporation from national market sales and local market sales. There is no system that the department is using to ensure that the smallholder farmers are documented so that such information could be kept and distributed to other stakeholders that are dealing with this sector. Hence, there is a need for the integration of the policies across the government departments that could assist the smallholder sector. Public sector institutions who are directly or indirectly helping the smallholder sector such as the Department of Economic Development, National Marketing Council, municipalities, Department of Agriculture, and Department of Trade and Investment, should ensure the integration of their policies and programmes to avoid duplication and wastage of resources. All these departments have different policies and programmes aiming to support the smallholder sector. (PO3, 2018)

The municipality doesn't work or plan or organise or coordinate any activities related to the smallholder farmers with the department of Agriculture. We haven't had much cooperation with the department of agriculture. There is a programme called RASET, which is in the draft phase. It is assumed that the RASET will try to coordinate all the activities or programmes that the municipality and provincial Department of Agriculture are implementing regarding the support for smallholder farmers. Hence, with such a programme, the relationship between the municipality and the provincial Department of Agriculture is sought to be improved. (MO2, MO3, 2018)

Within our department, there are no mechanisms to ensure the integration of agricultural activities or programmes with the eThekwini municipality. It still happens that the department will fund individual smallholder farmers that fall under eThekwini jurisdiction but with no communication with the municipality. The duplication in supporting such farmers by the department and eThekwini municipality happens almost every time. Hence, our activities are not coordinated. On the other side, the part that is not clear (a grey area) about the function of the department is the provision of infrastructure. Infrastructure is too broad and includes numerous things. You can see the plans of the other institutions in advance, but going forward in terms of the budget is that it is not discussed with everyone but only within the institution. The problem that exists with the government is that we don't plan with everyone before-hand. So, each department will be planning their things and allocate the budget without even thinking of the external parties that might be offering similar services. And, in most cases, the external parties are invited to share their input

once the budget is approved. So, the governmental planning is not always aligned across the spheres or departments. (PO1, PO2, 2018)

The provision of services by the municipality depends on IDP (priorities contained in the municipal plan must align with those of national and provincial spheres of government). But each department or unit within the municipality formulates its implementation strategies that will ensure that the municipal plans are achieved. On the other hand, the province or provincial departments look like they want to work in silos, and the municipality ends up using their funding to implement certain functions that fall under the provincial mandate. Hence, there are no proper working relationships between the municipality and the Department of Agriculture at the provincial level. Meaning there are no mechanisms that are in place to ensure that agricultural activities or programmes are integrated. (MO4, 2018)

In the past, the Parks, Recreation & Culture Unit within eThekwini Municipality used to work with this bulk market on specific issues, but now we are no longer working together. The line of communication stopped without any explanation or justification on why we are longer working together. (MO3, 2018)

The responses highlighted above align with the words of the country's President, Cyril Ramaphosa, who in his presentation of the Presidency Budget Vote to the National Assembly on the 17th of July 2019 identified the "pattern of operating in silos" in government as a challenge which results in a "lack of coherence in planning and implementation and has made monitoring and oversight of government's programmes difficult" (The Presidency, 2019: n.p.). Mubangizi and Mubangizi (2010) indicated that the failure of the government to coordinate similar activities and direct their efforts in a manner that will utilise various resources while avoiding wastage and duplication is one of the central challenges in the provision of services to the public. The fundamental collaboration amongst government departments on programmes for the delivery of specific societal impacts seems like a far-fetched dream. Nzimakwe and Ntshakala (2015: 830) noted that the "intergovernmental planning and coordination, among the three spheres of government, are crucial for South Africa if it is to realise its objective of becoming a well-oiled developmental state that can respond to and meet the social and economic needs of its people; namely eradicating poverty". Constant communication, cooperation and collaboration are critical within the spheres of government to ensure that each sphere is conscious of their roles and responsibilities in driving national development priorities, and to ensure that a single policy directs

activities that cut across departments, with input from those various departments, to maximise the outcomes. Osifo (2012) stipulated that the proper connections of internal and external institutional components assist in minimising internal and external uncertainties and complexities, and increase performance in an institution. Therefore, one sphere of government cannot successfully implement most strategies; the participation of all three spheres of government is critical for the adequate provision of services.

Proper planning, coordination and the integration of services provided by different institutions at the various levels of government is essential to ensure a conducive environment and investment climate. According to Wiggins and Sharada (2013), any support provided to the smallholder farmers will yield little impact if the enabling environment that governments provide is inappropriate for the development of market linkages. This means that it will be difficult for smallholder producers to prosper in the markets unless the government ensures the necessary conditions under which markets can function. Public institutions must not tolerate excessive levels of incoherence and apparent disorder in government, i.e. they must try to seize control of such levers as they can and create greater coordination. Eliminating redundant and contradictory programmes or projects and developing priorities more clearly is one of the ways to save resources. Public institutions must decide on the governing system's preferences rather than the multiple priorities that bubble up from each individual programme and organisation, if they are to achieve better coordination (Vanagas & Stankevičs, 2014).

One of the intergovernmental or interdepartmental coordination benefits is that it reduces expenditure and improves service delivery, but the main problem associated with it within the public sector is that it might be complicated by social and political forces, which may influence the entire process of coordination (Peters, 2018). Furthermore, some problems may stem from the nature of the institutions themselves, for instance, the institution seeking to preserve its independence, autonomy, institutional procedures, routines, budgets, personnel and policies. Political leadership is thus critical to ensure cooperation in government and authority for decision-making in coordination structures. The focus of such political leadership must be on driving coordination itself, not just the shared goals the departments might wish to attain (Razzano, 2016). Uncoordinated activities or programmes that cut across different government institutions to support smallholder producers may do the same thing and request the same information from the public, resulting in unnecessary costs for the government and lost time for the smallholder subsector.

The administrative theory indicates that coordination can be achieved in two primary ways, that is, by the institution and by the dominance of an idea. By institution simply means to allocate the interconnecting subdivisions of work to people who are placed in a structure so that orders of superiors to subordinates may coordinate the work. The dominance of an idea means the development of intelligent singleness of purpose in the minds and wills of those who are working together as a group so that each worker will of his own accord fit his task into the whole with skill and enthusiasm. Hence, the administrative theory stipulates that no institution could be effective without the extensive utilisation of both ways to achieve coordination. The results of this study are in harmony with the theory as the government activities that cut across various government institutions are not coordinated, and they do not yield positive results or outcomes as anticipated. The administrative theory indicates that the highest degree of coordination takes place within the departments set up, and the greatest lack of coordination and danger of friction occurs between the departments or at the points where they overlap.

Based on the findings of the study, it was noted that a lack of communication between the various government departments that are delivering similar services to the agro-smallholder producers is one of the major problems resulting from the lack of coordination. As the administrative theory does not say anything about communication between or amongst management, this study proposes that it should be emphasised within the administrative theory. Communication is a two-way process and interaction is critical. Such interaction must happen at all levels of management (planning, organising, coordinating, reporting, directing, staffing and budgeting), including all relevant stakeholders. Communication thus becomes the primary model of explaining social reality, which is achieved through interactive conversations between people. While the coordination of activities within government institutions is critical, similarly, the institutions can not operate without proper financial and human resources available. The section below discusses government ability to organize financial and human resources for their operation and sustainability of the municipal markets.

6.4.6 Organising financial and human resources for the operation and sustainability of the municipal markets

As per the Constitution (1996), the municipalities are mandated to deliver essential services and to be developmental by contributing to the social and economic development of the communities under their areas of jurisdiction. Furthermore, municipalities must structure and manage their planning and budgeting processes to give priority to the needs of the community. To ensure that

this mandate is carried out successfully, both human and financial resources are critical, but the financial resource is more significant as the municipalities cannot attract, select, develop, train and reward suitable candidates if there are no finances available. Through nationally raised revenue, the municipalities receive a grant to enable them to address, maintain and enhance service delivery and reduce infrastructure backlogs to the communities (Oosthuizen & Thornhill, 2017). On the other hand, the Constitution (1996) also requires that the municipalities raise their revenues from service fees, property rates, surcharges and other taxes, levies and duties. The developmental programmes of the municipalities must be aligned with their budgets. The revenue received from the national government and revenue raised internally must assist the municipality with the proper provision of services to the communities and ensure capacity within the municipality. The study also found that for the municipal markets to be sustainable and operational, revenue is received through nominal fees (space and cold room rentals and commission payable) and budget from the municipality (received through nationally raised revenue). Participants from both the retail and bulk markets stated that:

The bulk market commission is a little bit more expensive. The average commission that is payable (from the profit of the sales) to the bulk market if the supplier decided not to sell directly to the customers but utilising the agent is 12.5%. The 5% goes to the market authority (bulk market), and the agents receive 7.5%. The 5% that is payable to the bulk market assists the market to be sustainable. When the farmers want to use the cold rooms, there are separate tariff charges, and there are tenets that also pay rent for space as well. The bulk market also receives a portion of the budget from the municipality to help with the maintenance, upkeep of the buildings, marketing of the bulk market to the suppliers, securities, car parking, payments of staff and utility accounts, upgrading of the trading system, stationery, photocopying machines, and telephones- precisely the operating expenditure of the market. The bulk of the money (90%) comes from commission fees. The turnover of this market in 2017 was R1.4 billion. (M01, 2018)

The retail markets sustain themselves with the money received from the budget of the municipality and the revenue generated in these retail markets through the rental of spaces. Those individuals or farmers who want to trade in our retail markets have to pay for space. The rates of space vary across the markets as they are not the same and not located in the same location. The lowest price per day is R7, and the highest price is R500 (it depends on what you are trading as the retails markets consist of diverse individuals selling different

things, i.e. Fruits and vegetables, clothing, Indigenous medicines, prepared food, blankets, poultry). We don't have statistics that show how many agri-smallholder farmers are utilising our retail markets because we treat everyone as an individual. Usually, fees payable by farmers to hire a small table per day is R7, and to hire a large table per day is R10. (MO3, 2018)

The Municipal Finance Management Act (Act no. 56 of 2003) stipulates that the municipality must secure sound and sustainable management of their financial affairs and other institutions in the local spheres. In South Africa, the urban municipalities (metropolitan) are expected to raise a significant part of their revenue from their sources. In contrast, municipalities located in the rural areas receive most of their revenue from grants (Republic of South Africa, 2016). For instance, the eThekwini municipality has high potential to generate revenue and has numerous financial resources due to its diversified economy, which includes tourism, advanced manufacturing, transportation, finance, a shipping port and a range of government sectors (Mubangizi, 2010). Due to the heavy reliance of poor rural municipalities on national transfers, the government allocates more substantial portions of the available equitable shares to rural municipalities than urban municipalities (Republic of South Africa, 2016). The utilisation of such funds, the MFMA of 2003 requires the municipalities to secure sound and sustainable financial affairs through transparency, accountability, approval and management of their annual budgets. The National Treasury (2018b: 77) reported that numerous municipalities continue to face institutional and financial problems, breakdowns in service delivery and mounting debts. The non-payment of debts by the municipalities indicates that there are deeper underlying problems such as "weakness in revenue collection, and underinvestment in maintenance and renewal, which compromise the reliability of basic services" (National Treasury, 2018b: 77).

Given the significant assigned role of local government in South Africa's constitutional dispensation and its closeness to the real issues affecting communities daily, this sphere of government remains the potential flag bearer of the South African government. It demonstrates its obligation to act in a way that will produce an environment in which everyone can reach their full potential through the provision of quality services. For this to happen, a "core collective of people are needed that possess inherent to them a commitment, but also the skills and competencies attached to the specific role they fulfill to make local government work effectively and efficiently" (Du Plessis, 2016: 31). When the municipality faces capacity issues, both the national and provincial governments must strengthen and support the municipalities' capacity so that they will be in a position to manage their affairs.

An organisation can have machines, money and even materials, but nothing will be done without the workforce. Below are the responses from the municipal officials regarding human resources within the municipal markets:

As indicated earlier, the municipal markets are divided into retail and bulk markets. The retail market has numerous markets across the municipality, and they vary in terms of what they are selling. On the other hand, we have one bulk or Fresh Produce Market which deals with fruit and vegetables only. All these municipal markets have their own managers and operational staff. (MO1, 2018)

The retail market has the capacity to assist farmers and other individuals coming from different sectors to secure spaces within our markets. On the other side, when farmers request training, we communicate with other departments such as Parks and SEDA within the municipality that offers training. Hence, the municipal retail market has required human resources to ensure that it functions optimally. (MO3, 2018)

Olaniyan and Ojo (2008: 226) indicated that the "effectiveness and success of an organization, therefore, lies on the people who form and work within the organisation. Numerous authors such as Morrison and Milliken (2000), Detert and Burris (2007) and Takeuchi *et al.* (2012) noted that organisations have become more dependent on their workers for positive submissions and insightful ideas. Public institutions need employees who are skilled, knowledgeable, experienced, and in possession of the necessary expertise in their areas of work to maximise institutional performance and the achievement of goals. The failure of public institutions to pay sufficient attention to the issue of human capacity could lead to significant risk (Du Plessis, 2016). From the findings of the study, the municipal officials indicated that the human capital/resource is not a challenge within the municipal markets. In other words, both retail and bulk markets have employees who possess the relevant knowledge and skills to ensure that farmers or any individuals who want to trade in their markets are assisted accordingly. Furthermore, the study also found that the municipality organises workshops and training for its employees so that they will continuously learn new things as the environment changes regularly.

The administrative theory indicates that organising is an element of administration that is concerned with relating all components of the institution into a coordinated whole to achieve set goals. The assignment of specific roles to staff to perform, as well as building up human and material resources to carry out the planned activities, is critical in achieving the proposed

government objectives. For the institution to achieve its objectives, sufficient personnel with relevant expertise are required. The findings of this study affirm the administrative theory, i.e. the lack of personnel to assist the agro-smallholder producers portrays a negative image of the government institutions and the extension service officers, as a high number of agro-smallholder producers end up being serviced by few extension officers. Furthermore, the extension officers are not sufficiently equipped or skilled to ensure that the Department of Agriculture's agenda is successful. Therefore, the lack of personnel with relevant skills within the government institutions makes it impossible to achieve the created objectives. The government institutions' capacity depends on the ability of management to plan and organise the personnel and financial resources required for their institutions. The following section discusses the proposed model for agrosmallholder producers' accessibility to the municipal markets.

6.4.7 Proposed model for agro-smallholders' accessibility to the municipal markets

The proposed framework is a result of the extensive literature review and data collected from focus group discussions and semi-structured interviews. Key components of the framework have been identified and are reflected in Figure 6.1 below.

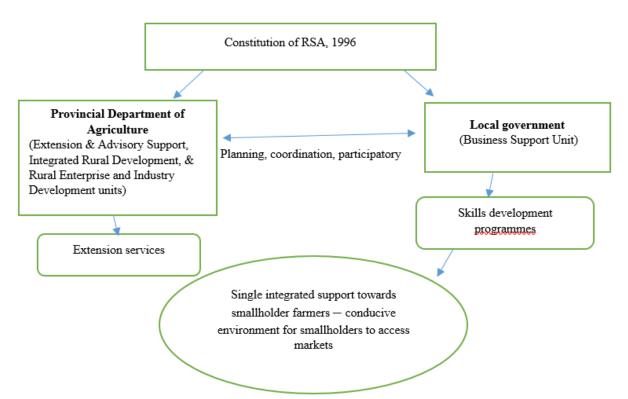


Figure 6.1: Framework on governmental processes towards agro-smallholders' ability to access markets

Source: Researcher's own (2020)

6.4.7.1 Constitution of RSA, 1996

The Constitution (1996), chapter 3, S41(h) stipulate that the spheres of government must cooperate with one another in mutual trust and good faith by informing one another of, and consulting one another on, matters of common interest. Furthermore, Chapter 7 of the Constitution, Section 153 (b), indicates that the municipality must participate in national and provincial development programmes. The Constitution in Schedule 4, Part A, also suggests that the agricultural sector is the functional area of both national and provincial competence. In contrast, Schedule 5, Part B stipulates that the municipalities are responsible for markets, but the provinces must provide monitoring and support for local government. Furthermore, the White Paper on Local Government of 1998 stipulates that municipalities can play a critical role in boosting local economies through local economic development initiatives. This provides the local government with a mandate to offer special social and economic services or to assist other government institutions with the provision of such services to avoid duplication of activities. However, Mubangizi (2011: 13) noted that the majority of "municipalities do not have adequate economic strategies in place" and are therefore unable to tackle socio-economic issues and boost their local economies. The agricultural activities at the local government level cannot only be indirectly placed under local economic developmental structure but must be recognised as the critical function to ensure proper support and avoid duplication of resources.

Based on the findings of this study, the government should consider amending Schedules 4 & 5 of the Constitution that highlight the competence of each sphere of government. The agricultural sector should fall under provincial and local spheres of government rather than be a national and provincial competence. In other words, this amendment would enable the municipalities, especially the metropolitan municipalities, to implement the agriculture function, or specific powers concerning agriculture would be devolved to the municipalities. Such an amendment could oblige the municipalities to allocate budget or resources to rural/urban agricultural development, rather than implementing agriculture-based activities and programmes for empowerment and skills transfers to smallholders, which sometimes duplicate the programmes delivered by the provincial government. Furthermore, it could assist both the provincial and local spheres of government in strengthening working relationships and coordination mechanisms that could benefit the smallholder subsector.

6.4.7.2 Provincial Department of Agriculture and Municipal Business Support Unit

An amendment of the Constitution to provide municipalities with the power to directly render agricultural services could assist in promoting integrated planning and coordination of agricultural activities between relevant departments at both the provincial and local levels. Furthermore, the participation of the provincial government in the matters of local government can assist in strengthening the planning tools that will ensure the development of comprehensive strategies and policies aiming at supporting and developing the smallholder agricultural sub-sector. The municipalities must be allowed to participate in provincial planning as this is a sphere that is at the grassroots level and best understands the needs that exist in their communities. Furthermore, the participation should also occur in the specific departments that deal directly with the activities of agriculture to ensure a precise and better alignment of their programmes or actions concerning the smallholder agricultural sub-sector. Furthermore, these spheres of government, especially in those departments that are directly involved with agriculture, should create a coordination structure. Such a structure should be responsible for ensuring that there is a proper alignment of planning and budgeting between the departments and ensuring the inclusion or participation of other relevant agricultural stakeholders in the planning processes.

6.4.7.3 Extension services and municipal skills development programmes

As highlighted in the findings of this study, the provincial department of Agriculture has extension and advisory services for helping the smallholder sub-sector, and the municipality provides training or workshops on skills development for this sub-sector. Although the majority of the smallholder producers lack business management skills, there is a great need for training or workshops around opportunities available in the municipal markets. Such training or seminars should not be for farmers only; they are also vital for the extension services so that they can advise the farmers accordingly. As indicated in the previous chapter, the departments responsible for municipal markets do not organise training or engage with the smallholder producers. The lack of involvement of this department when it comes to organising training or workshops for the smallholder producers perpetuates the lack of knowledge of farmers regarding the municipal markets. Ensuring the full participation of the department responsible for municipal markets and the integration of extension and advisory services from the department of agriculture could yield positive results in terms of knowledge provided to the farmers.

6.4.7.4 Single integrated support towards smallholder producers – conducive environment for smallholders to access markets

As highlighted in the findings, each governmental department formulates and implements its own programmes, aiming to help the smallholder sub-sector, without involving other stakeholders that do similar activities. Furthermore, there are no measures in place to ensure a comprehensive and integrated support system for the smallholder sector. Suppose the government could create a conducive environment with integrated support and approaches for the smallholder sub-sector. In that case, positive outcomes can be achieved in terms of growth and development and market access by the smallholder sub-sector. Proper planning, coordination and the integration of services provided by the relevant government departments at both the provincial and local levels are essential to ensure a conducive environment and investment climate for the smallholder sub-sector. Hence, the integrated support provided to the smallholder producers will yield a positive impact if the enabling environment that governments provide is appropriate for the development of market linkages.

6.5 CHAPTER SUMMARY

In this chapter, the details of the participants and a summary of the study's findings were presented. The data discussion and analysis were presented using the thematic analysis tool, and a proposed model for smallholder accessibility to the municipal markets was presented. The following chapter deals with the main conclusion and recommendations based on the data presented, discussed and analysed in this chapter.

CHAPTER SEVEN: CONCLUSION AND RECOMMENDATIONS

7.1 INTRODUCTION AND SUMMARY

The agro-smallholder sub-sector plays a crucial role in the alleviation of poverty. In most rural families, agriculture production and sales serve as a primary source of income, yet numerous constraints limit the growth and development of the smallholder agricultural sub-sector. A lack of participation in markets, a lack of in-farm infrastructure, high transportation costs, and a lack of business management skills are significant challenges for sustainable smallholder agricultural sub-sector development in South Africa.

The main aim of this study was to critically examine the influence of municipal markets on agrosmallholder growth within a decentralised state. The study was conducted in the eThekwini Metropolitan Municipality in the province of KwaZulu-Natal, South Africa. The researcher conducted seven individual face-to-face interviews with government officials and 15 focus group discussions with agro-smallholder producers. As the focus groups were between four and ten participants, the total number of participants for this study was 86. The agro-smallholder producers were purposively selected from Mbumbulu TC, Qadi TC, Mnini TC, Shangase TC and Ximba TC, which fall under the jurisdiction of the eThekwini Metropolitan Municipality. A maximum of three agro-smallholder producers per identified area were purposively selected. In addition, four managers from the eThekwini Municipality and three managers from the KZN Department of Agriculture & Rural Development were purposively selected to participate in the study. As mentioned earlier, the data were collected using semi-structured interviews and focus group discussions. The collected data were transcribed, coded and analysed using thematic analysis (TA) techniques.

This chapter offers concluding remarks and recommendations for future studies. The comments about both conclusions and recommendations are based on the literature review, the research objectives of the study, qualitative research approach and methods, and a discussion of the data collected during the study. The chapter begins with conclusions presented in the format of a presentation of the study's findings. The following part of the chapter covers the recommendations, and lastly, proposed future research.

7.2 CONCLUSION

The conclusions drawn from this section are based on the responses from the focus groups and semi-structured interviews. These conclusions relate to the specific objectives of this study, which were dealt with in the introductory chapter.

7.2.1 Infrastructure that affects the agro-smallholder producers

The findings of the study indicate that the government has played a critical role in the provision of off-farm infrastructures, such as roads, water and electricity, within the rural areas where the farms are located. However, most of the producers do not have power on their farms. Furthermore, the results of the study indicate that the government has played a vital role in supporting the smallholder agricultural sub-sector with on-farm infrastructures, such as water tanks, water pump engines, fencing, irrigation systems, watering cans, containers for keeping tools, hoes, rakes, shovels and spades. A lack of infrastructures, such as cold storage, tractors, irrigation systems and power, was highlighted by the producers as a significant challenge that curbs their production rate and ability to maximise their profits.

7.2.2 Perceptions of agro-smallholder producers on extension services

The agricultural extension and advisory services have a critical role to play in the context of sustainable agricultural productivity growth, especially for the smallholder sub-sector. Disseminating knowledge to smallholder producers is one of the essential functions that the agricultural extension officers must play in assisting the farmers to increase their ability to optimise returns. The findings of this study from the producers' perspective are that most of them are not receiving the right assistance from the extension officers, and they do not value the assistance provided to them. For this reason, there is a perception amongst the agro-smallholder producers about the extension services that the extension officers are not doing their jobs correctly. The main reasons for this perception are the inability of extension officers to provide relevant information to them and the lack of extension officer availability to the producers when they are needed.

7.2.3 Accessibility of municipal markets by the rural agro-smallholder producers

The ability of the smallholder producers to ensure sales to the municipal markets and other markets sometimes depends on them having excellent managerial and logistics skills, as well as an ability to deliver a continuous supply and meet challenging quality requirements and food safety standards.

Based on the findings of this study, the underlying transaction costs, the volume of products, and the inability of agro-smallholder producers to find information regarding prices in urban areas or any other markets are the main issues that limit the smallholder producers from fully participating in the municipal markets. Such problems often force them to sell their fresh produce to the local communities or other individual traders at their farm gates. The availability of the municipal markets, therefore, does not add any value or contribute positively to the smallholders' growth and development. Furthermore, the study found that middle-aged women dominate the farms, and as they are heavily involved in the production of crops, no one is focused on the activities related to marketing, networking or bookkeeping. Youth involvement could assist in closing this gap, however.

7.2.4 Municipal planning processes that influence the agro-smallholder producers' ability to participate in the municipal markets

The South African government formulates and implements laws and policies regarding the responsibilities and rights of citizens and the provision of essential services to the public. When the government is formulating any such policies or plans, especially for the smallholder producers, it is critical that these constituents are involved or can participate in the process so that their views can be incorporated. In other words, to promote governance and inclusive planning strategies at all government levels, stakeholders' involvement in the planning process is critical.

Based on the findings of the study, the participation of the smallholder sector into municipal planning is minimal. Almost all the producers stipulated that the municipality has never organised any meetings where only smallholder producers are invited so that they can voice their concerns regarding this sub-sector, for them to be included or represented in the IDP. Furthermore, the producers indicated that the only meetings that have been organised by the municipality include every community member, however the input provided by the community members is not always represented in the IDP. The study also found that the municipality's Business Support Unit does not encourage consultation with the smallholder producers when it comes to the planning of the municipal markets. This lack of participation of the smallholder producers negatively affects the sub-sector, as their issues and views concerning the agricultural sector are not integrated into the municipality's plans or policies.

7.2.5 Coordinating mechanisms used by municipalities to ensure inclusive and integrated support services to the agro-smallholder producers

The Constitution (1996) requires that the spheres of government consult and inform one another on issues of common concern, yet the findings of this study clearly show that there is a lack of collaboration or integration between the activities and/or programmes related to agriculture between the provincial and local spheres of government. Furthermore, the findings also indicate that neither sphere has measures in place to ensure a comprehensive and integrated support system for the smallholder sector. Each governmental sphere and department formulates and implements its own programmes to help the smallholder sub-sector, but does not involve other stakeholders. For this reason, the programmes or support provided by each sphere do not yield many positive results, as some of the assistance provided by one sphere may repeat what has been supplied by another. Furthermore, uncoordinated similar programmes or strategies lead to resource wastage, as they repeat the same activities that have been performed by other institutions or departments.

7.2.6 Organising processes for the allocation of financial and human resources to the municipal markets

The Municipal Finance Management Act (Act no. 56 of 2003) indicates that the municipality must ensure sound and sustainable management of their financial affairs and other institutions in the local spheres. In South Africa, the urban municipalities (metropolitans) are expected to raise a significant part of their revenue from their own sources. In contrast, municipalities located in rural areas receive most of their revenues from grants. The findings of the study indicate that the municipal markets largely receive revenue through nominal fees (space and cold room rentals, commissions payable) and budget from the municipality (received through nationally raised revenues. The revenue received assists the municipal markets to be sustainable and operational. Both financial and human resources were not mentioned as a challenge for the municipal markets. In other words, both retail and bulk markets have employees who possess the relevant knowledge and skills in ensuring that farmers or any individuals who want to trade in their markets are assisted accordingly.

7.3 RECOMMENDATIONS

There is a clear need for well-integrated mechanisms to be created by the government to improve the accessibility of the smallholder agricultural sub-sector into the markets. Moreover, a closer look reveals a complex problem, i.e., the markets that the municipality manages and controls do not benefit the smallholder sub-sector. Despite this, several programmes or workshops, and even extension services, have been created to help the smallholder sub-sector understand the markets available to them better. This section provides recommendations based on the empirical findings of the study. Supporting the agro-smallholder sub-sector to improve their market participation in the municipal markets, the following recommendations should be considered by the government as well as the smallholder agricultural sub-sector.

7.3.1 Amendments to the Constitution - Schedule 4&5, Part A&B.

Seventeen modifications have been made since the South African Constitution came into force in 1996. According to the Constitution (1996), Section 3 (a)(b)(ii), any other provision of the Constitution may be amended by a Bill passed by the National Assembly, with a supporting vote of at least two-thirds of its members, as well as by the National Council of Provinces with a supporting vote of at least six provinces, if the amendment alters provincial boundaries, powers, functions or institutions. This study, therefore, recommends that Schedule 4&5 should be amended to allow the agricultural function to be placed under the provincial Department of Agriculture and local government within the Business Support Unit. This could assist both the provincial and local spheres of government to better manage and coordinate the activities that they create explicitly for the support and development of the smallholder sub-sector. This would maximise the outcomes and impacts of the services provided to the farmers.

7.3.2 Dissemination of information about the municipal markets to farmers

In most cases, the smallholder producers engage in crop production without having explored possible markets for their fresh produce. In other words, many of the farmers only search for markets once their products are ready to be sold. The consequences of this are that producers often lose a large amount of their produce to degeneration when the right market cannot be found immediately, and they sometimes sell their produce at low prices at their farm gates to make sure that everything is sold before it spoils. Informed buyers can thus easily exploit the smallholder producers who lack market information. Providing market information so that the producers can enhance their negotiation ability could thus assist in preventing such exploitation. As highlighted earlier in the discussion chapter, the administrative theory does not say much about communication between or amongst management or departments. Yet, any institution must plan, organise and coordinate its activities properly. As has been seen in this study, communication – not only internally but also with external stakeholders such as agro-smallholder producers – is essential to ensure that the support provided yields more positive outcomes and enables the smallholder sector to grow. Proper interaction between government departments, both at the provincial and municipal

levels, and the agro-smallholder producers is needed to ensure that useful information is distributed accordingly to the producers.

It is, therefore, recommended that both extension officers and managers from the municipal markets distribute relevant information to the farmers about the markets available to them, as well as information about financial services, climate and weather, and encourage them to seek markets before committing to production. Information distribution by both municipal and provincial officials through coordinated channels could help the farmers know more about the possible marketing channels they could consider for their produce. Specific information channels such as meetings, workshops and cellular phones can be utilised to disseminate information about the markets available to them, as well as current market prices and demand. In addition, the distribution of information through meetings or workshops could provide the farmers with an opportunity to share their ideas in terms of how this sub-sector could be appropriately supported. Such opinions or inputs can be used by the relevant departments at both the local and provincial levels to properly formulate policies and strategies that address the needs of the farmers.

7.3.3 Create a single planning and coordination structure/forum

Based on the findings of the study, both the municipality and the provincial Department of Agriculture support the smallholder producers. It is therefore vital that the departments that directly deal with agricultural activities, especially the smallholder producers, from these two spheres of government create a single joint planning and coordination structure to discuss development priorities and planned projects for the smallholder sub-sector.

The planning system that the government is currently using remains unsuited to the task of long-term planning for the development of agro-smallholder producers. This is due to the substantial disintegration of roles and powers across the three spheres of government. This disintegration has resulted in government policies and programmes achieving sub-optimal outcomes relative to the state's resources on preparing and implementing them. Therefore, for the provincial Department of Agriculture and municipalities to improve, they should incorporate stakeholder insights, lay a policy foundation for a whole-of-government approach to planning, and set the direction for agrosmallholder producers' planned future. Creating a coherent planning and coordination system could assist government institutions in ensuring that better outcomes are achieved from the delivery of support services to agro-smallholder producers.

The planning and coordination structure should consist of the relevant representatives from both spheres. Such a structure could ensure that efforts are channeled towards maximising the impacts of programmes or projects towards the smallholder producers and ensuring that the focus of the relevant departments is on the same developmental agenda. In this way, the development of a stable relationship between the relevant departmental officials in both spheres could be achieved.

7.3.4 Improvement of on-farm infrastructure

Public infrastructure plays a critical role in sustained and rapid economic and socio-cultural development for rural people. Improved public infrastructure would assist by providing farmers with better access to production and productivity factors. Based on the study's findings, the government has played a vital role in improving public infrastructures such as roads, water supply, and electricity. However, the government has failed to assist smallholder producers with tractors, as the majority still use a hoe. Therefore, emphasis could be directed towards the farmers to make sure that they also play their part in ensuring the availability of on-farm infrastructure. Securing on-farm infrastructure such as cold rooms, storage and power would reduce the deterioration of produce after harvesting. Therefore, it is recommended that the farmers take responsibility for securing such infrastructure through accessing finance from the credit institutions or member contributions rather than depending on or waiting for the government to assist.

7.3.5 Reporting mechanisms and capacity building for the extension services

The National and Provincial Departments of Agriculture are central government institutions in South Africa responsible for extension and advisory activities for smallholder producers. Based on this study's findings, it is clear that the farmers are not benefiting from the extension and advisory functions, however. The Provincial Department of Agriculture highlighted human capacity as a significant challenge facing the extension and advisory programme, with less than 200 Agricultural Extension Officers being positioned throughout the KwaZulu-Natal province. The administrative theory stipulates that it is vital for an organisation to have sufficient human resources who are qualified and competent to ensure its effective management and smooth functioning. Through the administrative theory application, it thus recommended that the Department of Agriculture increase the extension services' capacity to implement the plans and strategies created for agro-smallholder producers effectively. There is no benefit from creating better-coordinated plans and strategies if there are not enough human resources to implement them on the ground.

Furthermore, based on the study findings, issues such as the visibility of the extension officers to the farmers and their inability to provide information that will be beneficial to the farmers clearly show that the department must create capacity programmes as well as reporting and evaluation mechanisms for the extension officers. The department of agriculture should organise capacity programmes around the core competencies that the extension officers should possess. The extension officers serve as the primary tool to transmit knowledge about production, markets, cultivation and quality improvement to farmers. In order to cater to each farmer's needs, it is recommended that the department consider the application of ICT, which could enable the farmers and extension officers to more effectively communicate and overcome the limitations of space, time and a lack of human resources. According to Ajani (2014), ICT refers to "technologies that enable users to receive, process, transmit, or send information which may be in the form of voice, text, or picture". ICT can play a critical role in increasing efficiency and communication between the farmers and buyers while reducing waste and price dispersion. Numerous authors, such as Aker (2011), Masutha and Rogerson (2015), Aker and Marcel (2015) and Freeman and Mubichi (2017) have noted that technologies such as cellphones, radio and TV can democratise information access, i.e., technology can empower farmers, present them with learning opportunities, and allow them to establish networks with other farmers.

The KZN Department of Agriculture & Rural Development must also formulate reporting mechanisms that will ensure the extension officers' accountability and visibility to the farmers. Furthermore, the department should create a database of the smallholder producers who are assisted by the extension officers so that follow-ups can be done by other officials within the department to ensure the authenticity of the reports produced by extension officers. The farmers in this study indicated that the extension officers typically come to their farms to get signatures as a sign that they visited them without providing useful information. The department must thus find ways to improve the reporting mechanisms of the extension officers. One of these could be a detailed day-to-day plan of action that will engage the farmers before the extension officers visit them. This could assist with the extension officers' visibility and result in a comprehensive report that could be presented to the department for each farmer.

7.3.6 Reduce transport challenges through collective marketing

The study results show that transportation costs have a negative influence on farmers' ability to access municipal markets. In other words, transportation is a vital factor in a smallholder producer's decision to supply or sell to municipal markets. The smallholder producers' inability to

pay transportation costs means that they will not reach distant markets, and they are limited to selling to the local markets near their farms. As the smallholders' farms are not far from each other, they could minimise their transportation costs by organising and coordinating transport to take their fresh produce to the markets. Such transport coordination could also benefit the farmers by strengthening their bargaining position when marketing their produce.

7.4 PROPOSED FUTURE RESEARCH

This study's responses were only based on agro-smallholder producers, the KZN Department of Agriculture & Rural Development, and the eThekwini Metropolitan Municipality's officials. Other relevant stakeholders, such as extension officers and financial institutions, were not included in the study. Thus a broader investigation into the impact of agricultural role players in the development and growth of the smallholder sub-sector is required. In other words, an in-depth investigation of the role and impact of micro-finance institutions and extension and advisory programmes on smallholder producers' development is crucial. Furthermore, future studies could examine the impact of entrepreneurial skills on smallholder producers' success or failure when it comes to accessing and expanding their markets for their produce.

REFERENCES

Abdulsamad, A., Brun, L. and Gereffi, G. 2013. *Realising the potential of African agriculture: Innovations and market access for smallholder farmers*. Available at: http://ssrn.com/abstract = 2598875 [Retrieved, January 20, 2015].

Abdu-Raheem, K.A. and Worth, S. H. 2016. Suggesting a new paradigm for agricultural extension policy: The case of West African countries, *South African Journal of Agricultural Extension*, 44(2): 216–230.

Ackroyd, S. and Fleetwood, S. 2002. *Realist perspectives on management & organisations*. New York: Taylor & Francis Ltd.

Adepoju, A.A. and Salman, K.K. 2013. Increasing agricultural productivity through rural infrastructure: evidence from Oyo and Osun States, Nigeria. *International Journal of Applied Agricultural and Apicultural Research*, 9(1&2): 1–10.

Adebayo, A. 2000. *Principles and practice of public administration in Nigeria*. 2nd ed. Ibadan: Spectrum Books.

Adesina, T.K. and Favour, E. 2016. Determinants of participation in youth-in-agriculture programme in Ondo State. *Nigeria. Journal of Agricultural Extension*, 20(10): 104–117.

Afande, F.O., Maina, W.N. and Maina, M.P. 2015. Youth engagement in agriculture in Kenya: Challenges and prospects. *Culture, Society and Development*, 7: 2422–8400.

Afful, D.B., Oluwatayo, I.B., Kyei, K.A., Ayisi, K. and Zwane, E.M. 2015. Contribution of Public extension to food security of smallholder farmers in Limpopo Province, South Africa in an era of climate variability. *Journal of Human Ecology*, 50(3): 205–212.

Agranoff, R. 2007. *Managing within networks: Adding value to public organizations*. Washington, DC: Georgetown University Press.

Akanle, O., Ademuson, A.O., Adegoke, O.O. and Okewumi, E.O. 2019. Gender and marketing of agricultural produce in Nigeria. *Gender & Behaviour*, 17(2): 12846–12858.

Akazili, J., Adjuik, M. and Chatio, S. 2008. What are the technical and allocative efficiencies of public health centres in Ghana? *Ghana Medical Journal*, 42(4): 149–155.

Aliber, M., Kirsten, M., Maharajh, R., Nhlapo-Hlope, J. and Nkoane, O. 2006. Overcoming underdevelopment in South Africa's second economy. *Development Southern Africa*, 23(1): 45–61.

Aliber, M. and Hall, R. 2010. *Development of Evidence-Based Policy around Small-Scale Farming*. Report commissioned by the Programme to Support Pro-Poor Policy Development, on behalf of the Presidency. Pretoria: Government of the Republic of South Africa.

Aliber, M. and Hall, R. 2012. Support for smallholder farmers in South Africa: Challenges of scale and strategy. *Development Southern Africa*, 29(4): 548–562.

Aliber, M. and Mdoda, L. 2015. The direct and indirect economic contribution of small-scale black agriculture in South Africa. *Agrekon*, 54(2): 18–37.

Altman, M., Hart, T.G.B. and Jacobs, P.T. 2009. Household food security status in South Africa. *Agrekon*, 48(4): 345–361.

Anania, P. and Kimaro, P.K. 2016. Factors affecting effective youths' participation in agricultural marketing co-operatives in Tanzania: Experience from selected agricultural co-operatives in Arusha and Moshi district councils, Tanzania. *International Journal of Economics, Commerce and Management*, 4(2): 709–731.

Andrew, M, Ainslie, A., and Shackleton, C. 2003. *Land Use and Livelihoods: Evaluating land and agrarian reform in South Africa*. Occasional Paper Series, No.8. Bellville: Programme for Land and Agrarian Studies, University of the Western Cape.

Aref, F. 2010. Barriers to community capacity building for tourism development in communities in Shiraz, Iran. *Journal of Sustainable Tourism*, 6(2): 136-142.

Aref, F. 2011. Farmers' participation in agricultural development: The case of Fars province, Iran. *Indian Journal of Science and Technology*, 4(2): 155–158.

Arinloye D.A.A, Pascucci, S., Linnemann, A.R., Coulibaly, O.N., Hagelaar, G. and Omta, O.S.A. 2015. Marketing channel selection by smallholder farmers. *Journal of Food Products Marketing*, 21(4): 337–357.

Ayinke, O.O. 2011. Contract farming in developing emerging farmers in South Africa: Exploring the Gledhow Mansomini sugarcane Scheme. Masters thesis: The University of Stellenbosch.

Akanle, O., Ademuson, A.O., Adegoke, O.O. and Okewumi, E.O. 2019. Gender and marketing of agricultural produce in Nigeria. *Gender & Behaviour*, 17(2): 12846–12858.

African Union. 2003. Second Ordinary Session Maputo, Mozambique. Assembly Declarations.

Agricultural Business Chamber. 2011. Executive summary of ABC workshop on finance and development finance in agriculture held on the 15th April 2011. From: https://www.agbiz.co.za/Documents/Workshops/tabid/409/Default.aspx. [Retrieved, January 05, 2018].

AgriSA. 2018. About us. From: https://www.agrisa.co.za/about [Retrieved, January 10, 2019].

Alliance for a Green Revolution in Africa. 2014. *Improving Fertilizer Supplies for African Farmers*. AGRA Brief 2, Nairobi, Kenya: AGRA.

Agrawal, V.K. and Vashistha, R. 2013. POSDCORB: A managerial overview. *Indian Journal of Research*, 3(4): 248–250.

Armstrong, M. 2008. Strategic human resource management. 4th ed. London: Kogan Page.

Andersen, P. and Shimokawa, S. 2006. *Rural Infrastructure and Agricultural Development*. Annual Bank Conference on Development Economics, Tokyo, Japan, May 29–30, 2006.

Arndt, C., Pauw, K. and Thurlow, J. 2016. The economy wide impacts and risks of Malawi's farm input subsidy program. *American Journal of Agricultural Economics*, 98(3): 962–980.

Akinnagbe, O.M. and Umukoro, E. 2011. Farmers' perception of the effects of land degradation on agricultural activities in Ethiope East local government area of Delta State, Nigeria. *Agriculturae Conspectus Scientificus*, 76(2): 135–141.

Akaili, J., Adjuik, M., Chatio, S. and Kanyoms, E. 2008. What are the technical and allocative efficiencies of public health centres in Ghana? *Ghana Medical Journal*, 42(4): 149–155.

Alasuutari, P., Bickman, L. and Brannen, J. 2008. *The SAGE handbook of social research methods*. London: Sage Publishers.

Ali, S. 2006. Why does policy fail? Understanding the problems of policy implementation in Pakistan - a neuro-cognitive perspective. *International Studies in Educational Administration*, 34(1): 1–20.

Alexandratos, N. 2005. Countries with rapid population growth and resource constraints: Issues of food, agriculture, and development. *Population and Development Review*, 31(2): 237–258.

Alžbeta Kucharíková, A., Tokaríková, E. and Blašková, M. 2015. Human capital management—Aspect of the human capital efficiency in university education. *Procedia - Social and Behavioral Sciences*, 177: 48–60.

Amrouk, E.M., Poole, N.D., Mudungwe, N. and Muzvondiwa, E. 2013. *The Impact of Commodity Development Projects on Smallholders' Market Access in Developing Countries: Case studies of FAO/CFC Projects*. From http://www.fao.org/docrep/017/aq290e/aq290e.pdf [Retrieved, November 02, 2018].

Ajani, E.N. 2014. Promoting the Use of Information and Communication Technologies (ICTs) for Agricultural Transformation in Sub-Saharan Africa: Implications for Policy. *Journal of Agricultural and Food Information*, 15(1): 42–53.

Aker, J.C. 2011. Dial 'A' for Agriculture: a Review of Information and Communication Technologies for Agricultural Extension in Developing Countries. *Agricultural Economics*, 42(6): 631–47.

Aker, J.C. and Marcel, F.M. 2015. Mobile Phone Coverage and Producer Markets: Evidence from West Africa. *The World Bank Economic Review*, 29(2): 262–92.

Anaeto, F.C., Asiabaka, C.C., Nnadi, F.N, Ajaero, J.O, Aja, O.O, Ugwoke F.O, Ukpongson, M.U. and Onweagba, A.E. 2012. The role of extension officers and extension services in the development of agriculture in Nigeria. *Journal of Agricultural Research*, 1(6): 180 – 185.

Anriquez, G. and Kostas, S., 2007. Rural development and poverty reduction: is agriculture still the key? *Journal of Agricultural and Development Economics*, 4(1): 5-46.

Arias, P., Hallam, D., Krivonos, E. and Morrison, J. 2013. *Smallholder Integration in Changing Food Markets*. From http://www.fao.org/ docrep/018/i3292e/i3292e.pdf [Retrieved, January 02, 2016].

Arndt, C., Davies, R. and Thurlow, J. 2018. *Urbanization, Structural Transformation and Rural-Urban Linkages in South Africa. International Food Policy Research Institute*. From: https://csp.treasury.gov.za/Resource%20Centre/Conferences/Documents/Urbanization%20 Review%20Papers/Paper%203%20-%20RSA%20Urbanization.pdf [Retrieved, February 10, 2019].

Asfaw, S., Shiferaw, C., Simtowe, F., and Lipper, L. 2012. Impact of modern agricultural technologies on smallholder welfare: Evidence from Tanzania and Ethiopia. *Food Policy*, 37: 283–295.

Asuming-Brempong, A. 2004. *The Role of Agriculture in the Development Process: Recent Experiences from Ghana*. African Association of Agricultural Economists. Shaping the Future of African Agriculture for Development: The Role of Social Scientists. Proceedings of the Inaugural Symposium, 6 to 8 December 2004, Grand Regency Hotel, Nairobi, Kenya.

Asendorpf, D. 2000. A culture of boycott: Reasons for the fragility of South Africa's democracy at the local level: The case of Umtata/Transkei. *Africa Spectrum*, 35: 273–292.

Atuahene, B. 2011. South Africa's Land Reform Crisis: Eliminating the Legacy of Apartheid. *Foreign Affairs*, 90(4): 121–129.

Ayaz, S. and Hussain, Z. 2011. Impact of institutional credit on production efficiency of farming sector: A case Study of Faisalabad. *Pakistan Economic and Social Review*, 49(2): 149–162.

Babu, S.C., Manvatkar R. and Kolavalli, S. 2016. Strengthening Capacity for Agribusiness Development and Management in Sub-Saharan Africa. African Journal of Management, 2(1): 233–247.

Babbie, E. 2010. The practice of social research. 12th ed. Wadsworth: Cengage Learning.

Baloyi, J.K. 2010. An analysis of constraints facing smallholder farmers in the agribusiness value chain: A case of farmers in Limpopo Province. Master's Thesis: University of Pretoria, Pretoria.

Bandama, M. 2016. *The crucial role of women in African agriculture*. From: https://www.farmersweekly.co.za/opinion/by-invitation/the-crucial-role-of-women-in african-agriculture/ [Retrieved, June 20, 2018].

Bankole, F.O. and Bankole, O.O. 2017. The effects of cultural dimension on ICT innovation: Empirical analysis of mobile phone services. *Telematics and Informatics*, 34(2): 490–505.

Balarane, A. and Oladele O.I. 2012. Awareness and use of agricultural market information among small scale farmers in Ngaka Modiri Molema District of North West Province. *Life Science Journal*, 9(3): 57 – 62.

Barbour, R. 2008. *Doing focus groups*. London: Sage Publishers.

Baudron, F. and Giller, K. 2014. Agriculture and nature: Trouble and strife? *Biological Conservation*, 170: 232–245.

Barrientos, S. and Visser, M. 2012. South African horticulture: opportunities and challenges for economic and social upgrading in value chains. Capturing the Gains Working Paper, No.12, Manchester University.

Battersby, J., Hayson, G., Kroll, F. and Tawodzera, G. 2015. *A study of current and future realities for urban food security in South Africa*. From: http://www.afsun.org/wp-content/uploads/2016/03/Web-Battersby-et-al-Urban-Food-Security-Report.pdf [Retrieved, March 10, 2017].

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

Baiyegunhi, L.J.S. and Fraser, G.C.G. 2014. Poverty incidence among smallholder farmers in the Amathole District Municipality, Eastern Cape Province, South Africa. *Journal of Human Ecology*, 46 (3): 261 – 273.

Barham, J. and Chitemi, C. 2009. Collective action initiatives to improve marketing performance lessons from farmer groups in Tanzania. *Food Policy*, 34: 53–59.

Bayu, T.B. 2020. Center-states Policy Coordination in the Ethiopian Federalism: Institutional Perspective. *Journal of Public Policy and Administration*, 4(1): 1–8.

Benfica, R., Cunguara, B. and Thurlow, J. 2018. *Linking agricultural investments to growth and poverty: An economywide approach applied to Mozambique*. In Press: Agricultural Systems.

Bediako, J.A. and Debrah, K. 2007. Finding a sustainable linkage between the emerging farmer and formal markets: The case of Pick 'n Pay and the Zanyokwe farmers in the Eastern Cape of South Africa. Paper presented at the 2007 AAAE Conference, 26–28 September 2007, Johannesburg, South Africa.

Berg, B.L. 2009. *Qualitative research methods for the social sciences*. 7th ed. Boston: Allyn & Bacon.

Bergman, M.M. 2008. Advances in mixed methods research. London: Sage Publishers.

Bhorat H, Oosthuizen M. and Van der Westhuizen C. 2012. Estimating a poverty line: An application to free basic municipal service in South Africa. *Development Southern Africa*, 29(1): 77-96.

Bhorat H and Van der Westhuizen C, 2013. Non-monetary dimension of well-being in South Africa, 1993-2004: A post-apartheid dividend? *Development Southern Africa*, 20(3): 295-314.

Biyela, A.C., Nzamakwe, T.I., Mthuli, S.A. and Khambule, I. 2018. Assessing the role of intergovernmental relations in strategic planning for economic development at local government level: A case study of uMkhanyakude District Municipality. *Journal of Gender, Information and Development in Africa*, 7(2): 221–239.

Binswanger-Mkhize, H.P. 2009. *Challenges and opportunities for African agriculture and food security: High food prices, climate change, population growth, and HIV and AIDS.* Expert meeting on how to feed the world in 2050, 24–26 June 2009. Food and Agriculture Organization of the United Nations: Economic and Social Development Department.

Bond, J.K., Thilmany, D. and Bond, C.A. 2006. *Direct marketing of Fresh Produce: Understanding consumer purchasing decisions and choices*. A publication of the American Agricultural Economics Association, 4th Quarter 2006: 21(4).

Bradstock, A. 2005. Key experiences of land reform in the Northern Cape Province of South Africa. From: http://agris.fao.org/agris-search/search.do?recordID=GB2013203703 [Retrieve d, May 04, 2018].

Bryan, E., Deressa, T., Gbetibouo, G. and Ringler, C. 2009. Adaptation to climate change in Ethiopia and South Africa: options and constraints. *Environmental Science and Policy*, 12 (4): 413–426.

Bryan, E., Ringler, C., Okoba, B., Roncoli, C., Silvestri, S. and Herrero, M. 2013. Adapting agriculture to climate change in Kenya: Household strategies and determinants. *Journal of Environmental Management*, 114: 26–35.

Braun, V. and Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3: 77–101.

Bryman, A. 2008. Social research methods. 3rd ed. New York: Oxford University Press.

Bryman, A., and Cramer, D. 2011. *Quantitative Data Analysis with IBM SPSS 17, 18 and 19: A Guide for Social Scientists*. London: Routledge.

Bryman, A. 2012. Social Research Methods. 4th ed. Oxford: Oxford University Press.

Breese, R. 2013. Conceptualising the nature of work: revisiting Luther Gulick's theories of organization. *Journal of Management History*, 19 (2): 279–294.

Business Enterprises at University of Pretoria (Pty) Ltd. 2015. *Impact Evaluation of the Comprehensive Agricultural Support Programme (From its inception in 2004 to February 2013)*. University of Pretoria: Hatfield.

Calzadilla, A., Zhu, T., Rehdanz, K., Tol, R., S., J. and Ringler, C. 2009. *Economy-wide impacts of climate change on agriculture in Sub-Saharan in Africa*. Research unit Sustainability and Global Change, Hamburg University and Centre for Marine and Atmospheric Science, Germany: Working Paper FNU-170. G8. 2009. G8 leader's declaration: Responsible leadership for a sustainable future. 35th G8 summit, L'Aquila, Italy, 8–10 July 2009.

Carter, J., Mitchell, D., Barberton, C. and Abdoll, C. 2014. *Expenditure and performance review: Micro Agriculture Finance Institutions of South Africa*. Pretoria: Cornerstone Economic Research (Pty) Ltd.

Centre for the Study of African Economies. 2014. *Agriculture in African development: A review of theories and strategies*. CSAE Working Paper WPS/2014-22.

Chambers, R. 2014. Rural development: Putting the last first. London: Routledge.

Chalekian, P.M. 2013. Instantiations of POSDCORB: A Framework-Theory-Model Approach. *Administration & Society*, 20(10): 1–28.

Chikazunga, D., Deall, S., Louw, A and van Deventer, J. 2008. The role of Fresh Produce Markets in South Africa. Regoverning Markets, *Policy Brief 4*: September 2008.

Chikazunga, D. and Paradza, G. 2012. Can smallholder farmers find a home in South Africa's food-system? Lessons from Limpopo Province. From: http://www.plaas.org.za/blog/cansmallholderfarmers-find-home-South-Africa's-food-system-lessons-Limpopo province [Retrieved, September 20, 2019].

Chitiga-Mabugu, M., Nhemachena, C., Karuaihe, S., Motala, S., Tsoanamatsie, N., Mashile, L. and Ngwenya, T. 2013. *Government's role in ensuring and improving food security in South Africa*. From: www.hsrc.ac.za/en/research-data/ktree-doc/13815 [Retrieved, September 10, 2016].

Cheteni, P. 2016. Youth Participation in Agriculture in the Nkonkobe District Municipality, South Africa. *Journal of Human Ecology*, 55(3): 207–213.

Chen, S., Chen, X. and Xu, J. 2016. Impacts of climate change on agriculture: Evidence from China. *Journal of Environmental Economics and Management*. 76: 105–124.

Chibba, M. and Luiz, J.M. 2011. Poverty, inequality and unemployment in South Africa: context, issues and the way forward. *Economic Papers*, 30(3): 307–315.

Chibaya, G. 2016. *Hypermarkets in South Africa -The Future of retailing*? From: https://www.cnbcafrica.com/news/southern-africa/2016/06/15/hypermarkets-south-africa-retailing/ [Retrieved, March 03, 2018]

Chisasa, J. 2014. A diagnosis of rural agricultural credit markets in South Africa: empirical evidence from North West and Mpumalanga provinces. *Banks and Bank Systems*, 9(2): 100–111.

Chowdhury, S.K., Gulati, A. and Gumbira-Sa'id, E. 2005. The rise of supermarkets and vertical relationships in the Indonesian food value chain: Causes and consequences. *Asian Journal of Agriculture and Development*, 2(1&2): 39–48.

Claassen, H., Mukwada, G., Naidoo, M. and Mahasa, P. 2014. Land reform and grain production: The case of emerging farmers in Qwaqwa, South Africa. *Journal of Human Ecology*, 46(2): 223–234.

Cole, K. 2005. Management: Theory and practise. 3rd ed. Australia: Pearson Prentice Hall.

Collier, P. 2007. *The Bottom Billion: Why the poorest countries are failing and what can be done about it.* Oxford: Oxford University Press.

Coetzee, G. and Machette, C. 2011. *The status of agriculture and rural finances in Southern Africa*. From: http://www.up.ac.za/media/shared/Legacy/sitefiles/file/1/3841/20110726fm truralfinance.pdf [Retrieved, April 28, 2018].

Contò F., Fiore M., La Sala P. and Papapietro P. 2014. The role of education, knowledge and human resources for the agricultural development in the perspective of new cap: A hypothesis of change in Basilicata. *Applied Studies in Agribusiness and Commerce*, 6(1-2): 123–129.

Cooper, D. 2002. Findings from the competition commission's inquiry into supermarkets. *Journal of Agricultural Economics*, 54(1): 127–143.

Creswell, J.W. 2009. *Research design: qualitative, quantitative, and mixed methods approaches*. Los Angeles: Sage Publishers.

Creswell, J.W. 2012. Educational research: Planning, conducting, and evaluating quantitative and qualitative research. 4th ed. Upper Saddle River, NJ: Merrill.

Creswell, J.W. 2014. *Research design: qualitative, quantitative, and mixed methods approaches.* 4th ed. Los Angeles: Sage Publishers.

Curristine, T. 2005. Government performance: Lessons and challenges. *OECD Journal on Budgeting*, 5(1): 127–151.

Curristine, T., Lonti, Z. and Joumard, I. 2007. Improving Public Sector Efficiency: Challenges and Opportunities. *OECD Journal on Budgeting*, 7(1): 1-41.

Das Nair, R. and Chisoro, S. 2015. The expansion of regional supermarket chains: Changing models of retailing and the implications for local supplier capabilities in South Africa, Botswana, Zambia, and Zimbabwe. UNU-WIDER project, Working Paper 2015/114.

Das Nair, R. 2016. Why new entrants struggle to break into South Africa's retail space. The Conversation. From: https://businesstech.co.za/news/business/141219 [Retrieved, March 03, 2018].

Davis, K., Babu, S.C. and Blom, S. 2014. *The role of extension and advisory services in building resilience of smallholder farmers*. Building resilience for food and nutrition security, 2020 Conference Brief 13, May 2014.

Davis, K.E. 2015. *The new extensionist: Core competencies for individuals*. GFRAS Brief #3. Lindau, Switzerland: Global Forum for Rural Advisory Services (GFRAS).

Davis, K.E. and Terblanché, S.E. 2016. Challenges facing the agricultural extension landscape in South Africa, Quo Vadis? *South African Journal of Agricultural Extension*, 44(2): 231–247.

Davis, K., Lion, K. and Arokoyo T. 2019. Organisational capacities and management of Agricultural Extension Services in Nigeria: Current Status. *South African Journal of Agricultural Extension*, 47(2): 118–127.

Dawson, C. 2002. Practical research methods: A use-friendly guide to mastering research techniques and projects. United Kingdom: How to Books.

De Bruyn, P., De Bruyn, J.N., Vink, N. and Kirsten, J.F. 2001. How transaction costs influence cattle marketing decisions in the Northern Communal areas of Namibia. *Agrekon*, 40(3):405–425.

Department of Agriculture, Forestry & Fisheries. 2002. *The Integrated Food Security Strategy for South Africa*. From: https://www.nda.agric.za/docs/Policy/FoodSecurityStrat.pdf [Retrieved March 02, 2020].

Department of Agriculture, Forestry & Fisheries. 2004. *Progress report on the implementation of the Comprehensive Agriculture Support Programme*. From: https://www.nda.agric.za/docs/CAS P/CASP%20Report_31%20August.pdf [Retrived March 10, 2020].

Department of Agriculture Forestry and Fisheries (DAFF). 2012. *Agricultural statistics*. From: http://www.nda.agric.za/docs/statsinfo/Ab2012.pdf [Retrieved, January 01, 2020].

Department of Agriculture, Forestry & Fisheries. 2015. Strategic plan for Department of Agriculture, Forestry & Fisheries, 2013/14 to 2017/18. From: http://www.daff.gov.za/doaDev/topMenu/DAFF%20Strategic%20Plan%202013.pdf [Retrieved, May 20, 2017].

De Vos, A.S., Delport, C.S.L., Fouché, C.B. and Strydom, H. 2011. *Research at grass roots: A primer for the social science and human professions*. Pretoria: Van Schaik Publishers.

Dewen, W. 2010. Can Social Security Boost Domestic Consumption in the Peoples' Republic of China? ADBI Working Paper 215, Asia Development Bank Institute, Tokyo, Japan

Department of Planning, Monitoring and Evaluation. 2018. *A concept note on institutionalisation of planning in South Africa*. From: https://www.dpme.gov.za/ key focus areas/gwmeSite/GovernmentWide%20M %20and%20E/A%20concept%20note %20on%20 Institutionalisation%20of%20Planning%20in%20South%20Africa.pdf [Retrieved, September 10, 2019].

Dioula, B.M, Deret, H., Morel, J., du Vachat, E. and Kiaya, V. 2013. *Enhancing the role of smallholder farmers in achieving sustainable food and nutrition security*. From: http://www.fao.org/fileadmin/user_upload/agn/pdf/Dioula_Paper_ICN2.pdf [Retrieved, September 9, 2019].

Devaux, A., Torero, M., Donovan, J. and Horton, D. (eds). 2016. *Innovation for inclusive value chain development: Successes and challenges*. Washington, DC, International Food Policy Research Institute (IFPRI).

Degu, G. and Yigzaw, T. 2006. *Research methodology*. From: https://www.Cartercenter.org/resources/pdfs/health/ephti/library/lecture_notes/health_science_students/ln_research_method final.pdf [Retrieved, August 01, 2016].

Dercon, S., Gilligan, D., Hoddinott, J. and Woldehanna, T. 2006. *The impact of roads and agricultural extension on consumption growth and poverty in fifteen Ethiopian villages*'. CSAE Working Paper Series 2007-01. Oxford: CSAE.

Deressa, T. T., Hassan, R. M., Ringler, C., Alemu, T. and Yesuf, M. 2009. Determinants of farmers' choice of adaptation methods to climate change in the Nile Basin of Ethiopia. *Global Environmental Change*, 19: 248–255.

Department of Rural Development & Land Reform. 2009. *Strategic Plan 2009/10 – 2011/12*. From: https://www.gov.za/sites/default/files/comprehensive-rural-development-programme.P df [Retrieved, February 20, 2020].

Department of Rural Development & Land Reform. 2015. Comprehensive Rural Development Programme: Evaluation report by Department of Performance, Monitoring and Evaluation (DPME), with Minister present. From: https://pmg.org.za/committee/95/?filter=2015 [Retrieved, February 10, 2018].

Department of Rural Development & Land Reform. 2017. *Annual Report 2016-2017*. From: http://www.ruraldevelopment.gov.za/publications/annual-report/file/5762-department-of- rural-development-and-land-reform-annual-report-1-april-2016-31-march-2017 [Retrieved, May 05, 2018].

Denzin, N.K. and Lincoln, Y.S. 1994. *Handbook of qualitative research*. California: Sage Publishers.

Denscombe, M. 2008. *Ground rules for good research: a 10-point guide for social researchers*. London: Open University Press.

DePoy, E. and Gilson, S. 2008. *Evaluation practice: how to do good evaluation research in work settings*. London: Routledge.

Devendra, C. 2016. Rainfed agriculture: its importance and potential in global food security. *Utar Agriculture Science Journal*, 2(2): 4–17.

Devereux, S. and Maxwell, S. 2001. Food Security in Sub-Saharan Africa. ITDG, London

De Villiers, B. 2012. Codification of "Intergovernmental Relations" by way of legislation: The experiences of South Africa and potential lessons for young multitiered systems. *Zaöerv*, 72: 671–694.

Detert, J.R. and Burris, E.R. 2007. Leadership behavior and employee voice: Is the door really open? *Academy of Management Journal*, 50: 869–884.

Diao, X. and Hazell, P. 2004. *Exploring market opportunities for African smallholders*. International Food Policy Research Institute, 2020 Africa Conference Brief 6: Kampala, Uganda, April 1-3, 2004.

Dicicco-Bloom, B. and Crabtree, B.F. 2006. The qualitative research interview. *Medical Education*, 40: 314–321.

Di Falco, S., Veronesi, M. and Yesuf, M. 2011. Does adaptation to climate change provide food security? A micro-perspective from Ethiopia. *American Journal of Agricultural Economics*, 93(3): 825–842.

Di Falco, S., Yesuf, M., Kohlin, G. and Ringler, C. 2012. Estimating the impact of climate change on agriculture in low-income countries: household level evidence from the Nile Basin. *Ethiopia*. *Environmental Resource Economics*, 52: 457–478.

Dobson, P.W., Waterson, M. and Davies, S.W. 2003. The patterns and implications of increasing concentration in European food retailing. *Journal of Agricultural Economics*, 54(1): 111–125.

Dong, F., Liu, J. and Featherstone, A. M. 2010. *Effects of credit constraints on productivity and rural household income in China*. A working paper presented at Center for Agricultural and Rural Development (CARD), 507: Iowa State University.

Doody, O. and Noonan, M. 2013. Preparing and conducting interviews to collect data. *Nurse Researcher*, 20(5): 28–32.

Drimie, S. and Verduijn, R. 2007. *Input for presidency position on food security*. Unpublished document, Pretoria.

Drimie, S. and Ruysenaar, S. 2010. The Integrated Food Security Strategy of South Africa: An institutional analysis. *Agricultural Economics Research Policy and Practice in Southern Africa*. 49(3): 316–37.

Dube, S. C and das Nair. 2016. *Barriers to entry in grocery retail: FVC and the growing independents*. Centre for Competition: Regulation and Economic Development, Quarterly review: February 2017 Issue.

Du Plessis, E. and Dube, P. 2018. *Land expropriation without compensation: the ultimate test for the ANC is still in the making*. From: https://www.news24.com/news24/columnists/ guestco lumn/land-expropriation-without-compensation-the-ultimate-test-for-the-anc-is-still-in-the-making-20181219 [Retrieved, December 20, 2018].

Duy, V.Q. 2012. The Role of access to credit in rice production efficiency of rural households in the Mekong Delta, Vietnam. CAS Discussion paper No 84.

Du Plessis, L.M. 2016. Human capital development in local government and the search for a capable state. *African Journal of Public Affairs*, 9(3): 30–38.

Du Plooy-Cilliers, F., Davis, C. and Benzuidenhout, R.M. 2014. *Research matters*. Cape Town: Juta.

Duvendack, M., Palmer-Jones, R., Copestake, J.G., Hooper, L., Loke, Y. and Rao, N. 2011. *What is the evidence of the impact of microfinance on the wellbeing of poor people?* London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London, 2011.

D'Haese, M. and Van Huylenbroeck, G. 2005. The rise of supermarkets and changing expenditure patterns of poor rural households, case study in the Transkei area, South Africa. *Food Policy*, 30: 97–113.

Ekepu, D., Tirivanhu, P. and Nampala, P. 2017. Assessing farmer involvement in collective action for enhancing the sorghum value chain in Soroti, Uganda. *South African Journal of Agricultural Extension*, 45(1): 118–130.

Emongor, R. and Kirsten, J. 2009. The impact of South African supermarkets on agricultural development in the SADC: A case study in Zambia, Namibia and Botswana. *Agrkon*, 48(1): 60–84.

EThekwini Municipality. 2018. *Municipal Spatial Development Framework 2018-2019*. From: http://www.durban.gov.za/City_Services/development_planning_management/ Documents/Dr aftSDF2018_2019_Feb2018.pdf [Retrieved, January 02, 2019].

Erastus, Y.E., Stephen, A. and Abdullai, I. 2014. Institutional Framework for Promoting Small and Medium Scale Enterprises in Ghana: Perspective of Entrepreneurs. *Australian Journal of Business and Management Research*, 3(10): 28–45.

Koech, K.E., Mutai, K.B., Kibet, K.L. and Kosgei, K.G. 2015. Determinants of market facilitators choice by smallholder farmers in Laikipia County, Kenya. *Journal of Agriculture and Veterinary Science*, 8(1): 78–82.

Evan, M., Berman, E.M. and Korosec, R.L. 2005. Planning to coordinate and coordinating the plan evidence from local governments. *American Review of Public Administration*, 35(4): 380–401.

Ewert, J., Eva, G. and Hamman, J. 2007. South Africa: The inclusion and empowerment of farm workers through partnerships: the case of 'Thandi' fruit and wine. London: Regoverning Markets-Innovative Practice series, IIED.

Fan, S. and Zhang, X. 2005. Infrastructure and regional economic development in rural China. *China Economic Review*, 15: 203–214.

Fabiyi, E.F., Danladi, B.B., Akande, K.E. and Mahmood, Y. 2007. Role of Women in Agricultural Development and Their Constraints: A Case Study of Biliri Local Government Area, Gombe State, Nigeria. *Pakistan Journal of Nutrition*, 6(6): 676–680.

Fan, Q. and Garcia, V.B.S. 2018. Information access and smallholder farmers' market participation in Peru. *Journal of Agricultural Economics*, 69(2): 476–494.

Fan, S., Brzeska, J., Keyzer, M. and Halzema, L. 2013. From Subsistence to Profit: Transforming Smallholder Farms. International Food Policy Research Institute (IFPRI), Washington D.C

FAO. 2010a. A review of experiences of establishing emerging farmers in South Africa: Case lessons and implications for farmer support within land reform programmes. From: http://www.fao.org/3/i1385e/i1385e.pdf [Retrieved, February 15, 2018].

FAO. 2010b. *Policies and institutions to support smallholder agriculture*. Committee on Agriculture, 22nd Session.

FA0. 2016a. *Agri-Gender Statistics*. From: http://www.fao.org/3/a-i5769e.pdf [Retrieved, November 10, 2019].

FAO, 2016b. Rural communication services for family farming contributions, evidence and perspectives. From: http://www.fao.org/3/a-i6059e.pdf [Retrieved, August 10, 2019].

FAO. 2011. *The State of Food and Agriculture: Women in Agriculture*. Closing the Gender Gap for Development. Rome. p. 8.

FAO. 2017. Bringing youth back to agriculture in Southern Africa. From: http://www.fao.org/africa/news/detail-news/en/c/1052983/ [Retrieved, January 07, 2020].

Faiz, A. 2012. The promise of rural roads: review of the role of low-volume roads in rural connectivity, poverty reduction, crisis management, and livability. Transportation Research E-Circular, (E-C167).

Fayol, H. 1930. Industrial and General Administration. London: Sir Isaac Pitman and Sons.

Fereday, J. and Muir-Cochrane, E. 2006. Demonstrating rigor using thematic analysis: a hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1): 1–11.

Flick, U., Kardorff, E.V. and Steinke, I. (eds.). 2004. *A Companion to Qualitative Research*. London: SAGE (especially chapters 5.10–5.21).

Flick, U. 2009. An introduction to qualitative research. 4th ed.. London: Sage Publicashers.

Fischer, E. and Qaim, M. 2011. Linking smallholders to markets: Determinants and impacts of farmer collective action in Kenya. *World Development*, 40(6): 1255–1268.

Fischer, E. and Qaim, M. 2014. Smallholder farmers and collective action: What determines the intensity of participation? *Journal of Agricultural Economics*, 65(3): 683–702.

Fugard, A.J.B. and Potts, H.W.W. 2015. Supporting thinking on sample sizes for thematic analyses: a quantitative tool. *International Journal of Social Research Methodology*, 18(6): 669–684.

Fulmer, J. 2009. *What in the world is infrastructure*? PEI Infrastructure Investor, July/August 30–32.

Franks, P.E. 2014. The Crisis of the South African Public Service. *The Journal of the helen Suzman Foundation*, 74: 48–56.

Freeman, K. and Mubichi, F. 2017. ICT use by smallholder farmers in rural Mozambique: A case study of two villages in central Mozambique. *Journal of Rural Social Sciences*, 32(2): 1–19.

Frederickson, H.G., Smith, K.B., Larimer, C.W. and Licari, M.J. 2012. *The public administration theory primer*. Philadelphia: Westview Press.

Fourie, D. and Poggenpoel, W. 2017 Public sector inefficiencies: Are we addressing the root causes? *South African Journal of Accounting Research*, 31(3): 169–180.

Funk, C.C. and Brown, M.E. 2009. Declining global per capita agricultural production and warming oceans threaten food security. *Food Security*, 1: 271–289.

Garrity, D.P., Akinnifesi, F.K., Ajayi, O.C., Weldesemayat, S.G., Mowo, J.G., Kalinganire, A., Larwanou, M. and Bayala, J. 2010. Evergreen Agriculture: a robust approach to sustainable food security in Africa. *Food Security*, 2:197–214.

Gbetibouo, G.A. 2009. *Understanding Farmers' Perceptions and Adaptations to Climate Change and Variability: The Case of the Limpopo Basin, South Africa*. IFPRI Discussion Paper, 849.

Gêmo, H.R., Stevens, J.B. and Chilonda, P. 2013. The role of a pluralistic extension system in enhancing agriculture productivity in Mozambique. *South African Journal of Agricultural Extension*, 41: 59–75.

Ghadiri, M. 2005. Effective factors of rural youth attitude in employment in to agricultural activities. Masters' Thesis: Department of rural development, Science and research, Tehran (University of Iran).

Gido, E.O, Sibiko, K.W, Ayuya, O.I. and Mwangi, J.K. 2015. Demand for Agricultural Extension Services Among Small-Scale Maize Farmers: Micro-Level Evidence from Kenya. *The Journal of Agricultural Education and Extension*, 21(2): 177–192.

Gyau, A., Franzel, S., Chiatoh, M., Nimino, G., and Owusu, K. 2014. Collective action to improve market access for smallholder producers of agroforestry products: key lessons learned with insights from Cameroon's experience. *Current Opinion in Environmental Sustainability*, 6: 68–72.

Gibbs, H.K., Ruesch, A.S., Achard, F., Clayton, M.K., Holmgren, P., Ramankutty, N. and Foley, J.A., 2010. Tropical forests were the primary sources of new agricultural land in the 1980s and 1990s. *Proceedings of the National Academy of Sciences of the United States of America*, 107: 16732–16737.

Glatzel, K. 2015. *The farms of change: African smallholders responding to an uncertain climate future*. A Montpellier panel report 2015.

Godfray, H.C.J., Beddington, J.R., Crute, I.R., Haddad, L., Lawrence, D., Muir, J.F., Pretty, J., Robinson, S., Thomas, S.M. and Toulmin, C., 2010. Food security: the challenge of feeding 9 billion people. *Science*, 327: 812–818.

GRAIN. 2008. Lessons from a Green Revolution in Africa. In Seedling: October 2008: pp 22–29.

Gravette, F.J. and Forzano, L.B. 2003. *Research methods for the behavioral sciences*. Belmont: Wadsworth/Thompson Learning.

Gerber, J. 2018. *EFF due to table motion of land expropriation without compensation in Parliament*. From: https://mg.co.za/article/2018-02-27-parliament-to-decide-on-expropriation-without-compensation/ [Retrieved, July 20, 2018].

Greyling, J.C. 2015. South Africa's agricultural sector twenty years after democracy (1994 to 2013). *Professional Agricultural Workers Journal*, 3(1), 10-14.

Greenberg, S. 2013. The disjunctures of land and agricultural reform in South Africa: Implications for the agri-food system. Institute for Poverty, Land and Agrian Studies, Working Paper 26: August 2013.

Greenberg, S. 2017. Corporate power in the agro-food system and the consumer food environment in South Africa. *The Journal of Peasant Studies*, 44(2): 467–496.

Green, G.P. and Haines, A. 2008. *Asset building and community development*. 2nd ed. Los Angeles, A: Sage Publishers.

Grey, C. 2005. A very short book about studying organization. London: Sage Publishers.

Griffin, R.Q. 2011. *Management: Principles and practises*. 10th ed. United States: South-Wester: Cengage learning.

Grimsey, D., and Lewis, M. K. 2002. Evaluating the risks of Public Private Partnerships for infrastructure projects. *International Journal of Project Management*, 20(2): 107–118.

Gubbels, P. 2004. *The critical role of smallholder agriculture, in in United Nations*. An integrated approach to rural development: Dialogues at the Economic and Social Council. United Nations Publications: United Nation, pp 59–64.

Guest, G., MacQueen, K.M. and Namey, E.E. 2012. *Applied thematic analysis*. Thousand Oaks, CA: Sage Publishers.

Gulick, L. 1937. *Notes on the theory of organization*. In L. Gulick & L. Urwick (Eds.), Papers on the science of administration (pp. 1–46). New York, NY: Institute of Public Administration.

Haantuba, H. and de Graaf, F. 2009. Linkages between smallholder farmers and supermarkets: Lessons from Zambia. In the Transformation of Agri-food systems: Globalisation, supply chain and smallholder farmers by McCullough, E.B., Pingali, P.L. and Stamoulis, K.G. (eds.) 2009. London: Earthscan.

Hao, J. 2018. *Chinese Farmers' Cooperatives and Smallholder Farmers*. PhD Thesis: Wageningen University and Research, Wageningen.

Hall, R. 2009. *Dynamics in the commercial farming sector*. From: http://www.plaas.org.za/sites/default/files/publications-pdf/AC5.pdf [Retrieved, June 10, 2016].

Hamid, G. 2005. *The effective coordination and implementation of the IFSNP*. Draft Issue Paper. FAO, Rome.

Hart, T.G.B. 2011. The significance of African vegetables in ensuring food security for South Africa's rural poor. *Agriculture and Human Values*, 28:321–333.

Hatchuel, A. and Segrestin, B. 2019. A century old and still visionary: Fayol's innovative theory ofmanagement. *European Management Review*, 1-21.

Haughton, J. and Khandker, S. 2009. *Handbook on poverty and inequality*. The World Bank, Washington, DC.

Hazell, P. 2011. *Five big questions about five hundred million small farms*. Keynote paper presented at the IFAD Conference on New Directions for Smallholder Agriculture, 24-25 January, IFAD Rome.

Hegele, Y. 2018. Explaining bureaucratic power in intergovernmental relations: A network approach. *Public Administration*, 96:753–768.

Hendricks, S.L and Lyne M.C. (eds.). 2009. *Does food security improve when smallholders access a niche market*? Scottsville: The African Centre for Food Security, University of KwaZulu-Natal.

Hesse-Biber, S.N. and Leavy, P. 2011. *The practice of qualitative research*. 2nd ed. Thousand Oaks, CA: Sage Publishers.

Henson, S. and Jaffee, S. 2007. *The Costs and Benefits of Compliance with Food Safety Standards for Exports by Developing Countries: The Case of Fish and Fishery Products* in Swinnen, J. (ed.) Global Supply Chains, Standards and the Poor. CABI Publications.

Hisali, E., Birungi, P. and Buyinza, F. 2011. Adaptation to climate change in Uganda: evidence from micro level data. *Global Environmental Change*, 21: 1245–1261.

Hinson, R.E. 2011. Banking the poor: The role of mobiles. *Journal of Financial Services Marketing*, 15(4): 320–333.

Holloway, I. and Wheeler, S. 2010. *Qualitative research in nursing and healthcare*. 3rd ed. Oxford: Wiley-Blackwell.

Hookana, H. 2011. *Measurement of effectiveness, efficiency and quality in public sector services: Interventionist empirical investigations*. Proceedings of the 12th Management International Conference, Portoroz, 23-26 November 2011.

Hounkonnou, D., Kossou, D., Kuyper, T.W., Leeuwis, C., Nederlof, E.S., Röling, N., Sakyi-Dawson, O., Traoré, M. and van Huis, A. 2012. An innovation systems approach to institutional change: Smallholder development in West Africa. *Agricultural Systems*, 108(C), 74–83.

Howden, S.M., Soussana, J.F., Tubiello, F.N., Chhetri, N., Dunlop, M. and Meinke, H., 2007. *Adapting agriculture to climate change*. Proceedings of the National Academy of Sciences of the United States of America, 104(50): 19691–19696.

HLPE (High Level Panel of Experts on Food Security and Nutrition). 2013. *Investing in smallholder agriculture for food security*. A report by the high-level panel of experts on Food Security and Nutrition, 6, Rome: FAO.

Hox, J.I. and Boeije, H.R. 2005. Data collection, primary vs secondary. *Encyclopedia of Social Measurment*, 1: 593–599.

Humphrey, J. 2005. Shaping Value Chains for Development: Global Value Chains in Agribusiness. Paper prepared for Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH. Eschborn, Germany: GTZ.

Human Sciences Research Council. 2013. *The South African national health and nutrition survey: SANHANES-1*. From: http://www.hsrc.ac.za/uploads/pageNews/72/SANHANES-launch%20edition%20(online%20version).pdf [Retrieved, August 10, 2016].

IFAD (International Fund for Agricultural Development). 2011. *Proceedings. In IFAD conference on new directions for smallholder agriculture*, 24–25 January 2011. Rome: IFAD.

IFAD. 2014. *Investing in smallholder family farmers for the future we want*. From: http://www.ifad.org/events/gc/37/doc/concept%20note e.pdf [Retrieved, November 12, 2015].

International Finance Corporation. 2014. Access to finance for smallholder farmers: learning from the experiences of microfinance institutions in Latin America. Washington: Wold Bank Group.

Ile, I.U. 2007. A public administration approach to managing intergovernmental relations system in the governance of the state: A case review of Nigeria and South Africa. Doctoral Thesis, University of Pretoria: School of Public Management and Administration.

Ile, I.U. 2010. Strengthening intergovernmental relations for improved service delivery in South Africa: Issues for consideration. *Journal of US-China Public Administration*, 7 (1), 51–57.

Isac, C., Voichita, L. and Guta, A.J. 2009. Coordination of management activities- A condition sine qua non of a performance management. *Anals of the University of Petrosani, Economics*, 9(3): 335–340.

Ishaq, W. and Memon, S.Q. 2016. Roles of women in agriculture: A case study of rural Lahore, Pakistan. *Journal of Rural Development and Agriculture*, 1(1): 1–11

Jacobs, P. 2003. Support for agricultural development. Cape Town: Programme for Land and Agrarian Studies.

Jacobs, P., Aliber, M., Hart, T. and Donovan, M.O. 2008. *Review of Rural Development: 15 Year Review of Economic and Social Sector Programmes*. Report commissioned by the President's Office.

Jacobs, P. and Hart, T. 2012. *Critical review of the research on skills development in rural areas*. Pretoria: Human Sciences Research Council.

Jaka, H. and Shava, E. 2018. Resilient rural women's livelihoods for poverty alleviation and economic empowerment in semi-arid regions of Zimbabwe, Jàmbá. *Journal of Disaster Risk Studies*, 10(1):1–11.

Jarbandhan, D.B. and Schutte, D. 2006. Using the survey procedure and interview data collection technique. *Journal of Public Administration*, 41(3.1): 669–681.

Jari, B. and Fraser G.C.G. 2009. An analysis of institutional and technical factors influencing agricultural marketing amongst smallholder farmers in the Kat River Valley, Eastern Cape Province, South Africa. *African Journal of Agricultural Research*, 4(11): 1129–1137.

Jari, B. and Fraser, G. 2012. *Influence of institutional and technical factors on market choices of smallholder farmers in the Kat River Valley*, in van Schalkwyk, H.D., Groenewald, J.A., Fraser, G.C.G., Obi, A., & van Tilburg, A (eds). 2012. *Unlocking markets to smallholders: Lessons from South Africa*. Netherlands: Wageningen Academic Publishers.

Jari, B., Snowball, J.D. and Fraser, G.C.G. 2013. Is fair trade in commercial farms justifiable? Its impact on commercial and small scale producers in South Africa. *Agrekon*, 52(4): 66–88.

Jeseviciute-Ufartiene, L. 2014. Importance of planning in management developing organization. Journal of Advanced Management Science, 2(3): 176–180.

Johnson, M., Hazell, P., and Gulati, A. 2003. The Role of Intermediate Factor Markets in Asia's Green Revolution: Lessons for Africa? *American Journal of Agricultural Economics*, 85(5):1211–16.

Jordaan, H., Grové, B. and Backeberg, G.R. 2014. Conceptual framework for value chain analysis for poverty alleviation among smallholder farmers. *Agrekon*, 53(1): 1–25.

Jouanjean, M. 2013. Targeting infrastructure development to foster agricultural trade and market integration in developing countries: an analytical review. From: https://pdfs.semanticscholar.org/043e/62efb6f053374d3f9e0fa772848ecfde7a76.pdf [Retrieved, March 20, 2018].

Kabelele, A.M. 2003. *Success stories from Zimbambwe*. In Kotschi J; Bayer W; Becker T & Schrimpt B (eds), *Alter Organic: Local Agendas for Organic Agriculture in Rural Development*. Proceeding of an International Workshop, 21-24 October, Bonn-Konigswinter.

Kahn, S., Madue, S.M., and Kalema, R. 2011. *Intergovernmental relations in South Africa*. Pretoria: Van Schaik Publishers.

Kanyane, M.H. and Nazo, L. 2008. Examining South African intergovernmental relations impact on local government: The case of Eastern Cape local government portfolio committee oversite role. *Journal of Public Administration*, 43(3): 136–144.

Kanyane, M.H. 2014. Exploring challenges of municipal service delivery in South Africa's *Public Service Delivery and Performance Review*, 2(1): 90–110.

Khapayi, M. and Celliers, P.R. 2016. Factors limiting and preventing emerging farmers to progress to commercial agricultural farming in the King William's town area of the Eastern Cape Province, South African Society of Agricultural Extension, 44(1): 25–41.

Kherallah, M. and Kirsten, J. 2001. *The new institutional economics: Applications for agricultural policy research in developing countries*. Markets and Structural Studies Division, Discussion paper No. 41, International Food Policy Research Institute, Washington DC.

Kibet, C. 2011. Major Challenges facing Kenyan agricultural sector. International Conference on Innovations in Extension and Advisory Services: Linking Knowledge to Policy and Action for Food and Livelihoods, held in Nairobi, Kenya, November 15–18.

Kimaru P., Towo, N. and Moshi, B. 2015. Determinants of rural youth's participation in agricultural activities: the case of Kahe east ward in Moshi rural district, Tanzania. *International Journal of Economics, Commerce and Management*, 3(2), 1–47.

King, N. and Horrocks, C. 2010. *Interviews in qualitative research*. California: Sage Publishers.

Kising'u, J.M. 2016. Factors influencing youth participation in agricultural value chain projects in Kenya: A case of Kathiani subcounty, Machakos county, Kenya. Masters' Thesis: University of Nairobi.

Kolawole, O.D., Wolski, P., Ngwenya, B. and Mmopelwa, G. 2014. Ethno-meteorology and scientific weather forecasting: Small farmers and scientists' perspectives on climate variability in the Okavango Delta, Botswana. *Climate Risk Management*, 2014(4): 43–58.

Kodithuwakku, S.S. and Weerahewa, J. 2014. Supermarkets and their effects on smallholder vegetable farmers in Sri Lanka: An exploratory case study. *Journal of Agriculture Economics and Rural Development*, 2(2): 62–71.

Kwenye, J.M. and Sichone, T. 2016. Rural youth participation in Agriculture: Exploring the significance and challenges in the control of the agricultural sector in Zambian. *Ruforum Working Document Series*, 14(1): 473–477.

Kepe, T. and Hall, R. 2016. Land Redistribution in South Africa. Commissioned report for High Level Panel on the assessment of key legislation and the acceleration of fundamental change, an initiative of the Parliament of South Africa, 28 September 2016.

Korsching, P.F. and Allen, J.C. 2004. Local entrepreneurship: A development model based on community interaction field theory. *The Journal of the Community Development Society*, 35(1): 25–43.

Kurukulasuriya, P., Mendelsohn, R., Hassan, R., Benhin, J., Deressa, T., Diop, M., Mohamed Eid, H., Fosu, K.Y., Gbetibouo, G., Jain, S., Mahamadou, A., Mano, R., Kabubo-Mariara, J., El-Marsafawy, S., Molua, E., Ouda, S., Ouedraogo, M., Séne, I., Maddison, D., Seo, S.N. and Dinar, A., 2006. Will African agriculture survive climate change? *World Bank Economic Review*, 20(3): 367–388.

Kumar, R. 2011. Research methodology: A step-by-step guie for beginners. Los Angeles: Sage Publishers.

Kumo, W.L., Chulu, O. and Minsat, A. 2016. *South African economic outlook 2016*. From: www.africaneconomicoutlook.org/sites/...05/South_Africa_GB_2016%20WEB.pdf [Retrieved, December 03, 2017].

Kurukulasuriya, P. and Rosenthal, S. 2003. *Climate change and agriculture: A review of impacts and adaptations*. From: https://openknowledge.worldbank.org/bitstream/handle/109 86/16616/787390WP0Clima0ure0377348B00PUBLIC0.pdf?sequence=1 [Retrieved, March 13, 2017].

Laegaard, J. and Bindslev, M. 2006. *Organisational theory*. From: http://www.e booksdirectory. Com /details.php?ebook=3444 [Retrieved, January 11, 2017].

Lahiff, E. 2008. *Land reform in South Africa: Is it meeting the challenge*? Policy Brief: Debating Land Reform and Rural Development, Land and Agrarian Studies (PLAAS). Cape Town: School of Government, University of Western Cape.

Lal, R. and Khurana, A. Gender issues: The role of women in agriculture sector. *International Journal of Business Management Research*, 1(1): 29–39.

Lal, T. 2018. Impact of financial inclusion on poverty alleviation through cooperative banks.

International Journal of Social Economics, 45(5): 808–828.

Larson, D.F., Lampietti, J., Gouel, C., Cafiero, C. and Roberts, J. 2014. Food security and storage in the Middle East and North Africa. *World Bank Economic Review*, 28(1): 48–73.

Llanto, G.M. 2010. Overcoming obstacles to agricultural microfinance: Looking at broader issues. *Asian Journal of Agriculture and Development*, 4(3): 24–40.

Lokanathan, S. and Kapugama, N. 2012. *Smallholders and micro-enterprises in Agriculture: Information needs and communication patterns*. LIRNE Asia, Colombo, Sri Lanka, 1–48.

Leedy, P.D. and Ormrod, J.E. 2005. *Practical research: planning and design*. 8th ed. Upper Saddle River, N.J.: Prentice Hall

Leibbrandt, M. and Woolard, I. 2006. *Towards a Poverty Line for South Africa: A Background Note*. South African Labour and Development Research Unit. University of Cape Town, South Africa.

Levidow, L., Zaccaria, D., Maia, R., Vivas, E., Todorovic, M. and Scardigno, A. 2014. Improving water-efficient irrigation: Prospects and difficulties of innovative practices. *Agricultural Water Management*, 146: 84–94.

Linna, P., Pekkola, S., Ukko, J. and Melkas, H. 2010. Defining and measuring productivity in the public sector: Managerial perceptions. *International Journal of Public Sector Management*, 23(5): 479–499.

Louw, A., Geyser, M. and Ndanga, L. 2006. *Financial management and deal structuring for AgriBEE transactions*. Part of the ABSA Investigation on AgriBEE in South Africa, 2005. ABSA Chair in Agribusiness, Pretoria.

Louw, A., Vermeulen, H., Kirsten, J. and Madevu, H. 2007a. Securing small farmer participation in supermarket supply chains in South Africa. *Development Southern Africa*, 24(4): 539-551.

Louw, A., Chikazunga, D., Jordaan, D. and Bienabe, E. 2007b. *Restructuring food markets in South Africa: Dynamics within the context of the tomato subsector*. London: Regoverning Markets, Agrifood Sector Studies (IIED).

Louw, A. 2008. *Improved small scale farmer access to Fresh Produce agri-food market in South Africa*. Regoverning Markets, Policy Brief, January 2008.

Louw, A., Jordaan, D., Ndanga, L. and Kirsten, J.F. 2008. Alternative marketing options for small-scale farmers in the wake of changing agri-food supply chains in South Africa. *Agrekon*, 47(3): 287–308.

Louw, A., van der Merwe, M., Munthali, T., Makhanya, C., Simelane, M., Murwisi, K., Louw, J. and Nenseler, A. 2013. *Investigation in accordance with Chapter 8 of the Municipal Systems Act into an alternative service delivery mechanism for the Tshwane Fresh Produce Market*. From:http://www.tshwane.gov.za/sites/Council/Council%20Resolutions/Council%20Resolutions%202014/93.%20Council%2031%20July%202014/12.%20Report_Investigation%20in%20terms%20of%20Section%2078%20of%20the%20Municipal%20Systems%20Act.pdf [Retrieved, February 20, 2017].

Louw, P. and Lulama, N. 2015. *Understanding the smallholder farmer in South Africa: Towards a sustainable livelihood's classification*. International Conference of Agricultural Economists, Milan Italy, Universita Degli Studi Di Milano, August 8–14, 2015.

Lowder, S. and Carisma, B. 2011. *Financial resource flows to agriculture: a review of data on government spending, official development assistance and foreign direct investment*. Agricultural Development Economics Division Working Paper No. 11–18, Rome, FAO.

Lowder, S.K., Carisma, B. and Skoet, J. 2012. Who invests in agriculture and how much? An empirical review of the relative size of various investments in agriculture in low- and middle-income countries. ESA Working Paper No. 12–09. December 2012, Food and Agriculture Organization of the United Nations.

Lowatcharin, G., Crumpton, C.D. and Pacharoen, S. 2019. Intergovernmental relations in a world of governance: A consideration of international experiences, challenges, and new directions. *Asia-Pacific Social Science Review*, 19(4): 44–55.

Mabaya, E., Tihanyi, K., Karaan, M. and van Rooyen, J. 2011. Case Studies of Emerging Farmers and Agribusinesses in South Africa. SunMedia: Bloemfontein.

Machethe, C.L. 2004. *Agriculture and poverty in South Africa: Can agriculture reduce poverty?*From: http://www.sarpn.org.za/documents/d0001005/p1125-Agriculture-Poverty_
Machethe_2004.pdf [Retrieved, June 20, 2016].

Maddison, D. 2007. *The Perception of and Adaptation to Climate Change in Africa*. World Bank Policy Research Working Paper, 4308.

Magagula, D.N., Mukonza, R.M., Manyaka, R.K. and Moeti, K.B. 2019. Towards strengthening collaboration between district and local municipalities in South Africa: Insights from Ehlanzeni

District Municipality. *The Journal for Transdisciplinary Research in Southern Africa*, 15(1): 1–10.

Magingxa, L. and Kamara, A. 2003. *Institutional perspectives of enhancing smallholder market access in South Africa*, Paper presented at the 41st Annual Conference of the Agricultural Economic Association of South Africa held in Pretoria.

Mafsikaneng, N.N. 2015. Evaluation of extension support within Comprehensive Agricultural Support Program in the Tshwane Metropolitan Municipality. Masters' Thesis, Faculty of Sciences and Agriculture, University of Limpopo.

Makanyeza, C., Kwandayi, H.P. and Ikobe, B.N. 2014. Strategies to improve service delivery in local authorities. *International Journal of Information Technology and Business Management*, 15(1): 1–11.

Mahmood, Z., Basharat, M. and Bashir, Z. 2012. Review of classical management theories. *International Journal of Social Sciences and Education*, 2(1): 512-522.

Makhura, T.M. 2001. Overcoming transaction costs barriers to market participation of smallholder farmers in the Northern Province of South Africa. PhD Thesis: University of Pretoria, Pretoria.

Makhura, M. and Mokoena, M.R. 2003. *Market access for small-scale farmers in South Africa*. In: Nieuwoudt, L. & Groenewald, J. (eds). *The challenge of change: agriculture, land and the South African economy*. Durban: University of Natal Press.

Malan, N. 2019. Food gardens and small-scale farmers key to food system transformation. Retrieved from: https://www.uj.ac.za/newandevents/Pages/Food-gardens-and-small-scale-farmers-key-to-food-system-transformation-Dr-Naud%C3%A9-Malan.aspx [Retrieved date: August 31, 2019].

Mamabolo, M.E. 2017. The impact of the implementation of government policy on the spatial distribution of emerging farmers in the Mopani district in the Limpopo province of South Africa. PhD Thesis: University of South Africa: Faculty of Geography.

Marumo, O. and Mabuza, M.L. 2018. Determinants of urban consumers' participation in informal vegetable markets: Evidence from Mahikeng, North West province, South Africa, and implications for policy. *South African Journal of Economic and Management Sciences*, 21(1), 1–9.

Matlon, P. 2004. *The role of agriculture and rural development in eradicating hunger and poverty, in United Nations*. An integrated approach to rural development: Dialogues at the Economic and Social Council. United Nation: United Nations Publications, 42–52.

Mamatzakis, E.C. 2003. Public infrastructure and productivity growth in Greek agriculture.

Agricultural Economics, 29: 169–180.

Mandl, U., Dierx, A. and Ilzkovitz, F. 2008. *The effectiveness and efficiency of public spending*. From:http://ec.europa.eu/economy_finance/publications/pages/publication119 02_en.pdf [Retrieved, February 03, 2017].

Manzoor, A. 2014. *A Look at Efficiency in Public Administration: Past and Future*. Sage Open, 1-5: DOI: 10.1177/2158244014564936.

Matsane, S.H. and Oyekale, A.S. 2014. Factors affecting marketing of vegetables among small-scale farmers in Mahikeng Local Municipality, North West Province, South Africa. *Mediterranean Journal of Social Sciences*, 5(20): 390–397.

Magnusson, A.R. 2013. *The role of land reform and rural development in sustaining small-scale agriculture*. Master's Thesis. University of Cape Town: Faculty of Humanities.

Markelova, H., Meinzen-Dick, R., Hellin, J. and Dohrn, S., 2009. Collective action for smallholder market access. *Food policy*, 34: 1–7.

Mason, M. 2010. Sample Size and Saturation in PhD Studies Using Qualitative Interview.

Forum: Qualitative Social Researh, 11(3).

Masutha, M. and Christian, M.R. 2015. Business Incubation for Small Enterprise Development: South African Pathways. *Urban Forum*, 26(2): 223–41.

Masuku, M.B., Makura, M.T. and Rwelamira, J.K. 2001. Factors affecting market decisions in the maize supply chain among smallholder farmers in Swaziland. *Agrekon*, 40(4):698–707.

Masuku, M.M. 2013. *The effects of infrastructural and institutional services on food security in Ntambanana rural area*. Master's Thesis. University of Zululand: Faculty of Art.

Matei, A. and Dogaru, T.C. 2012. *Coordination of public policies through strategic planning instruments: Romania case study*. From: http://mpra.ub.uni-muenchen.de/53674/ [Retrieved, June 20, 2018].

May, J. and Carter, M. 2009. *Agriculture: analysis of the NIDS Wave 1 dataset*. Discussion paper no. 6. University of Cape Town: National Income Dynamics Study (NiDS).

Maoba, S. 2016. Farmers' perception of agricultural extension service delivery in Germiston Region, Gauteng Province, South Africa. *South African Journal Agricultural Extension*, 44(2): 167–173.

Marks, D.F. and Yardley, L. (eds). 2004. *Research methods for clinical and healthy psychology*. London: Sage Publishers.

Matamalas, R.L. and Ramos, M.S. 2009. *Marketing strategy of the supermarkets*. From: http://www.diva-portal.org/smash/get/diva2:239801/fulltext01 [Retrieved, February 05, 2018].

Marume, S.B. M. 2016. Organisation and organising in public administration. *Journal of Research in Humanities and Social Science*, 4 (6): 39-43.

McCusker, B. and Fraser, A. 2008. Land reform in the era of neoliberalism: Case studies from the Global South. *The Geographical Review*, 98 (3): iii-vi.

McNabb, D.E. 2002. Research methods in public administration and nonprofit management: Quantitative and qualitative approaches. London: M.E Sharpe, Inc.

McCullough, E.B., Pingali, P.L. and Stamoulis, K.G. (eds). 2009. *Transformation of Agri-food systems: Globalisation, supply chain and smallholder farmers*. Lomdon: Earthscan.

Merna, T. and Njiru, C. 2002. *Financing infrastructure projects*. London: Thomas Telford Publishing.

Mello, D. 2007. *Intergovernmental relations in the management of the great Limpopo Transfontier Park*. PhD Thesis: Pretoria: University of Pretoria.

Mihaiu, D.M., Opreana, A. and Cristescu, M.P. 2010. Efficiency, effectiveness and performance of the public sector. *Romanian Journal of Economic Forecasting*, 4: 132–147.

Misselhorn, A. 2006. Food insecurity in Sourthen Africa: Causes and emerging responses options from evidence at regional, provincial and local sphere scales. PhD Thesis, University of the Witwatersrand.

Mlambo, V. 2018. An overview of rural-urban migration in South Africa: its causes and implications. *Archives of Business Research*, 6(4): 63–70.

Mlambo, D.N. 2019. Governance and Service Delivery in the Public Sector: The Case of South Africa under Jacob Zuma (2009 – 2018). *African Renaissance*, 16(3): 207–224.

Mmbengwa, V.M., Gundidza, M., Groenewald, J.A. and van Schalkwayk, H.D. 2009. Factors affecting extension workers in their rendering of effective service to pre and post-settled farmers in government initiated and supported farming small, micro and medium enterprises. *South African Journal of Agriculture*, 38: 1–14.

Myeni, L., Moeletsi, M., Thavhana, M., Randela, M. and Mokoena, L. 2019. Barriers affecting sustainable agricultural productivity of smallholder farmers in the Eastern Free State of South Africa. *Sustainability*, 11(11): 1–18.

Mohit, A. 2012. Can smallholder farmers transform Africa's agricultural output? From: http://www.howwemadeitinafrica.com/can-smallholder-farmers-transform-africas- agricultural-output/20122/ [Retrieved August 20, 2019].

Moloi, M.J. 2010. A comparison of socioeconomic characteristics that determine the farm income of emerging livestock and horticultural farmers in South Africa. Masters' Thesis: University of Limpopo.

Monette, D.R., Sullivan, T.J. and Dejong, C.R. 2008. *Applied social research: A tool for the human services*. 7th ed. Belmont: Brooks/Cole, Cengage Learning.

Moobi, M.N. and Oladele, O.I. 2012. Factors influencing small scale farmers' attitude and participation in formal financial markets in Mahikeng Municipality, South Africa. *Journal of Human Ecology*, 39(1): 11–17.

Morrison, E.W. and Milliken, F.J. 2000. Organizational silence: A barrier to change and development in a pluralistic world. *The Academy of Management Review*, 25(4), 706–725.

Moseley, W.G. 2007. Neoliberal agricultural policy versus agrarian farm workers and land redistribution in South Africa's Western Cape Province. *South African Geographical Journal*, 89(1): 4–13.

Morris, C.D. 2007. Assessment of agricultural information needs for CTA's products and services ACP African states – country study: South Africa. Consultancy Report for the Technical Centre for Agricultural and Rural Cooperation (CTA), Wageningen.

Morudu, H.D. 2017. Service delivery protests in South African municipalities: An exploration using principal component regression and 2013 data. *Cogent Social Sciences*, 3(13): 1–15.

Mouton, J. 2001. How to succeed in your Master's and Doctoral studies: A South African guide and resource book. Pretoria: Van Schaik Publishers.

Mouza, C. 2006. Linking professional development to teacher learning and practice: a multi-case study analysis of urban teachers. *Journal of Educational Computing Research*, 34(4): 405–440.

Mpandeli, S. and Maponya, P. 2014. Constraints and challenges facing the small scale farmers in Limpopo Province, South Africa. *Journal of Agricultural Science*, 6(4): 135–143.

Msimango, B. and O.I. Oladele, O.I. 2013. Factors influencing farmers' participation in agricultural cooperatives in Ngaka Modiri Molema District. *Journal of Human Ecology*, 44:2, 113–119.

Muchopa, C.L. 2013. Agricultural value chains and smallholder producer relations in the context of supermarket chain proliferation in Southern Africa. *International Journal of Managing Value and Supply Chains*, 4(3): 33–44.

Mubangizi, B.C. 2010. Participatory service delivery processes with reference to the rural-urban divide of South Africa's municipalities. *Administratio Publica*, 18(2): 148–165.

Mubangizi, B.C. and Mubangizi, J.C. 2010. Service delivery for the poor in South Africa: the right of access to food and water. *Loyola Journal of Social Sciences*. 24(1):23–43.

Mubangizi, B., 2011. *Local Government's Role in Trade for Food Security in South Africa*. ICITI (International Conference on Information Management, Technical Management and Intelligent Technology) 2011, ISSN: 16941225, pp. 1–18.

Mubangizi, B.C. 2013. Good Governance and Food Security in South Africa – Opportunities for Local Government. *Loyola Journal of Social Sciences*, 27(2).

Mubangizi, B.C., Nhlabathi, Z.F. and Namara, R. 2013. Network governance for service delivery: Lessons from South Africa and Uganda. *Journal of Public Administration*, 48 (4.1): 777–795.

Muchara, B. and Mbatha, C.N. 2016. Role of institutional innovations on smallholder agricultural entrepreneurship in KwaZulu-Natal, South Africa. *Journal of Human Ecology*, 55(1, 2): 41–50.

Murray, A.T. 2010. Quantitative Geography*. Journal of Regional Science, 50(1): 143–163.

Muto, M. and Takashi, Y. 2009. The Impact of Mobile Phone Coverage Expansion on Market Participation: Panel Data Evidence from Uganda. *World Development*, 37(12):1887–96.

Mukwevho, R. and Anim, F.D.K. 2014. Factors affecting small scale farmers in accessing markets: A case study of cabbage producers in the Vhembe District, Limpopo Province of South Africa. *Journal of Human Ecology*, 48(2): 219–225.

Municipal IQ. 2019. 3 key trends from 2018's all-time service delivery protest record – for immediate release. From: http://www.municipaliq.co.za/index.php?sitepage=press.php. [Retrieved, March 13, 2019].

Muske, G., Woods, M., Swinney, J. and Khoo, C.L. 2007. Small businesses and the community: Their role and importance within a state's economy. *Journal of Extension*, 45(1).

Nardi, P.M. 2006. *Doing survey research: A guide to quantitative methods*. Boston: Pearson Education, Inc.

National Planning Commission (NPC). 2012. *National Development Plan: Vision for 2030*. Pretoria: Government Printer.

National Agricultural Marketing Council. 2005. Report 2: Fresh produce marketing in South Africa. Pretoria: National Agricultural Marketing Council.

National Development Agency. 2013. *Government's role in ensuring and improving food security in south Africa*. Johannesburg: The Research and Development Directorate.

National Treasury. 2016. *Budget review: 2016*. From: www. treasury.gov.za [Retrieved January 12, 2020].

National Treasury. 2018a. *Public-sector infrastructure update: 2018 budget review*. From: http://www.treasury.gov.za/documents/national%20budget/2018/review/Annexure%20D.pdf [Retrieved May 08, 2018].

National Treasury. 2018b. *Budget Review 2018*. From: http://www.treasury.gov.za/documents/national%20budget/2018/review/FullBR.pdf [Retrieved January 20, 2019]

National Planning Commission, 2015. *Reforming the South African Government Planning System*. From: https://www.nationalplanningcommission.org.za/.../Planning%20discussion%20 document [Retrieved April 23, 2018].

National Planning Commission. 2012. *National Development Plan, vision 2030- an integrated and inclusive rural economy*. From: https://www.nationalplanning.commission. org.za/assets/Documents/NDPChapters/devplan_ch6_0.pdf [Retrieved October 28, 2019].

Nair, N.V. and Moolakkattu, J.S. 2015. Why do women's cooperative societies languish? A study of selected societies in Kottayam, Kerala. Asian Journal of Women's Studies, 21(2):105–125.

Nagesso, H., Ayele, T. and Nigussie, B. 2018. Public Infrastructures and Livelihood Strategies: The Case of Rural Households in Kersa District, Jimma Zone. *Multidisciplinary Journal for Education, Social & Technological Sciences*, 5(2): 73–96.

Naamwintome B.A. and Bagson E. 2013. Youth in agriculture: Prospects and challenges in the Sissala area of Ghana. *Net Journal of Agricultural Science*, 1(2): 60–68.

Neuman, W.L. 2011. *Social science methods: Qualitative and quantitative approaches.* 7th ed. Boston: Pearson.

Nhlabathi, H. and Van Rensburg, D. 2018. *SA's land audit makes case for land tax*. City Press, 04 February 2018; 06:00am.

Ngqangweni, S., Mmbengwa, V., Myeki, L., Sotsha, K. and Khoza, T. 2016. *Measuring and tracking smallholder market access in South Africa. National Agricultural Marketing Council*, Working Paper (NAMC/WP/2016/03).

Nzimakwe, T.I. and Ntshakala, T. 2015. Intergovernmental Relations and Cooperative Governance: Two Sides of the Same Coin. *Journal of Public Administration*, 50 (4): 824–840.

Ntuli M. 2010. Presentation to the Select Committee on Trade and International Relations. Cape Town: Parliament.

Ndulu, B.N., Chakraborti, L., Lijane, R.L., and Wolgin, J. 2007. *Challenges of African Growth: Opportunities, Constraints and Strategic Directions*. Washington, D.C., World Bank.

Nelsona, G., C., van der Mensbrugghec, D., Ahammadd, H., Blance, E., Calvinf, K., Hasegawag, T., Havlikh, P., Heyhoed, E., Kylef, P., Lotze-Campeni, H., von Lampej, M., d'Croza, D., M., van Meijlk, H., Muller, C., Reillye, C., Robertsona, R., Sandsl, R., D., Schmitzi, C., Tabeauk, A., Takahashig, K., Valinh, H. and Willenbockelm, D. 2014. Agriculture and climate change in global scenarios: Why don't the models agree? *Agricultural Economics*, 45: 85–101.

Nesamvuni, A.E., Tshikolomo, K.A., Nengovhela, N.B., Moloto, A., Madzivhandila, T.P., Swanepoel, F.J.C. and Mpandeli, N.S. 2016. Farmer perceptions on empowerment programs by the Department of Agriculture and Rural Development, Gauteng Province, South Africa. *Journal of Human Ecology*, 54(2): 101–109.

Neves, D. 2017. *Rural development and livelihoods in South Africa*. From: http://www.plaas.org.za/news/rural-development-and-livelihoods-south-africa [Retrieved: March 03, 2017].

Nhema, A.G. 2015. Relevance of classical management theories to modern Public Administration: A review. *Journal of Public Administration and Governance*, 5(3): 165–179

Nhemachena, C., and Hassan, R., 2008. Determinants of African farmers' strategies for adapting to climate change: multinomial choice analysis. *African Journal of Agricultural and Resource Economics*, 2(1): 83–104.

Ng, A. and Loosemore, M. 2007. Risk allocation in the private provision of public infrastructure. *International Journal of Project Management*, 25(1): 66–76.

Ngqakamba, S. 2018. *Property rights a heated topic at land expropriation summit.* From: https://www.news24.com/news24/southafrica/news/property-rights-a-heated-topic-at-land-expropriation-summit-20181205 [Retrieved, December 20 2018].

Nhamo, L., Matchaya, G., Nhemachena, C. and van Koppen, B. 2016. The impact of investment in smallholder irrigation schemes on irrigation expansion and crop productivity in Malawi. *African Journal of Agricultural and Resource Economics*, 11(2): 141–153.

Nkomo, S. 2017. *Public service delivery in South Africa: Councillors and citizens critical links in overcoming persistent inequities*. Afrobarometer Policy, Paper No. 42. October 2017, 1–15.

Njelekela, C. and Sanga, C. 2015. Contribution of Information and Communication Technology in improving access to market information among smallholder farmers: The case study of Kilosa District. *The International Journal of Management Science and Information Technology*, 17: 56–71.

Nielsen Holdings. 2017. *Spazas boost Traditional Trade surge in South Africa*. From: http://www.nielsen.com/za/en/press-room/2017/spazas-boost-traditional-trade-surge-in-south-africa.html [Retrieved, March 03, 2018].

Nicholls, T., Elouafi, I., Borgemeister, C., Campos-Arce, J.J., Hermann, M., Hoogendoorn, J., Keatinge, J.D.H., Kelemu, S., Molden, D.J. and Roy, A. 2013. *Transforming rural livelihoods and landscapes: sustainable improvements to incomes, food security and the environment.* From:

http://www.airca.org/docs/AIRCA_White_Paper_Landscapes.pdf [Retrieved, December 20, 2015].

Nora, D., Katy, H., Roy, K., Forhad, S. and Kenneth, S. 2011. *From farm to firm: rural-urban transition in developing countries*. Washington, DC: World Bank.

Norton, R. 2014. *Agricultural value chains: A game changer for small holders*. From:https://www.devex.com/news/agricultural-value-chains-a-game-changer-for-small-holders-83981 [Retrieved 20 December 2018].

Noonari, S., Memon, I.N., Bijarani, A.A., Peerzdo, M.B., Memon, Q., Wagan, S.A., Chandio, A.A., Sethar, A.A., Bhatti, M.A. and Kalwar, G.Y. 2015. Impact of credit on agricultural productivity: A case study of Zarai Taraqiati Bank Ltd (ZTBL) Loans in District Kashmore at Kandh Kot, Sindh Pakistan. *Journal of Economics and Sustainable Development*, 6(7): 66–88.

Ntloedibe, M. 2015. *Republic of South Africa- Retail food*. From: http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Retail%20Foods_Pretoria_South%20Africa%20-%20Republic%20of 12-30-2015.pdf [Retrieved, October 21, 2016].

Nwagboso, C.I. and Duke, O. 2012. Rural development programme implementation in developing countries: The experience of China and India. *Global Journal of Human Social Science*, 12(11): 27–34.

Obayelu, O.A. 2012. Saving Behaviour of Rural Households in Kwara State - Nigeria, *African Journal of Basic and Applied Sciences*, 4(4):115–123.

Obi, A. 2006. *Trends in agricultural land prices*. PhD Thesis, University of the Free State, Bloemfontein.

Obi, A., van Schalkwyk, H.D. and van Tilburg, A. 2012. *Market access, poverty alleviation and socio-economic sustainability in South Africa*, in van Schalkwyk, H.D., Groenewald, J.A., Fraser, G.C.G., Obi, A., & van Tilburg, A (eds). 2012. *Unlocking markets to smallholders: Lessons from South Africa*. Netherlands: Wageningen Academic Publishers, pp. 23-33.

Olayide, O.E, Tetteh, I.K. and Popoola, L. 2016. Differential impacts of rainfall and irrigation on agricultural production in Nigeria: Any lessons for climate-smart agriculture? *Agricultural Water Management*, 178: 30–36.

Oladele, O.I. 2015. Effect of information communication technology (ICT) on agricultural information access among extension officers in North West Province South Africa. *South African Journal of Agricultural Extension*, 43(2): 30–41.

Olaniyan, D.A. and Ojo, L.B. 2008. Staff training and development: A vital tool for organisational effectiveness. *European Journal of Scientific Research*, 24 (3): 326-331.

O'laughlin, B., Bernstein, H., Cousins, B. and Peters, P.E. 2013. Introduction: Agrarian change, rural poverty and land reform in South Africa since 1994. *Journal of Agrarian Change*, 13(1): 1–15.

Olum, Y. 2004. *Modern management theories and practices*. Paper presented at the 15th East African Central Banking Course, held on 12th July 2004, at Kenya School of Monetary Studies.

Oluwuo, S.O. and Uche, C.M. 2004. *Processes and Functions of School Administration in Nnabuo*, In Okorie P, O, M & Agabi, O.G (eds) *Introduction to School Management*. Port Harcourt: Eagle Lithograph Press.

Onwuegbuzie, A.J. and Leech, N.L. 2007. Sampling designs in qualitative research: making the sampling process more public. *The Qualitative Report*, 12(2): 238–254.

Osabuohien, E.S. 2014. Large-scale agricultural land investments and local institutions in Africa: the Nigerian case. *Land Use Policy*, 39: 155–165.

Oosthuizen, O. and Thornhill, C. 2017. The grant system of financing the South African local government sphere: Can sustainable local government be promoted? *Local Economy: The Journal of the Local Economy Policy Unit*, 32 (5). doi.org/10.1177/0269094217721683.

Ortmann, G.F. 2005. Promoting the competitiveness of South African agriculture in a dynamic economic and political environment. *Agrekon*, 44(3): 286–320.

Ortmann, G.F. and King, R.P. 2010. Research on agri-food supply chains in Southern Africa involving small-scale farmers: Current status and future possibilities. *Agrekon*, 49(4): 397–417.

Osifo, C. 2012. *Organization and coordination: An intra-and inter performance perspective*. Proceedings of the University of Vaasa: Working Papers 3.

Ostrom, M., Cha, B. and Flores, M. 2010. Creating access to land grant resources for multicultural and disadvantaged farmers. *Journal of Agriculture, Food Systems, and Community Development*, 1(1): 89–106.

Ouattara, W. 2012. Economic efficiency analysis in Côte d'Ivoire. *American Journal of Economics*, 2(1): 37–46.

Owusu-Antwi, G. and Antwi, J. 2010. The analysis of the rural credit market in Ghana, *International Business and Economics Research Journal*, 9(8): 45–56.

Parker, L.D. and Riston, P.A. 2005. Revisiting Fayol: Anticipating Contemporary Management. *British Journal of Management*, 16: 175–194.

Patel, A. 2010. *Infrastructure for agriculture & rural development in India: Need for a comprehensive program & adequate investment*. From: https://www. Microfinancegateway. org/sites/default/files/mfg-en-paper-infrastructure-for-agriculture-rural-development-in-india-need-for-a-comprehensive-program-adequate-investment-sep-2010.pdf [Retrieved, March 20, 2018].

Pasban, M. and Nojedeh, S.H. 2016. A Review of the Role of Human Capital in the Organization. *Procedia - Social and Behavioral Sciences*, 230: 249–253.

Panday, P.K. and Jamil, J. 2011. Challenges of coordination in implementing urban policy: The Bangladesh experience. *Public Organisational Review*, 11: 155–176.

Patton, M.Q. 2002. *Qualitative research and evaluation methods*. 3rd ed. Thousand Oaks, CA: Sage Publishers.

Penstone, K. 2017. *Traditional trade and the R250bn opportunity*. From: https://www.marklives.com/2017/01/whm-media-turning-landmarks-to-brandmarks/ [Retrieved, March 20, 2019].

Peyton, S., Moseley, W. and Battersby, J. 2015. Implications of supermarket expansion on urban food security in Cape Town, South Africa. *African Geographical Review*, 34(1): 36–54.

Pereira, L.M., Cunco, C.N. and Twine, W.C. 2014. Food and cash: understanding the role of the retail sector in rural food security in South Africa. *Springer Science-Food Security*, 6: 339–357.

Peters, B.G. 2018. The challenge of policy coordination. *Policy Design and Practice*, 1(1): 1–11.

Phakathi, M. 2020. The causes and the resolution of conflict in Local-Provincial Intergovernmental Relations: The case study of OSS in KwaZulu-Natal. *Journal of Gender, Information and Development in Africa*, 9(1): 131–155.

Pietersen, J.M. 2017. Intergovernmental Relations: Delivery of portable water to poor communities in Diepsloot of Gauteng Province. PhD Thesis, University of South Africa: Public Administration & Management.

Pillay, V. 2010. Evaluation of the impact of the Integrated Food and Nutrition Programme in Kungwini. PhD Thesis, Department of Social Work and Criminology: University of Pretoria.

Pimentela, D. and Pimentel, M. 2006. Global environmental resources versus world population growth. *Ecological Economics*, 59: 195–198.

Politte, C. and Bouckaert, G. 2000. *Public Management reform: A comparative Analysis*. Oxford: Oxford University Press.

Porter, J., R., Xie L., Challinor A., Cochrane K., Howden, S.M. and Iqbal, M.M. 2014. Food security and food production systems. In: Field, C.B., Barros, V., Dokken, D.J., Mach, K.J., Mastrandrea, M.D. & Bilir, T.E. (Eds.): *Climate Change: Impacts, Adaptation, and Vulnerability*. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, United Kingdom and New York, USA: Cambridge University Press, pp. 485-533.

Poole, N. 2017. *Smallholder agriculture and market participation*. From http://www.fao.org/ 3/a-i7841e.pdf [Retrieved, November 02, 2018].

Potts, D. 2008. The urban informal sector in sub-Saharan Africa: From bad to good (and back again?). *Development Southern Africa*, 25(2): 51–67.

Poulton, C., Dorward, A. and Kydo, J. 2010. The future of small farms: Directions for services, institutions, and intermediation. *World Development*, 38(10): 1413–1428.

Punch, K.F. 2005. *Introduction to social research: Quantitative and qualitative approaches.* 2nd ed. Thousand Oaks, CA: Sage Publishers.

Punt, C., Pauw, K. and van Schoor, M. 2005. *A profile of the Eastern Cape Province: Demographics, poverty, inequality and unemployment*. From: http://wwwold.elsenburg .com/provide/documents/BP2005_1_2%20Demographics%20EC.pdf [Retrieved, November 10, 2015].

Qwabe, N. 2014. Lending to small-scale farmers in South Africa: A case for best practices in formal institutions. Master's Thesis, University of Pretoria: Faculty of Natural and Agricultural Sciences.

Rajiv, R. 2010. Formal versus informal markets: Investing in agriculture markets-based solution (Decision and policy analysis), International Centre for Tropical Agriculture. From: http://dapa.ciat.cgiar.org/formal-versus-informal-markets/[Retrieved, November 08, 2018].

Raju, K.V. and Singh, P.K. 2014. *Producers' Collectives in Sustainable Agri-value Chain*. From: http://www.ksrm.ac.in/wp-content/uploads/2014/12/Piyush-Kumar-Singh-and-K-V- Raju-Symp-2014-Producers-Collectives-in-Sustainable-Agri-value-Chain-1.pdf [Retrieved, November 11, 2016].

Range, J. 2017. *The state of SA's fresh produce markets*. From: https://www.farmersweekly .co.za/agri-business/agribusinesses/state-sas-fresh-produce-market/ [Retrieved, December 14, 2018].

Rahim, A., Atan, R. and Kamaluddin, A. 2017. Human capital efficiency and firm performance: an empirical study on Malaysian technology industry. *SHS Web of Conferences*, 36: 1–11.

Raphela, M.GM. 2014. Smallholder farmers in Ekurhuleni: The challenges and constraints of access to agricultural markets. Masters' Thesis, Stellenbosch University: Development Finance.

Raidimi, E.N. and Kabiti, H.M. 2017. Agricultural extension, research, and development for increased food security: the need for public-private sector partnerships in South Africa. *South African Journal of Agricultural Extension*, 45(1): 49–63.

Rapsomanikis, G. 2015. *The economic lives of smallholder farmers: An analysis based on household data from nine countries*. From: http://www.fao.org/3/a-i5251e.pdf [Retrieved, September 10, 2019].

Randela, R., Alemu, Z.G. and Groenewald, J. 2008. Factors enhancing market participation by smallscale cotton farmers. *Agrekon*, 47(4): 451–469.

Razzano, G. 2016. The coordination challenge for the open government partnership in South Africa. From: https://www.corruptionwatch.org.za/wp-content/uploads/2016/09/Odac-Book_Digital.pdf [Retrieved, October 22, 2019].

Republic of South Africa (RSA). 1996. Constitution of the Republic of South Africa of 1996. Pretoria: Government Printer.

Republic of South Africa (RSA). 1998. White Paper on Local Government. Pretoria: Government Printer.

Republic of South Africa (RSA). 2000. Local Government: Municipal Systems Act (No. 32 of 2000). Pretoria: Government Printer.

Republic of South Africa. *Intergovernmental Relations Framework Act, Act 13 of 2005*. Pretoria: Government Printers.

Reardon, T.C.B., Barrett, J.B. and Swinnen, J. 2009. Agrifood industry transformation and small farmers in developing countries. *World Development*, 37–11.

Remler, D.K. and van Ryzin, G.G. 2011. *Research methods in practice: Strategies for description and causation*. California: Sage Publishers.

Resnick, D. 2004. Smallholder African agriculture: Progress and problems in confronting hunger and poverty. DSGD Discussion Paper No 9, Washington D.C., USA, International Food Policy Research Institute.

Pretty, J., Toulmin, C. and Williams, S. 2011. Sustainable intensification in African agriculture. *International Journal of Agricultural Sustainability*, 9(1): 5–24.

Robbins, S.P., Coulter, M.K. and Coulter, M. 2005. *Management*. 8th ed. Upper Saddle River, NJ: Pearson Prentice Hall.

Rosset, P.M. and Martínez-Torres, M.E. 2012. Rural social movements and agroecology: context, theory, and process. *Ecology and Society*, 17(3): 7–17.

Ruysenaar, S. 2010. *The Integrated Food Security Strategy of South Africa (IFSS): An Institutional Analysis*. From: http://www.ccri.ac.uk/Events/RGS-IBG%202010/Ruysenaar_Integrated food strategy%5B1%5D.pdf [Retrieved, August 14, 2016].

Sala, S., Anton, A., McLaren, S.J., Notarnicola, B., Saouter, E. and Sonesson, U. 2017. In quest of reducing the environmental impacts of food production and consumption. *Journal of Cleaner Production*, 140: 387–398.

Sanga, C., Kalungwizi, V. and Msuya, C. 2013. Building agricultural extension services system supported by ICTs in Tanzania: Progress made, challenges remain. International *Journal of Education and Development using ICT*, 9(1): 80–99.

Sartorius, K. and Kirsten, J. 2002. Can small-scale farmers be linked to agribusiness? The timber experience. *Agrekon*, 41(4):295–325.

Satishkumar, N, Tevari, P. and Singh, A. 2013. A Study on Constraints Faced by Farmers in Adapting to Climate Change in Rainfed Agriculture. *Journal of Human Ecology*, 44(1): 23–28.

Salami, A., Kamara, A.B. and Brixiova, Z. 2010. *Smallholder Agriculture in East Africa: Trends, Constraints and Opportunities*. Working Papers Series No 242, African Development Bank, Tunis.

Salkind, N.J. 2006. Exploring research. 6th ed. New Jersey: Pearson Education.

Sam, I.O. 2014. Achieving sustainable poverty reduction and rural development in Nigeria through local economic development strategies. *American Journal of Rural Development*, 2(1): 13–19.

Sandelowski M. 1996. One is the liveliest number: The case orientation of qualitative research. *Research in Nursing & Health*, 19(6): 525–529.

Sarah, K., Lower, J.S. and Terri, R. 2016. The number, size, and distribution of farms, smallholder farms, and family farms worldwide. *World Development*, 87: 16–29.

Selepe, M., Sabela, T. and Masuku, M. 2014. The effect of infrastructural challenges on food security in Ntambanana, KwaZulu-Natal, South Africa. *African Journal of Hospitality, Tourism and Leisure*, 3(1): 1–12.

Senyolo, G.M, Chaminuka, P., Makhura, M.N. and Belete, A. 2009. Patterns of access and utilization of output markets by emerging farmers in South Africa: Factor analysis approach. *African Journal of Agricultural Research*, 4(3): 208-214.

Sebopetji, T.O. 2008. An application of probit analysis to factors affecting small-scale farmers' decision about credit. Masters' Thesis: University of Limpopo.

Sebeho, M. A. and Stevens, J. B. 2019. An overview of perceptions and attitudes towards extension service delivery in Fezile Dabi District, Free State Province. *South African Journal of Agricultural Extension*, 47(1): 61–72.

Shange, N. 2014. Analysis of the challenges and opportunities for smallholder farmer value chain integration in the Western Cape: A public and private sector organisation perspective. Masters Thesis: Stellenboch University.

Shiferaw, J.O. and Reddy, V.R. 2009. *Challenges of adoption and adaptation of land and water management options in smallholder agriculture: Synthesis of lessons and experiences.* From: https://publications.iwmi.org/pdf/H042002.pdf [Retrieved, March 20, 2017].

Shiferaw, B., Obare, G. and Muricho, G. 2006. Rural institutions and producer organizations in imperfect markets: Experiences from producer marketing groups in semi-arid Eastern Kenya. IFPRI Working paper no. 60. Washington, DC: International Food Policy Research Institute.

Schellnhuber, H.J. 2014. Climate change effects on agriculture: Economic responses to biophysical shocks. *Potsdam Institute for Climate Impact Research*, 111(9): 3274–3279.

Schlenker, W. and Lobell, D.B. 2010. Robust negative impacts of climate change on African agriculture. *Environmental Research Letters*, 5(1).

Schneider, U. A, Petr Havlík, P., Schmid, E., Valin, H., Mosnier, A., Obersteiner, M., Böttcher, H., Skalsky', R., Balkovic, J., Sauer, T. and Fritz, S. 2011. Impacts of population growth, economic development, and technical change on global food production and consumption. *Agricultural Systems*, 104: 204–215.

Schmidhuber, J. and Tubiello, F.N. 2007. Global food security under climate change. *Proceedings of the National Academy of Sciences of the United States of America*, 104(50), 19703–19708.

Schmidhuber, J. and Bruinsma, J. 2011. *Investing towards a world free of hunger: lowering vulnerability and enhancing resilience*. In Prakash, A. (ed), *Safeguarding food security in volatile global markets*: Rome, FAO.

Schönfeldt, H.C., Kirsten, J.F. and McClachlan, M. 2013. *Country policy analysis: Nutrition Impact of agriculture and food systems South Africa*. From: http://unscn.org/files/ Publications/Country_Case_Studies/UNSCN-Country-Case-Study-South-Africa-FINAL.pdf [Retrieved, October 12, 2017].

Seo, S.N. and Mendelsohn, R. 2008. Measuring impacts and adaptations to climate change: a structural Ricardian model of African livestock management. *Agricultural Economics*, 38: 151–165.

Sekaran, U. and Boungie, R. 2010. *Research methods for business: A skill building approach*. 4th ed. New York: John Wiley & Sons.

Shaidi, E.W. 2013. *Investigation into causes of service delivery protests in municipalities: A case study of Nelson Mandela Bay Municipality*. PhD Thesis. Nelson Mandela Metropolitan University.

Sharp, J.S., Jackson-Smith, D. and Smith, L. 2011. Agricultural economic development at the rural-urban interface: Community organization, policy, and agricultural change. *Journal of Agriculture, Food Systems, and Community Development*, 1(4): 189–204.

Shaw, J.D., Park, T. and Kim, E. 2013. A Resource-based perspective on human capital losses, HRM investments and organizational performance. *Strategic Management Journal*, 34: 572–589.

Skaik, S.H. 2008. *Management Theories History and Practice*. From: http://www.cmguide.org/archives/291 [Retrieved, January 19, 2016].

Simon, H. 1997. *Administrative Behavior: A Study of Decision-Making Processes in Administrative Organisation*. 4th ed. New York: The Free Press.

Silverman, D. 2004. *Qualitative research: Theory, methods and practice*. 2nd ed. London: Sage Publishers.

Singh, S. 2012. *Policy: The woes of rural wage labor*. From: http://www.capacity.org/capacity/opencms/en/topics/value-chains/the-woes-of-rural-wage-labour.html [Retrieved, November 20, 2015].

Sikwela, M.M. 2013. The impact of farmer support programmes on market access of smallholder farmers in the Eastern Cape and KwaZulu-Natal provinces, South Africa. PhD Thesis, University of Fort Hare: Department of Agricultural Economics and Extension.

Smit, B. and Skinner, M.W. 2002. Adaptation options in agriculture to climate change: A typology. *Mitigation and Adaptation Strategies for Global Change*, 7: 85–114.

Smit, P.J., Cronje, G.J., Brevis, T. and Vrba, M.J. 2013. *Management principles: A contemporary edition for Africa*. 5th ed. Cape Town: Juta.

Statistics South Africa. 2011. *Agricultural households' municipal data per province*. From: http://www.statssa.gov.za/?page_id=1021&id=ethekwini-municipality [Retrieved, December 18, 2015].

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

Statistics South Africa. 2016. Community Survey 2016. Pretoria: Statistics South Africa.

Statistics South Africa. 2018. *Mid-year population estimates 2018*. From: http://www.statssa.gov.za/publications/P0302/P03022018.pdf [Retrieved, December 25, 2018].

Statistics South Africa. 2019a. *Quarterly Labour Force Survey: Quarter 3: 2019*. From: http://www.statssa.gov.za/publications/P0211/P02113rdQuarter2019.pdf [Retrieved January 5, 2020].

Statistics South Africa. 2019b. General household survey 2018. Pretoria: Statistics South Africa.

Stefano, L. 2004. *Printed information access, preferences and use by farmers with potential for small-scale organic production, KwaZulu-Natal*. Masters' Thesis: University of KwaZulu-Natal: School of Agricultural Sciences and Agribusiness.

Steyn, J.G. 2011. Food security in South Africa: perceptions of the role of local government. Pretoria: Idasa.

Stevens, B., Schieb, P. and Andrieu, M. 2006. *A Cross-sectoral Perspective on the Development of Global Infrastructures to 2030*. Paris: OECD Publishing.

Siyo-Pepetheka, T. 2014. The comprehensive rural development programme as a vehicle for enhancing stakeholder participation in rural governance: A Case study of Dysselsdorp in the Western Cape Province, South Africa. Masters' Thesis, University of Western Cape.

South African Human Research Council. 2018. *Monitoring the Implementation of the Commission's Recommendations from its 2014 Report on Access to Water and Sanitation*. Water and Sanitation research brief. From: https://www.sahrc.org.za/home/21/files/The% 20Right%20to%20Water%20&%20Sanitation%20-%20Monitoring%20the%20Implementati mon%20of%20the%20SAHRCs%202014%20Recommendations%2020117-2018.pdf [Retrieved, August 12, 2019].

SOFA Team and Doss, C. 2011. *The role of women in agriculture*. ESA Working Paper No. 11-02, March 2011. The Food and Agriculture Organisation of the United Nations.

Sprinkhuizen, J. and Masangu, T. 2016. Policy brief series: evidence based policy making and implementation: Study of Tsheseng. Thintwa and Makhalaneng Villages, South Africa. *Bridge Water*, 4(1):79-89.

Surchev, P. 2010. Rural areas- problems and opportunities for development. *Trakia Journal of Sciences*, 8(3): 234–239.

Sulaiman, V. and Davis, K.E. 2012. *The "New Extensionist": Roles, Strategies, and Capacities to Strengthen Extension and Advisory Services*. Switzerland: Global Forum for Rural Advisory Services.

Sunday, O.J. 2014. An X-ray of intergovernmental relations conflicts and resource control in the fourth Republic in Nigeria. *International Journal of Educational Administration and Policy Sudies*, 6(3): 43–52.

Suri, H. 2011. Purposeful Sampling in Qualitative Research Synthesis. *Qualitative Research Journal*, 11(2): 63–75.

Tambo, J.A. and Abdoulaye, T. 2012. Climate change and agricultural technology adoption: the case of drought tolerant maize in rural Nigeria. Mitigation and Adaptation Strategies for agriculture. *Global Change*, 17: 277–292.

Terre Blanche, M.J., Terre Blanche, M., Durrheim, K. and Painter, D. 2006. *Research in practice: Applied methods for the social sciences*. 2nd ed. Cape Town: Juta & Company Ltd.

Taylor, J.E. and Filipski, M.J. 2014. *Beyond Experiments in Development Economics: Local Economy-Wide Impact Evaluation*. United Kingdom: Oxford University Press.

Thapa, G. 2009. Smallholder farming in transforming economies of Asia and the Pacific: Challenges and opportunities. Discussion paper, IFAD's Governing Council, 18 February 2009.

Thamaga-Chitja, J.M. and Morojele, P. 2014. The Context of Smallholder Farming in South Africa: Towards a Livelihood Asset Building Framework. *Journal of Human Ecology*, 45(2): 147–155.

Takeuchi, R., Chen, Z. and Cheung, S.Y. 2012. Applying uncertainty management theory to employee voice behaviour: An integrative investigation. *Personnel Psychology*, 65: 283-323.

The Presidence, RSA. 2011. *Making the case for a decentralized small-scale farmer strategy in South Africa*. Policy Brief 2, August 2011.

The Presidency, RSA. 2012. *National Development Plan 2030: Our future- make it work*. Available:http://www.poa.gov.za/news/Documents/NPC%20National%20Development%20P lan%20 Vision%202030%20-lo-res.pdf [Retrieved, April 25, 2016].

The Presidency, RSA. 2019. *President to launch the Presidential District Coordination Service Delivery Model*. From: http://www.thepresidency.gov.za/press-statements/president-launch-presidential-district%C2%A0coordination-service-delivery-model [Retrieved, January 14, 2020].

Thornhill, C. and Madumo, O.S. 2011. The utilisation of ward committees as an effective tool for improving service delivery: A case study. *Administratio Publica*, 9(2): 129–144.

Thornhill, C. 2012. *South African public administration and management*. 10th ed. Pretoria: Van Schaik Publishers.

Tilahun, H., Teklu, E., Michael, M., Fitsum, H. and Awulachew, S.B. 2011. Comparative performances of irrigated and rainfed agriculture in Ethopia. *World Applied Sciences Journal*, 14: 235–244.

Tkemaladze, G.S. and Makhashvili, K.A. 2016. Climate changes and photosynthesis. *Annals of Agrarian Science*, 14(2): 119–126.

Tompkins, J.R. 2005. *Organization theory and public management*. Belmont, CA: Wadsworth, Cengage Learning.

Torero, M. 2011. *A framework for linking small farmers to markets*. Conference on New Directions for smallholder agriculture, 24-25 January 2011, IFAD HQ.

Tregurtha, N. 2008. *The Eastern Cape Siyakhula Massive Crop Production Programme*. 2nd Economy Project- Power Point Presentation: 30 September 2008.

Tregurtha, N., Vink, N. and Kirsten, J. 2010. *Presidency fifteen-year review project: Review of agricultural policies and support instruments in South Africa 1994-2009*. From: http://www.tips.org.za/files/agriculture_presidency_fifteen_year_ review_final reportjuly 2010 final.pdf [Retrieved, May 20, 2018].

Trochim, W. and Donnelly, J.P. 2006. *The research methods knowledge base*. Mason, OH: Atomic Dog Publishing.

Turner, S. 2001. *Sustainable development: What land got to do with it?* Policy Brief: Debating Land Reform and Rural Development, No.2, Institute for Poverty, Land and Agrarian Studies (PLAAS). Cape Town: School of Government, University of Western Cape.

Twala, C. 2014. The causes and socio-political impact of the service delivery protests to the South African citizenry: A real public discourse. *Journal of Social Science*, 39: 159–167.

Ubisi, S.V, Khumalo, P. and Nealer, E.J. 2019. Provision of adequate housing through cooperative government and intergovernmental relations in the Bushbuckridge Local Municipality. *Gender & Behaviour*, 17(2): 13355–13369.

Uganda Coalition for Sustainable Development. 2011. *East Africa's food crisis: The answer is to promote smallholder farmers*. From: http://www.ugandacoalition.or.ug/sites/default/files/UCSDEbulletin JULY2011.pdf [Retrieved, February 15, 2016].

Ugwulashi, C.S. 2012. Effective integration of administrative processes in School Administration. *Academic Research International*, 2(2): 315–320.

Uittenbroek, C.J.U., Mees, H.L.P., Hegger, D.L.T. and Driessen, P.P.J. 2019. The design of public participation: who participates, when and how? Insights in climate adaptation planning from the Netherlands. *Journal of Environmental Planning and Management*, 62(14), 2529–2547.

UNEP- United Nations Environment Programme. 2016. In: Westhoek, H., Ingram, J., Van Berkum, S., Ozay, L. and Hajer, M. (Eds.), *Food systems and natural resources*. A report of the working group on food systems of the international resource panel, ISBN 978-92-807- 3560-4, p. 164.

UNPD – United Nations Population Division. 2011. *World population prospects*. The 2010 Revision. Highlights and advance tables.

Van Rooyen J. 2011. *Survival tips for small-scale farming*. Farmer's weekly. From: http://www.farmersweekly.co.za/article.aspx?id=5981&h=Survival-tips-for-small-scale-farming [Retrieved, September 30, 2016].

Van Rooyen, C.R., Steward, S. and De Wet, T. 2012. The impact of microfinance in sub-Saharan Africa: A systemic review of evidence. *World Development*, 40 (11): 2249–2262.

Van Tilburg, A. and van Schalkwyl, H.D. 2012. Strategies to improve smallholders' market access, in van Schalkwyk, H.D., Groenewald, J.A., Fraser, G.C.G., Obi, A., & van Tilburg, A (eds). 2012. Unlocking markets to smallholders: Lessons from South Africa. Netherlands: Wageningen Academic Publishers.

Vanagas, R. and Stankevič, J. 2014. Impact of coordination for organization process. *Intellectual Economics*. 8 (2), 112–125.

Van Zyl, J. and Binswanger, H.P. 1996. *Market-assisted rural land reform: how will it work*? In: J. Van Zyl, J. Kirsten and H.P. Binswanger (eds.) *Agricultural land reform in South Africa*. Cape Town: Oxford University Press.

Van der Heijden, T. 2010. Good for who? Supermarkets and small farmers in South Africa – a critical review of current approaches to market access for small farmers in developing countries. Masters' Thesis: Department of Agricultural Economics, University of Stellenbosch.

Van der Heijden, T. and Vink, N. 2013. Good for whom? Supermarkets and small farmers in South Africa – a critical review of current approaches to increasing access to modern markets. *Agrekon*, 52(1): 68–86.

Van der Waldt, G. 2016. Managing for excellence in the public sector. 3rd ed. Juta: Lansdowne.

Von Loeper, W., Musango, J., Brent, A. and Drimie, S. 2016. Analysing challenges facing smallholder farmers and conservation agriculture in South Africa: A system dynamics approach. *South African Journal of Economics and Management Sciences*, 5: 747–773.

Vaidyanathan, A. 2013. Future of cooperatives in India. *Economic & Political Weekly*, 48(18):30–34.

Wagan, S.A., Jingdong, L., Shuanxi, X., Noonari, S., Memon, Q.U.I., Rahman, A. and Pirzado, M. B. 2016. Significance of agricultural finance in agricultural and rural development of Pakistan: A case study of Qambar Shahdadkot District. *European Journal of Business and Management*, 8(16): 64–70.

Vaismoradi, M., Turunen, H. & Bondas, T. 2013. Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing and Health Sciences*, 15: 398–405.

Weatherspoon, D.D. and Reardon, T. 2003. The rise of supermarkets in Africa: implications for agrifood systems and the rural poor. *Development Policy Review*, 21(3):1–17.

Wessels, J. and Nel, E. 2016. A new co-operative revolution in South Africa? Reflections on the outcomes of state support in the Free State Province. *Local Economy*, 31(1-2): 187–203.

Wiafe, T. and Yona, L. 2016. Farm business management skills a missing link for smallholder farmers: a case of Malingunde, Malawi. *European Journal of Business and Innovation Research*, 4(3): 53–73.

Wiewiora, A., Keast, R. and Brown, K. 2016. Opportunities and challenges in engaging citizens in the co-production of infrastructure-based public services in Australia. *Public Management Review*, 18(4): 483–507.

Wiggins, S., Kirsten, J. and Lambi, L. 2010. The future of small farms. *World Development*, 38(10): 1341–1349.

Wiggins, S. and Keats, S. 2013. *Leaping and Learning: Linking smallholders to markets in Africa*. London, Agriculture for Impact, Imperial College and Overseas Development Institute.

Wilkinson, D & Birmingham, P. 2003. *Using research instruments: A guide for researchers*. London: Routledge.

Williams, M. 2018. Women in rural South Africa: a post-wage existence and the role of the state". *Equality, Diversity and Inclusion: An International Journal*, 37(4): 392–410.

Williams, C. and van Zyl, N. 2008. *Capital- and market-access-constraints in land reform projects; three case studies from Mpumalanga*. From: http://www.tips.org.za/files/Williams Van Zyl 24 Oct 2008 tmp53b1ce2c.pdf [Retrieved, March 20, 2018].

Willy, D. K. and Holm-Müller, K. 2013. Social influence and collective action effects on farm level soil conservation effort in rural Kenya. *Ecology Economics*, 90: 94–103.

Wren, D.A, Bedeian, A.G. and Breeze, J.D. 2002. The foundations of Henri Fayol's administrative theory. *Management Decision*, 40(9): 906–918.

Woolard, I. 2013. The youth unemployment problem in South Africa within the international context, SALDRU, University of Cape Town. From: http://www.econ3x3.org/article/how-oldage-pension-helping-young-people-rural-areas-find-jobs#sthash.nrnXSX8n.dpuf [Retrieved January 3, 2019].

World Bank. 2007. World Development Report 2007: Agriculture for Development. Washington, DC: The World Bank.

World Bank. 2008a. *The Growth Report: Strategies for Sustained Growth and Inclusive Development*. From: https://openknowledge.worldbank.org/bitstream/handle/10986/6507/44 9860PUB0Box3101OFFICIAL0USE0ONLY1.pdf?sequence=1&isAllowed=y [Retrieved, December 20, 2015].

World Bank. 2008b. World Development Report 2008: Agriculture for Development. Washington, DC: The World Bank.

World Bank. 2009. Gender in agriculture: sourcebook. Washington, DC: World Bank Publications.

World Bank. 2013. *Malawi*. From http://www.worldbank.org/en/country/malawi [Retrieved October 10, 2019.

World Bank. 2016. *Agriculture and rural development*. From: http://data.worldbank.org/topic /agriculture-and-rural-development [Retrieved, March 17, 2017].

Writer, S. 2018. How the land expropriation debate is already starting to impact banks. BusinessTech, 7 September 2018. From: https://businesstech.co.za/news/banking/270149/ how-the-land-expropriation-debate-is-already-starting-to-impact-banks/ [Retrieved, February 20, 2019]

Wright, P.M. and McMahan. 2011. Exploring human capital: putting human back into strategic human resource management. *Human Resource Management Journal*, 21(2): 93–104.

Xaba, T. and Dlamini, C.S. 2015. The Comprehensive Agricultural Support Programme's (CASP) training and capacity building: An impact analysis on income levels of emerging farmers in Limpopo Province, South Africa. *American Journal of Economics, Finance and Management*, 1(3): 153-163.

Xaba, B.G. and Masuku, M.B. 2013. Factors affecting the choice of marketing channel by vegetable farmers in Swaziland. *Sustainable Agriculture Research*, 2(1): 112–123.

Yami, M., Feleke, S., Abdoulaye, T., Alene, A.D., Bamba, Z. and Manyong, V. 2019. African Rural Youth Engagement in Agribusiness: Achievements, Limitations, and Lessons. *Sustainability*, 11(185): 2–15.

Yusuf, I. 2013. The relationship between human capital efficiency and financial performance: an empirical examination of quoted Nigerian banks. *Research Journal of Finance and Accounting*, 4(4): 148–154.

Ziming Liu, Z., Müller, M., Rommel, J. and Feng, S. 2016. Community-based agricultural land consolidation and local elites: Survey evidence from China. *Journal of Rural Studies*, 47: 449–458.

Ziebicki, B. 2013. Relations between organisational effectiveness and efficiency in the public sector. *Problems of Management in the 21st Century*, 8: 102–110.

Ziervogel, G., Mark New, M., van Garderen, E.A., Midgley, G., Taylor, A., Hamann, R., Stuart-Hill, S., Myers, J. and Warburton, M. 2014. Climate change impacts and adaptation in South Africa. *WIREs Climate Change*, 2014(5): 605–620.

Zwane, M.T. 2014. School feeding programmes as a mechanisms to improve market access for smallholder farmers in rural areas of South Africa. Masters' Thesis: University of Pretoria, Faculty of Natural and Agricultural Sciences.

Zwane, E.M., Groenewald, I.B. and Van Niekerk, J.A. 2014. Critical factors influencing performance of extensionists in Limpopo Department of Agriculture in South Africa. *South African Journal of Agricultural Extension*, 42: 49–61.

APPENDICES

APPENDIX A: ETHICAL CLEARANCE



19 October 2016

Mr Jabulani Christopher Nyawo (209509557) School of Management, IT & Governance Westville Campus

Protocol reference number: HSS/1611/016D

Project title: Access to municipal markets by agro-smallholder producers in eThekwini Metropolitan Municipality: A Public Administration perspective

Full Approval – Expedited Application In response to your application received on 29 September 2016, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Dr Shamila Naidoo (Deputy Chair)

/ms

Cc Supervisor: Professor Betty Mubangizi Cc Academic Leader Research: Professor Brian McArthur Cc School Administrator: Ms Angela Pearce

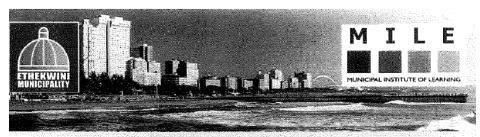
> Humanities & Social Sciences Research Ethics Committee Dr Shenuka Singh (Chair) Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 290 3587/8390/4557 Facsimile: +27 (0) 31 280 4609 Email: ximbap@ukzn.ac.za /anymanm@ukzn.ac.za / mohunp@ukzn.ac.za Website: www.ukzn.ac.za

1910 - 2010 A Founding Campuses 👅 Edgewood 👛 Howard College 🐣 Medical School 👼 Pissermaritzburg 💻 Westville

APPENDIX B: GATEKEEPERS' LETTERS



Pod 1, Second Floor, Intuthuko Junction, 750 Mary Thiphe Street, Umkhumbane, Cato Manor, Durban 4001. Tel: 031 322 4513, Fax: 031 261 3405, Fax to email: 086 265 7160, Email: mile@durban.gov.za, Website: www.mile.org.za

For attention:
Chair: Higher Degrees Committee
College of Law and Management Studies
University of Kwazulu Natal
Howard Campus
Durban
4001

7 July 2016

RE: LETTER OF SUPPORT TO STUDENT JC NYAWO, STUDENT NUMBER 209509557 - GRANTING PERMISSION TO USE ETHEKWINI MUNICIPALITY AS A CASE STUDY

Please be informed that eThekwini's Economic Development and Investment Promotion Unit (EDIPU) in partnership with the eThekwini Municipal Academy (EMA), have considered the request by Mr JC Nwayo to use eThekwini Municipality as a research study site leading to the awarding of a Doctoral degree in Public Administration entitled "Access to municipal markets by agro-smallholder producers in eThekwini Metropolitan Municipality: A Public Administration perspective".

We wish to inform Mr JC Nwayo of the acceptance of his request and hereby assure him of our utmost cooperation towards achieving his academic goals; the outcome which we believe will help our municipality in the long run. In return, we stipulate as conditional, that Mr Nwayo presents the results and recommendations of this study to the related unit/s on completion.

It is agreed that Mr Mwayo will liaise with Ms P. Mbonambi for any guidance and assistance he might need from our professional level employees in eThekwini Municipality.

	2016-08-22
	Date
oThekwini Museideelity	



ETHEKWINI MUNICIPAL ACADEMY

Shell House 221 Anton Lembede Street, Durban , 4001 Tel: 031 311 3192, Fax: 031 311 3292 www.durban.gov.za

23 August 2016

Dear Mr J.C Nwayo

RE: AUTHORITY TO DO RESEARCH IN THE ETHEKWINI MUNICIPALITY

Your letter dated 7 July 2016 requesting to use eThekwini Municipality as a research study site leading to the awarding of the Doctoral Degree in Public Administration.

You are hereby informed that you are granted authority to do research as requested. You are reminded of the ethics which have to be prioritized when engaging our employees on this research.

ther logistics.

Regards	

Dote

Dr M.B. Ngubane

Head: EThekwini Municipal Academy



Tel. +27 31 716 7914 Fax. +27 31 716 7905 Postal, 36 Kings Road, Pinetown, 3610 Office, 3rd Floor

BUSINESS UNIT: TIS ETHEKWINI

Enquiries: My Reference: Inkomba Yami: E-mail: Isla Isla Isla Isla Isla Isla Isla Isla	12/07/2016
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Student Name: Mr Jabulani C. Nyawo

Student Number: 209509557

Dear Mr Nyawo

PERMISSION TO CONDUCT A RESEARCH: TRADITIONAL COMMUNITIES UNDER ETHEKWINI LOCAL HOUSE

This letter serves to grant Mr Jabulani Christopher Nyawo (209509557) of the University of KwaZulu-Natal, permission to conduct research for his research topic entitled "Access to municipal markets by agrosmallholder producers in eThekwini Metropolitan Municipality: A Public Administration perspective.". The smallholder producers will be selected within the areas which fall under eThekwini Local House of Traditional Leaders. Please note that for the purposes of interviewing the smallholder producers, you will approach them directly and participation is on a voluntary basis.

The study should be conducted within the ambit of good research and ethics as laid down by the University and include confidentiality and anonymity where necessary.

We wish you well in your research endeavour.

Kind regards

APPENDIX C: INFORMED CONSENT

UKZN HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE (HSSREC)

APPLICATION FOR ETHICS APPROVAL

For research with human participants

Information Sheet and Consent to Participate in Research

Date:

Greetings,

My name is Jabulani Christopher Nyawo from uMkhanyakude District Municipality, northern of KwaZulu-Natal. I am studying towards a Doctoral Program in the University of KwaZulu-Natal, Westville Campus, within the Discipline of Public Governance.

You are being invited to consider participating in a study that involves research on the "Access to municipal markets by agro-smallholder producers in eThekwini Metropolitan Municipality: A Public Administration perspective". The aim and purpose of this research is to critically examine the influence of municipal markets on agro-smallholder sector's growth within a decentralised state. The study is expected to include thirty-two (32) participants. The maximum of five agro-smallholder producers per area who have agro-smallholders (either cooperatives or individuals or community gardens) under eThekwini Traditional Councils will be purposive selected. Five managers under the Sustainable Development & City Enterprise cluster within Durban Metro Municipality will be selected. Finally, two managers from KZN Department of Agriculture & Rural Development within the Branch Rural Development will also be selected. Before the interview, the researcher will make an appointment with the participants. Furthermore, the interviews will involve a free interaction with the participants. The data collected will be confidential and will be used purely for research purposes. By participating in this study, there is no potential or harmful risk involved. The duration of your participation if you choose to participate and remain in the study is expected to be less than thirty (30) minutes.

The role of the agro-smallholder farming sector is emphasized within government through the National Development Plan (NDP) which allocates smallholder farming sector with a role to drive rural development and also to improve community's livelihoods. Hence, the researcher hopes that, by conducting this study, recommendations will be made on how this sector could be improved and how government departments can work together to ensure the success of this sector. Furthermore, the researcher hopes that the model will be created which might assist the agrosmallholder sector to grow within the agricultural sector.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number: HSS/1611/016D).

In the event of any problems or concerns/questions you may contact the researcher at:

Mr. Jabulani C. Nyawo

031 206 7403/ 0798564121 or

Nyawoj1@ukzn.ac.za/ sakhilenyawo@yahoo.com

OR

The UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus Govan Mbeki Building Private Bag X 54001 Durban 4000 KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557- Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

Your participation in the study is voluntary and by participating, you are granting the researcher permission to use your responses. You may refuse to participate or withdraw from the study at any time with no negative consequence. There will be no monetary gain from participating in the study. Your anonymity will be maintained by the researcher and the School of Management, I.T. & Governance and your responses will not be used for any purposes outside of this study.

All data, both electronic and hard copy, will be securely stored during the study and archived for five years. After this time, all data will be destroyed.

If you have any questions or concerns about participating in the study, please contact me or my research supervisor at the numbers listed above.

Sincerely
Jabulani C. Nyawo
CONSENT TO PARTICIPATE
I () have been informed about the study entitled () by ().
I understand the purpose and procedures of the study (add these again if appropriate).

I have been given an opportunity to ask questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

I have been informed about any available compensation or medical treatment if injury occurs to me as a result of study-related procedures.

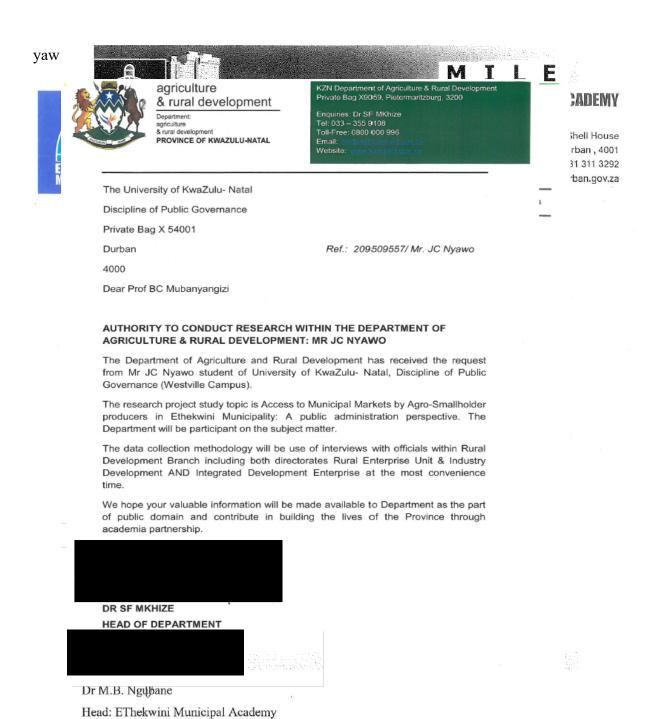
If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher at (provide details).

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001 Durban 4000						
KwaZulu-Natal, SOUTH AFRICA	A					
Tel: 27 31 2604557 - Fax: 27 31 2	Tel: 27 31 2604557 - Fax: 27 31 2604609					
Email: <u>HSSREC@ukzn.ac.za</u>						
Additional consent, where applica	ble					
I hereby provide consent to: Mr Jo	C Nyawo					
Audio-record my interview / focu	s group discussion YES / N	10				
Signature of Participant	Date					
Signature of Witness	Date					
(Where applicable)						
Signature of Translator	Date					
(Where applicable)						



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Signature of Witness (Where applicable)	Date	
Signature of Translator (Where applicable	Date	