

UNIVERSITY OF KWAZULU-NATAL



**A conceptual framework to address challenges facing female-owned agricultural
cooperatives in Pietermaritzburg**

by

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A dissertation submitted in fulfilment of the requirements for the degree of

Doctor of Business Administration

Graduate School of Business and Leadership

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January 2023

DECLARATION

I, **Silindile Ndlovu**, declare that

- The research reported in this dissertation, except where otherwise indicated, is my original research.
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ACKNOWLEDGEMENTS

I would first like to thank God for being my source of my strength.

I would like to express my gratitude to my supervisor, Prof TI Nzimakwe, for his great support and input. Without his encouragement and mentorship, I could not have achieved this.

I would like to also extend my humble thanks to Thami Mbonambi for the motivation and to all the University of KwaZulu-Natal Postgraduate and Doctoral Administration staff for their understanding when I needed support.

I would like to acknowledge and thank all cooperatives that participated in the study. I would also like to thank John Ngubane from the Agriculture Department in Parks, Leisure, and Cemeteries for all the support he gave me through the data collection stage.

DEDICATION

I dedicate this work to my family, my two children Aphile and Solwazi Kukhanya, for understanding me when I was away from home to invest in bettering my life. I hope mommy will make you proud.

To the rest of my family, my mother, dad, brother: Sbusiso, sister: Solani and Senzo Ndlovu, thank you for being an inspiration, my wish is to make our family shine.

To my late grandmother, Mrs Busaphi Ngcobo, thank you for believing in me, I will always love you.

ABSTRACT

The study investigated challenges encountered by small to medium-scale (primary to secondary level) female cooperatives in the agricultural sector in Pietermaritzburg. This research aimed to assess the challenges encountered by female entrepreneurs in the small to medium-scale agricultural sector in Pietermaritzburg in KwaZulu-Natal to present a conceptual framework to address the challenges encountered by female owned agricultural cooperatives in Pietermaritzburg. A qualitative methodology was used to generate an in-depth understanding of the phenomenon under study. The researcher's target population in this study was female-owned cooperative enterprises in the agricultural sector in Pietermaritzburg. The sample for the study was selected through the purposive sampling method. Only 20 female-owned cooperatives out of 306 in the agricultural sector in Pietermaritzburg participated in the study. Semi-structured in-depth interviews were used to collect data on the challenges facing female entrepreneurs in the agricultural sector in Pietermaritzburg. Ten primary-level female-owned cooperatives and ten secondary-level female-owned cooperatives were selected to participate. Thematic analysis was used to analyse the data. Study findings revealed that a lack of access to sufficient and productive land for expansion; a lack of skills; a demand for legal and regulatory frameworks; a lack of capital and markets and the issue of collateral availability; a lack of government support, a lack of infrastructure, a gap in understanding business culture; and poor value chain organisation affect female entrepreneurs in the small to medium-scale agricultural sector. These constraints presented a framework of barriers for female entrepreneurs in the small to medium-scale agricultural sector that must be addressed. This conceptual framework can be used towards the empowerment of women as a prerequisite for achieving inclusive growth or for promoting their services from primary to secondary cooperative level within the formal sector of the economy.

Keywords: Co-operatives; farming; primary level cooperatives; secondary level cooperatives; Agri sector; Agri markets; Agribank; Agri business.

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LIST OF ACRONYMS

ASGISA	: Accelerated and Shared Growth Initiatives for South Africa
BEE	: Black Economic Empowerment
CASP	: Comprehensive Agricultural Support Programme
CBOs	: Community Based Organisations
CSBD	: Centre for Small Business Development
DAFF	: Department of Agriculture, Forestry and Fisheries
DTI	: Department of Trade and Industry
DPLG	: Department of Provincial and Local Government
EFO	: Ezemvelo Farmers' Organisation
FAO	: Food and Agriculture Organisation:
FSP	: Farmer Support Programme
GAP	: Good Agricultural Practices
GDP	: Gross Domestic Product
GEAR	: Growth, Employment and Redistribution
GGP	: Gross Geographic Product
HSRC	: Human Science Research Council
ICA	: International Cooperative Alliance
IDP	: Integrated Development Plan
ILO	: International Labour Organisation
LED	: Local Economic Development
NCBA	: National Cooperative Business Association
NDA	: National Department of Agriculture
NDP	: National Development Plan
NGOs	: Non-Governmental Organisations
OECD	: Organisation for Economic Cooperation and Development
PGDS	: Provincial Growth and Development Strategies
SEDA	: South African Enterprise Development Agency

SMMEs : Small, Medium and Micro Enterprises
USDA : United States Department of Agriculture

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CHAPTER ONE

INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 INTRODUCTION

This study investigates the challenges that female owned agricultural cooperatives face in Pietermaritzburg, in the KwaZulu-Natal province of South Africa. South Africa is currently undergoing reforms and structural changes relating to social issues, economic, and political matters (Tapscott, 2017). Such changes are ongoing even within the educational structures of many developed and developing countries. Most parents have changed their perspective of educating girl children, families, particularly parents, are now keen for their female children to enrol for school and to complete their education (Chürr 2015). In a similar vein, governments across the globe are refocusing their strategy and now seek to economically empower women. Chürr (2015) believes that it is because of the previous traditional beliefs, that females have been discriminated from enjoying basic human rights for decades. Many governments, including the South African government, are transforming this history by promoting female education through providing scholarships, and promoting the socioeconomic wellbeing of women through various mechanisms and initiatives (Tapscott, 2017).

The policy shifts from governments have resulted in an increase in the number of girls attending school at various levels of education. McPherson (2011) asserts that education has enabled women to assume new roles in society, their new roles have diversified and contributed immensely to societal growth and development. McPherson indicates that education of women has led to these changes and resulted in more women becoming independent. Consequently, women venture into business to fend for their families thereby contributing positively to economic development and growth in their respective countries. Roles of women in economic activities have traditionally been limited to household activities and extraordinarily little on a broader economic landscape. Their roles, particularly in the South African economy and society, are now no longer constrained to the home. Instead, women's roles now traverse all sectors of the economy, and this impact is largely being felt in the agricultural and service sectors (McPherson, 2011; Asongu, Nnanna & Acha-Anyi, 2020).

The increased participation of women in the labour force has resulted in increased household income and interest in education and health matters. However, disparities between men and women in the workplace are of major concern as women tend to have challenges in accessing economic resources to develop and grow their businesses (Morsy, 2020). One area in which women's presence cannot be ignored is the agricultural sector, where female cooperatives are active. Numerous studies show that South African female cooperatives tend to be unsuccessful for a variety of reasons (Rena, 2017). Thus, this study seeks to unearth the challenges facing female cooperatives and further develop a conceptual framework for their sustainability.

This chapter presents an overview of the study, background to the study, the research problem and aim of the study, purpose of the study, the study's significance, and contribution, as well as the research objectives and questions. The chapter also succinctly presents the limitations of the study. It will conclude with the definitions of terms used and an outline of the structure of the thesis.

1.2 BACKGROUND TO THE STUDY

This study investigates the challenges faced by female cooperatives in the agricultural sector in the City of Pietermaritzburg, South Africa. In doing this it is acknowledged that there has

been a noticeable increase in entrepreneurial activities all over the world, primarily due to rapid global socioeconomic changes that are creating entrepreneurial opportunities for both men and women (Mazzarol & Reboud, 2020). However, a study by McPherson (2011) found that the empowerment of women is a prerequisite for achieving inclusive growth. Women farmers have represented at least a quarter of the global farming population (Rapsomanikis, 2015). In SubSaharan Africa, there are about 50% women in the agricultural workforce who are responsible for the growth, trade, and preparation of food for their families (Chauvin, Mulangu & Porto, 2012). However, women still have less access to agriculture inputs to produce crops, such as produce resources, agriculture inputs and services, than men do (Ankrah, Freeman & Afful, 2020).

McPherson (2011) has projected that by 2030, agricultural outputs are likely to rise in the SubSaharan countries from 2.5% to 4 %, provided that the productive resources are made available to all agricultural cooperatives despite their gender. McPherson (2011) further discovered that women play an imperative role in agriculture since almost half of the female population in SubSaharan Africa depend heavily on agricultural activities to earn a living (McPherson, 2011). Dzisi (2008) attests to the investigations by many other authors by stating that women in the agribusiness sector are also experiencing significant gender discrimination in respect of wages. In this regard, Dzisi (2008) further argues that the wages of women are lower than men despite being the major contributor to the labour required to sustain agricultural activities. However, this phenomenon is happening despite great and welcome policies and programmes that have been put on paper by governments to alleviate women's problems. Moreover, women still encounter substantial gender disparity in wages because of their gender (Sundari, 2020).

A plethora of pointers show that agricultural programmes are designed to exclude women's needs are indicated in research by the Organisation for Economic Cooperation and Development (OECD) (2004). The OECD revealed that in Sub-Saharan Africa, women produce and market 60% of the food requirements. This provides women with skills and knowledge of the local markets and customers. Žmija et al., (2020) agree with these sentiments and point out that if women are established those women tend to be more successful in operating their farms as compared to men. They have little chances of renting, so they tend to own the pieces of land they use for farming.

Despite the challenges faced by women in agriculture, it is evident that they participate in all levels of the economy nationally and globally. Most female-owned agribusinesses still face being heavily marginalised, mainly because of the stereotypic culture that categorises the female gender species as having the domestic role of wife and mother (Jalbert, 2011). For this reason, they are expected to be only responsible for childbearing, rearing and ensuring the entire family's wellbeing and welfare. Jalbert's (2011) study emphasised that women are bonded by traditional beliefs, norms and values that assign them secondary status in society compared to men.

Furthermore, the demand for collateral (or security) by financial institutions is problematic for small and medium-scale enterprises that do not generate large profits or own premises or equipment. Banks are bureaucratic and inflexible, which results in women raising capital from their savings, family, and friends to start-up businesses. These restrictions make it difficult for female entrepreneurs to access or create viable business opportunities. According to Ngulube (2012), a lack of education or skills results in a lack of confidence to embark on developing sound business plans to access capital from financial institutions such as banks. Nevertheless, the role of women in economic activities in South Africa is beginning to change. In several domains of life such as the socioeconomic and political spheres, women are becoming independent. These changes are because of growing awareness of modernization philosophies such as increasing social equity which lead to increasing women's prosperity.

Amongst African countries, McPherson (2011) cites South Africa as having shown a particularly marked increase where 80% of women are self-employed in the agricultural sector, thereby contributing to the South African economy. The primary cause is the fact that agricultural cooperatives have traditionally been used as a conduit for smallholder farmer development in South Africa (Mpanza & Mbatha, 2021). Consequently, there has been an increase in the number of female-owned agricultural cooperatives in the country, especially in the post-apartheid era. Prior to 1994, cooperatives were mainly dominated by the white minority while there were informal black cooperatives in existence which were mainly run by men. The latter cooperatives were not fully supported by the South African government. After 1994, the government used the cooperative model as a vehicle to reduce and alleviate poverty (Department of Trade and Industry [DTI], 2009). This opened the door for the establishment of female cooperatives.

The DTI's Cooperative Enterprise Development Division is responsible for the cooperative sector. There are also several government programmes in South Africa that have been put in place to ensure that the department realises its objectives. Some of these include, the Export Marketing and Investment Assistance Scheme, the Cooperative Incentive Scheme that is more like a direct cash grant, and the Isivande Women's Fund. In KwaZulu-Natal, government funding is also channelled through the KwaZulu-Natal Development Corporation's Cooperatives Fund and Ithala Development Finance Corporation, amongst others (DTI, 2010).

Although the number of female entrepreneurs has increased significantly over the past two decades, the survival of their businesses has remained low and questionable. This research adds to existing literature in the field under study and the findings will contribute to South Africa's development. The study seeks to unveil issues faced by female cooperatives in the agricultural sector, and further suggest interventions that might be implemented by the South African government to make these ventures a success story. The study also provides suggestions for strategies that associations may implement to provide better services to women.

1.3 RESEARCH PROBLEM

Most female entrepreneurs in the small and medium-scale agriculture cooperative business sector in Africa face challenges of discrimination (Roomi & Parrott, 2008; Forcher-Mayr & Mahlkecht, 2020). In addition, according to Barrett, Reardon, Swinnen and Zilberman (2020), female entrepreneurs in the agricultural small and medium-scale cooperative business sector face challenges because of a lack of or non-existent exposure to business information, technical education, and financial support from investors, as well as a lack of social support due to the discriminatory customs of African cultures. Female entrepreneurs in KwaZulu-Natal in South Africa, especially in the agricultural sector, are suffering the same challenges, which then become obstacles for their businesses to gain social and financial independence.

Nonetheless, there is an increase in female-owned businesses emerging in KwaZulu-Natal, most of them remain at the micro level. According to Ndlovu and Masuku (2021), agricultural cooperatives are an engine for growth and food security in Africa. However, their inability to expand and become sustainable is problematic and requires further investigation. Female entrepreneurs play a vital role in the economy of KwaZulu-Natal and represent untapped potential in the agricultural sector. Currently, the potential of female-owned businesses is hidden in the informal sector in enterprises such as local, small-scale farming; the hospitality

industry such as restaurants, beauty shops; and light manufacturing such as textile art or crafts. According to DTI (2015), there were only 600 surviving cooperatives in Pietermaritzburg in 2015. The other 1600 are considered 'dead' resulting in a survival rate of 20% and a mortality rate of 80% (DTI, 2015). These figures prompted the researcher's interest in conducting this study to examine the obstacles faced by female entrepreneurs in the agricultural sector in Pietermaritzburg in starting and growing their businesses within the KwaZulu-Natal province. The need to investigate these challenges is further prompted by the role played by women in the socioeconomic well-being of the communities. A conceptual framework informing policy direction will emanate from the study findings.

1.4 RESEARCH METHODOLOGY

The study uses qualitative methods which create an in-depth understanding of the phenomenon under study. Therefore, this method benefits this study as it is aimed at generating an in-depth understanding of participants' attitudes and experiences of female entrepreneurs in the small to medium-scale agricultural sector in Pietermaritzburg. By using a qualitative research methodology, data has an enhanced level of detail which provides more opportunities to glean the insight needed to understand the research problem. In doing so, a qualitative research methodology helps to understand issues that affect female entrepreneurs in the small to medium-scale agricultural sector in Pietermaritzburg.

The method is also used because it is flexible and can adjust in the research environment. In addition, the qualitative method is used because the study can be carried out with minimum costs using smaller sample sizes, which can save on costs. This allows for quick research findings to be obtained. Qualitative methodology is also used because it provides an open-ended research process. The open-ended structures of qualitative research make it possible to get underneath superficial responses and rational thoughts to gather information from an individual's emotional response (Bryman, 2017; Mirriam, 2009).

In qualitative research, according to Creswell (2014) the objective is exploratory and descriptive rather than explanatory. The descriptive nature of qualitative research allows the researcher to provide a description of the experiences of the participants, which either sustains or confronts the theoretical assumptions on which the study is based (Meyer, 2001; Creswell, 2014; Bryman, 2017). The current research is interrogative, since it aims to bring new understanding and meaning to the topic of female entrepreneurs in the small to medium-scale agricultural sector within the South African context. Extraordinarily little research has focused on female entrepreneurs in the small to medium-scale agricultural sector. Within the tradition of qualitative research, there are three broad categories of data collection: participant observation; interviewing; and the use of personal documents (Creswell, 2014). In the present study, interviews are used as the main method of data collection. A semi-structured interview approach has been adopted, which facilitates an understanding of the problem from the perspective of the participants under investigation.

There are three types of research methods, namely quantitative, qualitative, and mixed methods. Quantitative research methodology collects data that is converted into statistics by putting the data into categories, sequence order or measured in units. Data which is collected using quantitative research methodology is presented using graphs and tables. Qualitative research methodology is an in-depth investigation into a phenomenon in which data is not in the form of numbers. Mixed methods combine quantitative and qualitative research methods.

The data collected is in-depth and statistical and used to understand a phenomenon under study.

Qualitative research methodology

This study makes use of the qualitative research design. According to Michael and Cochran (2002), qualitative research methods seek to unearth experiences and attitudes of participants and deal with such questions as what, how or why phenomena. This research design enables the researcher to study attitudes and behaviours of the participants within their natural setting. This explains why qualitative research is concerned with qualitative phenomena involving quality (Rajasekar *et al.*, 2013; Aspers & Corte, 2019). As such, some of its characteristics are about being non-numerical, descriptive, apply reasoning and using words to get the meaning or feeling. Qualitative methods comprise three most common methods, which include participant observation, in-depth interviews, and focus groups. In this research, the researcher adopted this method to explore the ‘what,’ ‘how’ or ‘why’ of a phenomenon under study. It looks at challenges facing female entrepreneurs within the small and medium business scale and is a case study of agriculture cooperatives in Pietermaritzburg. To ascertain key information required for this study, the researcher employed in-depth interviews and focus groups.

This study uses qualitative research methodology that allows the study to investigate the meaning that participants attribute to the situation, event, behaviour, interactions with others. Saldana (2009) states that qualitative research methodology is designed to reveal underlying factors to a phenomenon or underlying meaning to an action. In other words, qualitative research methodology investigates interpretations, meanings, symbols, processes, and relations of social real life. The qualitative research methodology generates descriptive data that must be interpreted using systematic and rigorous methods of transcribing, coding, analysing trends and themes. The focus of qualitative research methodology is everyday life and people’s

experiences that can help formulate theories or conceptual frames for better understanding of the research problem and how to deal with the problem (Collins & Stockton, 2018).

1.5 AIM OF THE STUDY

This study investigates the challenges encountered by female owned cooperatives in the agricultural sector in Pietermaritzburg in KwaZulu-Natal, South Africa.

1.6 RESEARCH OBJECTIVES

The objectives of the study are:

- To ascertain how the legal and regulatory framework affects female cooperatives in the agricultural sector in Pietermaritzburg in the KwaZulu-Natal Province;
- To determine factors that promote or hinder the success of female owned agricultural cooperatives in Pietermaritzburg in the KwaZulu-Natal Province;
- To establish how business culture affects female owned cooperatives in the agricultural sector in Pietermaritzburg in the KwaZulu-Natal Province; and
- To assess how the value chain of the organisation affects female cooperatives in the agricultural sector in Pietermaritzburg.

1.7 RESEARCH QUESTIONS

The study attempts to answer the following key questions:

- How does the legal and regulatory framework affect female cooperatives in the agricultural sector in Pietermaritzburg in the KwaZulu-Natal Province?
- What factors promote or hinder the success of female owned agricultural cooperatives in Pietermaritzburg in the KwaZulu-Natal Province?
- How does business culture affect female owned cooperatives in the agricultural sector in Pietermaritzburg in the KwaZulu-Natal Province?
- How does the value chain of the organisation affect female cooperatives in the agricultural sector in Pietermaritzburg?

1.8 CONTRIBUTION OF THE STUDY

This study contributes to extant literature by determining the challenges encountered by female owned cooperatives in the agricultural sector in Pietermaritzburg, KwaZulu-Natal, South

Africa. A model has been created which suggests the strategies that can be used by the South African government to address the challenges encountered by female entrepreneurs. The study will serve as an important source of information regarding the challenges encountered by female entrepreneurs in the small to medium-scale agricultural sector. The study reveals dimensions of agricultural entrepreneurial challenges that women consider as central. This study also provides empirical support for management planning decisions in numerous vital areas of their operations. For policymakers such as government and associations such as the Small Enterprise Development Agency, the findings of this study will provide vital insights and guidelines to understand the influence of the challenges encountered by female entrepreneurs on the operations of the small to medium-scale agricultural sector.

1.9 SIGNIFICANCE OF THE STUDY

This study seeks to unveil challenges faced by female owned cooperatives in the agricultural sector in KwaZulu-Natal and furthermore, it suggests a conceptual model to address those challenges. The study provides an in-depth understanding of the challenges faced by these female cooperatives and provides a body of knowledge that may assist the KwaZulu-Natal and South African government and financial institutions to find ways of empowering female owned cooperatives within the agricultural sector in KwaZulu-Natal and South African as a whole.

1.10 LIMITATIONS OF THE STUDY

The researcher encountered several limitations in this study, especially around data collection. Acquiring secondary data was difficult because very few studies have been conducted on this topic. Therefore, there was a lack of literature available to provide a background to underpin the study. Certain journals and other scholarly materials were not available for use off- campus.

The time factor was also a constraint because, in most instances, interviewees did not attend the interview that had been arranged with them. This put additional pressure on the researcher to re-schedule appointments or find other participants to interview. Nevertheless, the impact of this constraint was able to be reduced by making prior arrangements for the interviewees to participate in the research. Another measure taken by the researcher was to be very persistent in making calls to confirm the appointments for interviews.

1.11 DEFINITION OF CONCEPTS

Capital markets: These are financial markets for raising and trading in long-term financial instruments (Darškuvienė, 2010). They are part of the broader financial intermediation theory which states that financial intermediaries are middlemen between those in surplus and those economic agents in financial deficit. Capital markets are defined by Maleko and Msuya (2015) as markets in which money is provided to businesses or persons, for periods longer than a year. By law, capital markets must adhere to many bureaucratic policies such as, the National Credit Act of 2008, which still is sceptical about loaning female entrepreneurs funding for businesses. Female entrepreneurs still have less access to credit or funding to finance their business growth. According to Maleko and Msuya (2015), South African financial institutions view female owned cooperatives as elevated risk compared to male owned cooperatives which ultimately leads to barriers of entry for female entrepreneurs. This lack of financial support for female businesses becomes a barrier to the success of female entrepreneurs.

Legislation bureaucracy: This refers to a body of non-elective government officials and an administrative law or policy-making group. The HSRC (2007) indicated that small-scale farmers tend to lack access to funding as they do not own property to sue a collateral. The laws in the financial market mostly contribute to the challenges that women face when starting and sustaining businesses. The customary laws and norms have denied women access to own land or a property in many communities. Only men could own land or property, which can be used as a collateral against bank loans to finance small to medium businesses. Because of inflexible security policies, women entrepreneurs are forced to engage in informal businesses, in rural areas where land is state owned or publicly held.

Infrastructure: This refers to services offered by the government which enables production, processing, and trade in the sector. It includes infrastructure such as input-based resources such as water, physical infrastructure, and institutional infrastructure (Maleko & Msuya, 2015).

Skills levels: These are the proficiencies developed through training or experience (Ledford & Heneman, 2011). Skills are usually activities that have been learned. One can develop skills through the transfer of knowledge, which Maleko and Msuya (2015) calls the theoretical or practical understanding of a subject.

Business and technical skills: This refers to skills required for the implementation of a project or programme. These may be mechanical or technical in nature (Popescu, Iancu, Avram, Avram & Popescu, 2020). Business skills relate to professional leadership, communication, management, networking, and mathematical reasoning (HRSC, 2011).

Cultural inequalities: This refers to unequal treatment within the society. It is mainly driven by unequal relations in roles, and decision making.

Value chain: These are interrelated value-adding activities within the supply chain process. They involve converting inputs into outputs which will attract higher value and increased competitiveness. Activities in the value chain are supported by the procurement function, research and development, and personnel within an organization (Skenjana, 2012).

1.12 ORGANISATION OF THE THESIS

The thesis is organised into eight chapters as follows:

Chapter One: Background to the study

The background to the study is an introduction of the entire study. This chapter includes the statement of the problem, objectives of study, significance of study and methodology.

Chapter Two: Literature review: Origins of cooperatives

The second chapter examines literature by other scholars on the origins of cooperatives within and outside South Africa.

Chapter Three: Theoretical framework

Chapter Three examines literature by other scholars on the theories on cooperatives.

Chapter Four: Selected cooperatives

The chapter examines selected cooperative sectors with the aim of comparing characteristics to set the basis for this study.

Chapter Five: South African cooperatives

The fifth chapter reviews the South African cooperative sector to narrow down the research problem and contextualise the study.

Chapter Six: Research methodology

This chapter is an in-depth analysis of the research methodology underpinning the study.

Chapter Seven: Data presentation and analysis

This chapter is an in-depth analysis of the findings collected from interviews. The findings are presented using themes.

Chapter Eight: Conclusions and recommendations

This concluding chapter presents the conclusions and recommendations which will be obtained at the end of the study.

1.13 CONCLUSION

The study investigates the challenges encountered by female owned cooperatives in the agricultural sector in Pietermaritzburg in KwaZulu-Natal. The changing social, economic, and political environment in South Africa has seen an increase in enrolment of females in schools. Similarly, the role of women is also evolving primarily because women have opportunities to empower themselves through education which leads to them holding position of power within the society. However, due to the disparities between women and men in the labour force, women face challenges in accessing resources to develop and grow their agri-businesses. This chapter has presented an overview of the study, the background to the study, the research problem, the aim of the study, purpose of the study, significance or contribution of the study, research objective and questions.

The next chapter provides a discussion on the origins of cooperatives.

CHAPTER TWO

THE ORIGINS AND PRINCIPLES UNDERPINNING COOPERATIVES

2.1 INTRODUCTION

This chapter provides a discussion of the origins of cooperatives and then an overview of the characteristics of these entities. It also discusses types of cooperatives and how they contribute to the global economy. Finally, a discussion of cooperative movements in Africa is provided. The chapter uses existing literature and other secondary sources to provide a holistic view of the nature of cooperatives. It illustrates that cooperative, despite their geographical and historical disparities, share some challenges and defining characteristics. The first section looks at the origins of cooperatives.

2.2 ORIGINS OF COOPERATIVES

Cooperatives have been around since the mid nineteenth century where it is believed a cooperative movement originated in England around 1844 (The International Co-operative Alliance, 1995). These entities have played various roles in improving the welfare of societies, especially in socio-economic development around the globe. The concept of cooperatives has been mooted since Shore Porters Society was established in Aberdeen in 1498 and the Fenwick Weavers Society was established in 1761 in Scotland (Mazzarol, 2009). These cooperatives have played a crucial role, but the concept remained small until the emergence of the Industrial Revolution in England which modernised the concept (Deller, Hoyt, Hueth & SundaramStukel, 2009; Satgar, 2007a).

The harsh economic environment led to the modernization of cooperatives as members of society needed to remain active in economic production to survive (Ajayi 2012; De Peterman Dyer Witheford, 2010; Diamantopoulos, Getnet & Anullo, 2012; Hannan, 2014). During the Industrial Revolution, the increase of mechanization and demands for skilled labour force meant that most citizens were out of employment and lost their means of survival. These unskilled labourers became poor and as they were unable to complete in industrial trade (Jarka, Gunnar & Gert, 2003; Tchami, 2007). Consequently, cooperatives emerged due to poverty and the adverse effects of the Industrial Revolution. (International Cooperative Alliance, 2015).

According to the International Cooperative Alliance (2015), the establishment of cooperatives led to individuals from disadvantaged backgrounds in the society pooling resources and skills, to survive the harsh economic environment in England. These individuals produced and purchased goods from cooperative owned shops at much lower prices which meant they could

compete with the formal economic agents. In addition, according to the Cooperative Development Institute (2011), the cooperative model was established to shield members of the community from the ills of the collective interests of capitalism. Similarly, Jarka *et al.* (2003) asserts that cooperatives were a counter-reaction to capitalism as members of the society started benefiting from pooling resources to compete in economic activities. These sentiments are echoed by De Peuter and Dyer-Witthof (2010) who state that cooperatives emerged in the late 19th century as a movement to oppose capitalism. Since the Industrial Revolution, cooperatives have been a means of economic participation for the poor and disadvantaged members of the societies, and the concept has spread globally.

2.3 AN OVERVIEW OF THE CHARACTERISTICS OF COOPERATIVES

Cooperatives are defined by Porter and Scully (2007:494) as

“Voluntary closed organizations in which the decision control and risk-bearing features rest in the members in this membership, and choice administration reposes in the agent (chairperson as a manager of the group), who represents the principal’s interests.”

In this definition, three traits emerge according to Oken (2016), which are the voluntary association of individuals; the control by members; and the risk bearing by members of the cooperative. These traits arise because cooperatives are member owned. Most cooperatives are concurrently its clients as members tend to buy goods and services the cooperative they own (Birchall & Ketilson, 2009). Cooperatives are thus different from other forms of entities which are investor owned where investors contribute capital towards the entity formation (Mazzarol, 2009). Thus, in addition to capital contribution, members of cooperatives grow their markets by buying from the cooperative and seeking alternative markets for surplus goods and services (Dlamini, 2010; Dias, Krein, Streh & Vilhena, 2018)

The overriding aim of a cooperative in accordance with this view is to shield the hobbies of participants against exploitation by exploiters such as middlemen in the supply chain. This suggests that cooperatives exist to stabilise the market financial system by countering the outcomes of market distortion such as monopoly, and oligopoly (Baker & Graber-Lüzthøft, 2007; Chungyas & Calara, 2018).

It should be noted that the concept of cooperatives has primarily been limited to the agricultural sector and has been perfect for smallholder farmers globally (Okem, 2016). However, as alluded to by Von Ravensburg (2009), the concept should not be viewed as only suitable for the poor and rural smallholder farmers, but for any economic activity that can bring together a pool of members for sustainability. This was said in support of the United Nations (1996) argument that the technique is all about resource mobilization and entrepreneurship in communities which enhances economic activity and creates employment opportunities for the poor communities.

2.3.1 An analysis of the values and principles underpinning cooperatives

Cooperatives are guided by the founding principles arising from the Rochdale Pioneers in 1844 (Kokkinidis, 2010). These principles seem to be upheld globally and consist of seven concepts as discussed below. This study recognises the conceptual value of these seven principles insofar as they reiterate the fundamental rationale for cooperatives, as well as their potential strength.

2.3.1.1 Open and voluntary membership

According to the ICA (2007), the first underpinning principle of cooperatives is that of voluntary and open membership. This principle asserts that cooperatives do not discriminate its membership according to race, gender, or the social and political affiliation of individuals. Cooperatives are thus expected to accept membership from all individuals who intend utilizing the contributions and opportunities of the cooperative. It is, however, important that individuals intending to join the cooperative must adhere to the founding values of that cooperative. Other requirements include meeting obligations prescribed by the cooperative such as time contribution, finance, inputs, and other resources depending on the nature of the cooperative. Governance is regarded as a collective accountability of the members of the cooperative.

2.3.1.2 Democratic control

The second principle underpinning cooperatives is the democratic member control which according to Nilsson, Svendsen, and Svendsen (2012) is exceedingly difficult to achieve. The principle of democratic member control ensures that a cooperative is committed to satisfying the desires and aspirations of its all members in a cooperative set up. This is at the core of the cooperative movement. To achieve the democratic control, it is imperative that the cooperative

employs the one member one vote method in its decision-making process (Bernard & Spielman, 2009). This collective method is a principle that safeguards against anyone taking over of a cooperative, either by members with higher investment or other outsiders (such as government and development organisations). Given that a cooperative is owned and managed with the aid of members, every member is entitled to equally gain from its offerings and derived profits. Thus, the surpluses of a cooperative should be utilized widely for a variety of reasons which improve the sustainability of the cooperative (ICA, 2007).

2.3.1.3 Member economic involvement

The third underpinning principle of cooperatives is that the member's economic participation is secured firmly on the view that a cooperative is owned by means of participants who are required to make same contributions equally to its growth (ICA, 2007; Chungyas & Calara, 2018). The member's contribution represents his or her economic participation in the organization. Members thus contribute in terms of financial contribution, delivering farm produce to a processing plant, and contributing manual labour to an agricultural cooperative.

2.3.1.4 Autonomy or independence of cooperatives

The fourth principle underpinning cooperatives is the independence and impartiality of the organisation. Cooperatives adhere to the principle that they are free from the effect of external power such as government, non-governmental organisations (NGOs) and improvement organizations (Nannyonjo, 2013). The independence of cooperatives enables them to grow and achieve economies of scale and hence sustainability. They also receive skills programmes to enable them to grow to be self-reliant organizations. They also receive favourable tax insurance policies which enable them to reinvest their earnings and bolster the cooperative movement.

2.3.1.5 Education

The fifth principle involves providing education and coaching information which enables growth and sustainability of the cooperation (ICA, 2007). According to this principle, a cooperative ought to furnish applicable education and coaching to its contributors (Wanyama *et al.*, 2009). This principle enables cooperatives to make sound business decisions and

improves governance in the organization. It also ensures that members of a cooperative have the requisite skills to oversee the everyday running of the cooperative.

2.3.1.6 Cooperation amongst cooperatives

In line with the assertions of Novkovic (2008), the sixth principle is that of cooperation amongst cooperatives which entails promotion of cooperation amongst cooperatives to achieve intended outcomes. This principle boosts the formation of a network of cooperatives at local, regional, country-wide and at world-wide levels, making cooperatives strategically positioned to harness the benefits of economies of scale and scope (Dredge, 2006). The network can increase business returns, as the cooperative is not outsourcing activities to other businesses but providing the service. This ensures that cooperatives provide business opportunities to one another. Furthermore, cooperation amongst cooperatives lowers transaction costs for cooperatives that then results in improved profits.

2.3.1.7 Concern for the community

The seventh and final principle is that of concern for community. Cooperatives are deeply rooted in their communities and have an economic function in those communities (ICA, 2007). According to Zeuli, Freshwater, Markley and Barkley (2004), cooperatives have a role to achieve both social and financial benefits within the communities in which they operate. This statement is further echoed by Bertulfo (2007:106) who contends that cooperatives work for the sustainability of the communities and address socio-economic needs of those communities. It is additionally acknowledged that such socio-economic development has spill over effects to the entire society either unintentionally or intentionally. The United Nations (1996) further acknowledged that cooperatives are especially important in the development and growth of entrepreneurs and local economies.

In addition to the principles outlined above, cooperatives are governed by a set of values which include self-help, self-responsibility, democracy, equality, fairness, and solidarity. Cooperatives are thus, also governed through the moral values of honesty, openness, social accountability and caring for others (ICA, 2007; Grashuis & Su, 2019). The developmental orientation of cooperatives is mainly valuable in areas such as Sub-Saharan Africa where subsistence agriculture offers employment for about 80% of the population (Nyiraneze, 2009; Tshishonga, 2020). Studies (Develtere, Pollet & Wanyama, 2008; Getnet & Anullo, 2012) have

observed that cooperatives have been instrumental in poverty alleviation, job creation, monetary development, and social transformation (Bhukuth, Roumane & Terrany, 2018). According to Mazzarol (2009), cooperatives are different from other organizations in that they do not pursue a profit maximization goal. Instead, their focus point is the empowerment of the disadvantaged people in the community.

2.4 CURRENT TYPES OF COOPERATIVES

Cooperatives are pivotal in addressing members' share needs (Bijman, Iliopoulos, Poppe, *et al.*, 2012; Birchall & Ketilson, 2009; Dias, Krein, Streh & Vilhena, 2018), according to Birchall and Ketilson (2009), cooperatives are classified according to the nature of stakeholders which include consumers, producers, and workers. Thus, cooperatives can be grouped into four main forms: consumer, worker, producer, and finance cooperatives. Each structure of cooperative is briefly explored in the following paragraphs.

▪ Customer cooperative

This type of cooperative is owned by its own people concerned with the buying of consumable goods. In such cooperatives, purchase of goods is done in bulk, so they are consequently capable of selling the goods to participants at reduced costs (Deller *et al.*, 2009; Nguyen, Rameezdeen, Chileshe & Coggins, 2021). In this sense, their existence is recognised by the wish to rise above market monopoly by providing parallel grant chains for consumers.

▪ Purchaser cooperative

This is the most popular type of cooperative as a revolt against technocracy, and hierarchical corporations (Williams, 2005). This type of cooperative involves the ownership by people who have a common goal within purchasing.

▪ Employee cooperative

This is created when the company's labour force elects to perform administrative duties (Burdin & Dean, 2009). Employees can elect to run a worker cooperative, especially in the tourism sector. According to Majee and Hoyt (2010:147), employee cooperatives have open membership with the primary goal of achieving social and monetary advancement. These cooperatives are also called worker cooperatives, and according to Mathie (2012), such

cooperatives tend to have higher productivity and higher levels of innovation. Mathie further states that these cooperatives have the advantage of being focused on the rights of workers which cannot be sacrificed for profit. At the height of the Spanish fiscal crisis, cooperatives in the Basque region ensured that unemployment was persistently kept low.

Cooperatives have done this by way of re-hiring those laid off through poorly performing cooperatives (Birchall & Ketilson, 2009; Brandano, Detotto & Vannini, 2019). By collectively pooling their profits to buy shares in the company, worker cooperatives that emerge in this way achieve three things: they save the business enterprise from liquidation; they maintain jobs; and they create the capability of obtaining additional profits through the income of the cooperative (Burridge, 2012; Bretos & Errasti, 2018).

- **Producer cooperative**

This type refers to a type of cooperative ownership shaped by a group of men and women that produce the same kind of goods. Members of this structure of cooperative use shared facilities for processing and distributing their goods. Commonly known as an advertising cooperative, the producer cooperative provides value-added services along with processing, packaging, and branding to members. Individuals who are part of producer cooperatives enjoy services that would in any other case be costly if sourced individually. Producer cooperatives are often located in the agricultural zone where they furnish value-added services (Bloom & Hinrichs, 2011; Rifin & Naully, 2020).

- **Financial cooperatives**

Financial cooperatives, like the other different forms, are member owned. Members' savings supply the reserve that financial cooperatives lend to both members and non-members (Birchall, 2013). Cooperative financial institutions (CFIs) are better sources of finance for cooperatives as they are not faced with restrictions that apply to other financial institutions (Birchall, 2013).

2.5 COOPERATIVES AND THE GLOBAL ECONOMY

The number of cooperatives has been growing steadily over the decades with over 2.6 million cooperatives that have membership surpassing one billion and with at least 12.5 million

workers recorded (Merrien, 2014). According to Merrien (2014), these cooperatives have over 770 million outlets and have an annual review exceeding US\$3 trillion. Cooperatives are present in different economic sectors including insurance, financial services, agriculture, and retail, among others. Consequently, these avenues have enabled the emergence of cooperatives globally although those in Africa are relatively small (Mutuo, 2012). Again, according to Mutuo (2012), those in Africa tend to be the agricultural sector.

2.6 CONCLUSION

The overriding objective of this chapter was to present an overview of the cooperative movement. The chapter started out by examining the emergence of contemporary cooperatives and then explored how cooperatives have been conceptualised. The ideas and values of the cooperative movement have also been presented. It was mentioned that dedication to their concepts and values ensures that cooperatives simultaneously meet members' social and economic needs. Through this, cooperatives have been instrumental in enhancing the socioeconomic prerequisites of human beings around the world. In addition, they have contributed to the global economy in a variety of ways.

What is additionally mentioned in the chapter is that although modern-day cooperatives were introduced at some point during the period of colonialism, cooperatives in Africa pre-date the colonial era. A pre-colonial form of cooperative can still be found today despite the predominance of current types of cooperatives. From the historical overview of the evolution of cooperatives in Africa, the chapter shows that cooperatives are more successful in contexts where they operate independently of authorities' interference. For this reason, the function of authorities ought to pertain only to the introduction of conditions for the emergence and increase of cooperatives. Having explored the evolution and the conceptual understanding of cooperatives, the subsequent chapter examines the theoretical underpinnings of cooperatives.

CHAPTER THREE

THEORETICAL FRAMEWORK

3.1 INTRODUCTION

The purpose of this chapter is to present an overview of the theoretical arguments on cooperatives. The synthesis of the four theoretical premises in the previous chapter provides

useful insights into why people choose to collaborate, which in turn provides a useful lens through which to assess the collaborative activities (or, in the case of the present study, the lack thereof). In the first section, Transaction Cost Theory and its application to cooperatives is explored. This is followed by a review of cooperatives as a form of collective action. The nature, constitution, benefits, and constraints of collective action are also presented and discussed in this section. The view of cooperatives as social capital is also examined.

Additionally, the role of social capital in the formation and sustenance of collective action is reviewed in this section, followed by an appraisal of Property Rights and Agency Theory and Neo-classical Theory, followed by a discussion on cooperatives as a network. A selection of examples of the networking activities of cooperatives is presented and discussed. Each theory has been useful in informing the challenges faced by women in the agricultural sector as explored in this study.

3.2 COOPERATIVES AND TRANSACTION COST THEORY

Transaction cost theory (TCT) is used here to explain the nature of the market. The emergence of TCT has been attributed to the obstacles of neo-classical economic theory. This theory assumes that the market operates underneath a device of best records as nicely as zero transaction costs. The neo-classical financial concept presumes best rationality of agents in the economic device (Martins, Ribeiro & Leite, 2010). In contrast to neo-classical theory, TCT is informed by the assumption that men and women do not operate under the prerequisites of ideal rationality. Rather, they are restrained by bounded rationality due to imperfect data and an incapability to predict all possible implications of a decision (Martins, Ribeiro & Leite, 2010). Furthermore, TCT sees institutions as creations aimed at decreasing the costs of transactions (Ruester, 2010; Martins *et al.*, 2010).

TCT notably seeks to recognise the cause that underpins the nature of economic organisation. In this regard, TCT tries to expose the reasoning behind corporation structure and the advantages of the collection of this organisation, compared to normal organisational forms. According to Williamson (2005), a transaction fee is a form of a governance structure which asserts that allocation of funding is based on the type of enterprise. As an approach to studying the nature of the firm, Ruester (2010) states that TCT focuses on the efficiencies of a firm by

means of dropping transaction costs. The implication is that companies must constantly manage their governance structures to decrease transaction costs if they want to be successful.

Dyer (1997:536) categorizes transaction costs into four categories: i) search costs, ii) contracting costs, iii) monitoring costs and iv) enforcement costs. The management of these expenses has social partnership responsibilities such as ensuring an environment-friendly and fine functioning business. Cooperatives, as a mode of organising the market economy, are affected by transaction costs. Transaction fees are specifically high for small cooperatives. Since almost all cooperatives operate at a small scale, they get affected easily, unless they want to collaborate such that transaction costs are minimized. A vital step in this regard is for cooperatives, according to Menzani and Zamagni (2010), to forge collaborations that permit them to mitigate the risk of paying soaring prices for stock, which occur because of excessive transaction fees.

When cooperatives function individually, they commit time and resources to activities towards opposing and dealing with opposition, through record searches, drawing up, monitoring and imposing contracts. Collaboration between cooperatives results in the burden of these charges being borne by the collective. Consequently, there are decreasing transaction costs for individual cooperatives which subsequently yield higher returns. The transaction price approach is to study cooperatives efforts and provide a beneficial framework for understanding the benefits of cooperation from an economic standpoint. In addition, this approach offers beneficial insights into the formation of cooperatives and the need for cooperation amongst cooperatives (Department of Economic Development & Tourism, 2010; Chaddad, 2012).

Reducing transaction expenses is vital for cooperatives, particularly in today's globalised economy. Globalisation has both negative and positive effects on cooperatives. Hansen (2009) identifies the special challenges which cooperatives must strive to compete with on the international scale, including costs and transnational cooperation economy. This project is important for the continued existence of small-scale cooperatives (Hansen, 2009).

Another difficulty that globalisation raises to cooperatives with a rooted principle of *ubuntu*, is concern for community. When confronted with opposition from transnational corporations, cooperatives may want to improve their competitive standing by means of globalising their production. This entails adopting a variety of practices as well as outsourcing production to or purchasing inputs from the world market. While such practices could lower production costs,

they also create uncertainties for cooperatives in terms of whether to source inputs from local sources at a higher cost (thereby retaining capital locally and assisting in creating employment) or at more cost-effective alternatives from the global market (Hansen, 2009). Outsourcing production could negatively affect local markets, which are the communities in which cooperatives live and operate. It can therefore be safe to say that the globalisation of production should not have negative consequences that undermine cooperatives principle of community (International Cooperative Alliance, 1995).

In addition to the above, participation in the international economy ought to produce results and changes in the governance framework of cooperatives. As a cooperative pursues internationalisation through foreign investment, Hansen (2009) states that there is a risk that it may gradually become more influenced by the dynamics of the global market and less influenced by the members' input. Despite these challenges, cooperatives have a key role to play in the international economy. For instance, cooperatives help reduce economic imbalances imposed by the anomalies of monopoly and oligopoly markets.

3.3 UNDERSTANDING COOPERATIVES AS COLLECTIVE ACTION

The view of cooperatives as a form of collective action is also informed by the concept of cooperation as a human attribute for achieving a similar goal or goals. Zeuli *et al.*, (2004) describes collective action as a group of individuals with a common goal and purpose. Collective action, in this view, is deliberate action between groups of people or organisations. Such movements are geared towards the achieving of a common goal. Shared pursuits that evoke collective action are regularly beyond the control of individuals. Studies of collective movement have explored elements that facilitate the emergence of collective motion, as well as their sustainability. According to Ostrom (2002), human history is punctuated by a range of attempts at resolving communal challenges through cooperation. Similarly, MeinzenDick, Di Gregorio and McCarthy (2004) note that historic proof suggests that human beings of historical Greece, Egypt, Africa, and America demonstrated different forms of cooperative behaviour. The work of students such as Apicella *et al.* (2012), Hill *et al.* (2012) and Mathew and Boyd (2011) demonstrate that collective activities were quintessential for the success of cooperative societies for early agricultural activities. Cooperation was important to human civilisation as much as it was also vital for survival as humans battling against changing weather conditions.

According to Mazzarol (2009), theories of cooperation point out that cooperation is underpinned by the desire to attain character as a substitute rather than altruism. Cooperation facilitates the actualisation of both individual and collective goals. This is particularly true in the administration of Common Pool Resources (CPR). In her seminal work titled *Constitutional Decision-Making: A Logic for the Organization of Collective Enterprises*, Ostrom (1968) examines the procedures necessary in the formation of institutions for managing frequent pooled resources. Using the Indiana groundwater basin as a case study, she observed that the formation of collective action permits cooperating partners to mitigate the effects of individualisation which may damage the collective goals. In other words, the collective action opportunities to an individual to reap the benefits of collective actions, while avoiding the price of individual action (Mazzarol, 2009)

Joint action in this case is preferred to individual action because it creates prerequisites that gain the collective. Repeated interactions (particularly those that relate to CPR) create establishments for managing collective action. Such establishments may want to be either formal or informal. Formal establishments refer to guidelines which are created and enforced via the state or the public. In the context of CPR, policies are put in place to decide who has access to the CPR, as well as how the resources should be used and managed (Yami, Vogl & Hauser, 2009). In some instances, formal institutions have been recognised as ineffective in the governance of CPR. This is evident in situations where the country is both unable and unwilling to implement regulations governing CPR. When a formal organisation is incapable of or reluctant to enforcing guidelines and the culture of the organization, it is likely that members of the corporations are more uncooperative or freeloader on the efforts of others (Ostrom, 2002). This difficulty is often referred to as the 'free-rider problem.

According to Yami, Vogl and Hauser (2009:154) state that in contrast to formal ones, informal institutions are founded on societal codes that emerge out of interactions amongst members in a collective action. The important argument is that although the codes of behaviour are not formally constituted, they nonetheless guide the movements of individuals and give them the right of entry to CPR. According to Ostrom (2002), societal pressures and an expectation of conformity drives put compliance when casual institutions govern CPR.

Both formal and casual establishments have their merits and demerits. For instance, MeinzenDick, Di Gregorio and McCarthy (2004) argue that institutionalised collective action

reduces transaction charges in terms of contract re-negotiation and uncertainty amongst cooperating partners. However, given the layers of approval and bureaucratic approaches that selections must go through, formal establishments find it challenging for a collective action to adapt rapidly to altering interior and external imperatives. Such tension could possibly have expensive consequences for contributors to the collective action group.

Although institutionalisation can and does play a useful role in collective action, not all collective actions need institutional forms. In this regard, MeinenDick, Di Gregorio and McCarthy (2004) hypothesise that the formation of institutions is based on the nature of collective action. The foremost argument here is that collective movements that have a repetitive personality tend to encourage the formation of establishments, while once-off collective movements seldom require such institutions. As stated earlier, repeated interaction in any institution, either informal or formal, results in the formation of collective action enshrined by institutions.

While cooperation is a necessary element of society, Adams *et al.* (2003) and Ostrom (2014) argue that there are situations when self-interest trumps cooperation. Against this backdrop, Milward and Provan (2000) argue that balancing the relationship between character and collective pursuits creates dilemmas for society. According to Greenwood (2010:228), “social dilemmas arise every time a crew of humans should determine how to share a frequent useful resource while balancing short-term self-interests in opposition to long-term group interests.” The ‘common sense of collective action’ has been used as a model in the study of social dilemmas (Ostrom, 1990).

The first two metaphors used above (‘the tragedy of the commons’ and ‘the prisoners’ dilemma’) describe the propensity of rational sellers to maximise self-interest when faced with situations in which the burden of self-rewarding behaviour is borne by using the collective (Okem, 2016). The concept of ‘the tragedy of the commons’ is not a new concept. For instance, Aristotle once stated that “what is common to the biggest numbers has the least care bestowed upon it. Everyone thinks specifically of his own, hardly ever at all the common interest” (Aristotle, quoted in Murdock, 2013:154).

Collective action emerges as having the potential to obviate the terrible consequences of character activity, replacing ‘the tragedy of the commons’ with what can be called ‘success of the commons.’ What this entails is that via cooperative behaviour, humans come together

collectively to control collective aid, hence turning that which usually ought to be a tragedy into a success for the collective.

According to MeinzenDick, Di Gregorio and McCarthy (2004), collective action is a voluntary activity. The voluntariness stems from the fact that human beings freely grow, and they become sections of a collective action out of the recognition of the benefits that accrue to contributors of the collective. Natural disasters, an increase/decline in the commodity price, increased competition, drought, decline of herbal resources, economic decline and fee fluctuations have been identified as some of the elements that set off collective action (Zeuli *et al.*, 2004; Kruijssen, Keizer & Guiliani, 2006). In these situations, people (n individual or a person's organisation) realise that the attainment of their dreams can be better achieved through cooperation with others. While some of the elements that trigger collective action are internal, others are externally imposed (Ratner *et al.*, 2017). The willingness to take part, as well as the foreseeable benefits of collaboration, additionally affect collective action.

In applying the thinking of collective action to cooperatives, Mazzarol (2009:6) argues that the desire of individuals to participate in cooperatives can be explained in phrases. Such as "theories of social trade and social cooperation." Social trade emphasises the fact that the benefits of interaction in the social relationships of a cooperative outweigh the costs. Whilst the social cooperation is underpinned by the view that cooperation is borne out of frequent goals that people strive to attain (Okem, 2016). The phrase therefore indicates that leveraging the strength of collective motion is the underlying principle for cooperatives. This is aligned with the definition of cooperatives as firms formed to meet members' economic and social ends. The implementation of the second precept of the cooperative movement (members' democratic control) ensures that a cooperative works in the direction of actualising members' desires and aspirations (Okem, 2016).

Although collective action is perfect for the attainment of collective items in certain circumstances, there are pre-conditions for successful collective action. According to Kruijssen, Keizer and Giuliani (2006:7), the success of collective action is mediated by team characteristics such as "gender, age, stage of education, crew size, property of character members and heterogeneity". They argue that a homogenous team of collective actors is more likely to be successful because individuals with common characteristics are more likely to cooperate than those with divergent characteristics.

Similarly, the more homogeneous a team is, the greater possibly there is that they will share common values (Kruijssen, Keizer & Giuliani, 2006; Sotero, 2009; Garnevska *et al.*, 2011). In other words, humans with frequent values are more likely to work collectively for the attainment of common goals than those with one-of-a-kind values. Disagreement over issues such as methods to attain a collective result, often rely on the formation of sub-groups to swing the choices of the collective in favour of a precise sub-group. The time and assets spent on the formation and breakup of coalitions in such a collective action may take up valuable resources to gain the collective result (Hansmann, 1996). Decision-making in this regard can become a costly exercise for collective action.

Besides the abovementioned factors, it has been cited by Ostrom (1990, 2000) that a collective action that is made up of men and women who have experience in profitable collective movements stand a better chance of being successful because these members bring with them their previous experiences and expertise in working in a collective context. These experiences play a vital role in addressing the challenges associated with working as a collective. Such experiences and information include managing team dynamics and group conflicts. When this knowledge and experience is absent from the group, a collective motion may possibly degenerate into struggles that can sooner or later result in the cooperative's failure.

A lack of trust between cooperative members contributes to mutual distrust that could result in the termination of collective action (Kruijssen, Keizer & Giuliani, 2006). Moreover, a lack of faith between members could also result in parties being unwilling to invest either their time or other resources into the collective because they have doubts about the intentions of other members of the collective action. The implication of this is that members' participation is not entirely realised, which could result in the failure of cooperation. The assessment of cooperatives as a structure of collective action highlights two essential arguments.

Firstly, cooperatives are formed specifically when individuals choose to address their wants through collective action. This view is linked to ICA's definition that sees cooperatives as an employer designed to meet the members' economic, social, and cultural needs. On a similar note, collective action underscores the concepts of autonomy and member democratic influence of cooperatives. This is due to the fact the control of a cooperative by way of individuals ensures that it remains committed to actualising the beliefs for which it was formed. By striving to achieve character desires through cooperative activity, both personal and collective desires

are met. Such desires could be economic, emotional, cultural, and social needs (Khan & Law, 2018).

The second argument derived from the evaluation of cooperatives, as a form of collective action, is that while collective motion has achievable benefits, there are a variety of factors that may affect the success of a cooperative (Edenfield, 2016). One of these factors is team composition. Group characteristics such as gender, age, level of education and team dimension all influence the success of collective activity. In addition, previous experiences of cooperation may also determine the success or failure of collective motion because people that have engaged in collective activities bring with them collective experiences and expertise about its dynamics.

Confidence amongst cooperating partners is an essential ingredient in fostering collective action. Recognising this correlation between trust and collective activities, the function of social capital in collective action has been identified in the literature (Ido, 2019). The next section of the chapter discusses the relevance of social capital to the formation and sustenance of cooperatives

3.4 COOPERATIVES AND SOCIAL CAPITAL

When forming the cooperative membership or club, the concept of social capital is frequently applied in the literature. Ostrom (2000:162) defines social capital as interactions that occur when organizations have a mutual understanding, knowledge, rules about an activity that recurs overtime. Underlying this definition is the view that social capital is the unwritten rule that underpins social interactions and cooperation. Norms and values are necessary in cooperative activities as they create patterns of predictable behaviour (Tapia, 2012; Ishihara & Pascual, 2013). It can therefore be hypothesised that the stage of social capital in each community performs a crucial function in the formation and success of a cooperative.

According to Coleman (1998), social capital refers to the shape that underpins relationships, which results in productive outcomes. From this definition, it can be clarified that productive social members of the family determine the outcomes of social capital. Field (2008:1) argues that the main thesis of social capital can be summarized in two words “relationships matter.” The significance of relationships derived from the position is that they are connections that an individual can draw upon in the short, medium, and long-term. For this reason, social capital

can be compared to other forms of capital such as human and monetary capital. The point here is that social capital should be taken as productive to make certain goals attainable (Coleman, 1988).

However, the cost of social capital is limited to a specific social context. What is viewed as social capital in one context would possibly not be viewed as social capital in another. In addition, social capital does not have tangible traits like other types of capitals on the ground. That it, is positioned and evaluated by means of the intangible value of social and family members (Coleman, 1998; Field, 2008). One of the vital values of social capital is that it reduces the expenses of having to access statistics (Putnam 1995; Coleman, 1998; Mellor, 2009; Tapia, 2012; Nilsson, Svendsen & Svendsen, 2012). This is because social capital creates beliefs by repeated interactions that lead to organized behaviour.

Through the procedure of ‘social learning,’ individuals and organisations create stipulations for cooperation. By working and interacting with one another in the context of collective action, Coleman (1998) posits that people’s collective cognition is boosted. The benefit of this, is that the values, worldviews, beliefs, and practices of people emerge as subsumed in the collective. This therefore results in social learning, and in this way, social capital creates conditions for cooperation, communication, and collective action. According to Nilsson *et al.* (2012), there is a correlation between social capital and compliance with agreements. Similarly, Mellor (2009) argues that social capital influences both compliance and conflict decisions and decreases the cost of monitoring and enforcing contracts amongst cooperating individuals and organisations.

This is especially true when repeated transactions have built confidence between people. This eliminates the need for formal contracts. Nilsson *et al.* (2012) argue that the loss of social capital results in the decline of cooperation because social capital is a helpful resource that galvanises people to work towards reaching a collective end. Besides the economic benefits, social capital additionally produces non-economic advantages such as emotional aid and extended teamwork (Dlamini, 2010). As individuals have interaction in repeated interactions, they turn out to be more engaged at the non-public level with one another. The engagement builds trust that makes people more at ease to share subjective experiences and provide emotional help to one another.

It therefore can be hypothesised that cooperatives are more likely to form and operate effectively in contexts that value social capital highly. This is since, as seen earlier, social

capital performs a vital role, in galvanising humans to work collectively. Besides assisting in the formation of cooperatives (Agyapong, Agyapong & Poku, 2017) it can also be argued that social capital is essential in the sustainability of cooperatives. This is mainly because the presence of social capital consolidates the bonds amongst participants of a cooperative. Increased trust permits individuals to work collectively and eliminates problems, such as free riding, that frequently characterise cooperatives. Besides the above, social capital also performs a vital function in the emergence and sustenance of networks (Agyapong, Agyapong & Poku, 2017).

3.5 CONCLUSION

This chapter presented theoretical arguments on cooperatives; the discussions focused on how the quest for the attainment of individual goals is the driving force of cooperation. The key argument was that cooperation occurs in contexts where the attainment of individual goals can be best addressed through cooperation. Triggers of collective action include factors such as natural disasters, competition, increase/decrease of commodity prices, and depletion of natural resources.

Literature explored in this chapter showed that the development of a vibrant cooperative sector is achieved by utilising the strengths and values of collective action. This ultimately results in reduction of transaction costs, thus positioning cooperatives to become successful. This chapter demonstrated the values of collective action and showed that these values lie not only in the interaction amongst cooperative entities, but also with non-cooperative institutions. Through collaboration, cooperatives access the valuable resources that are an intrinsic part of a network. In addition, collaboration improves social capital that is important to future interactions. Each theory was useful in informing the challenges faced by women in the agricultural sector explored in this study.

Chapter Four will present an overview of the cooperative sector from selected cases studies. The examples will be helpful in drawing up a list of criteria that can be used to examine the success of cooperatives in each country chosen for the study.

CHAPTER FOUR

COOPERATIVES IN SELECTED COUNTRIES

4.1 INTRODUCTION

The aim of this chapter is to provide a review of how cooperatives have developed in selected countries across the European, Asian, American, and African continents. The chapter provides both an international perspective and a regional perspective to the understanding of female owned cooperatives. The chapter seeks to understand factors that affect the success or failure of cooperatives in these countries. While acknowledging the challenge that one cannot draw generic conclusions from this comparative review, it is nonetheless argued that the findings provide useful insights into the factors that affect the operation of cooperatives in general.

Generally, the problems of farmer's cooperatives can be identified as free-rider problems, horizon problems, portfolio problems, control problems, and influence costs problems (Cook, 1995). The free-rider problem arises when all the stakeholders in the cooperative receive the same rewards irrespective of their contribution to the cooperative. This discourages the cooperative members to go beyond their duties in the cooperative for the greater good of the cooperative. The horizon problem arises when the cooperative members are interested in the short-term gains rather than in long term gains.

These are members who refuse to invest assets which they might reap the rewards over a longer time, such as research and development, marketing, and education and training. The control problem arises in many ways. For instance, it arises as to the principal-agent problem, where the aims of the managers clash with the interests of the board or of the owners. It might also arise if the cooperative members have a misunderstanding of why and how the cooperatives operate, especially when members lack education. As the cooperative expands it becomes difficult to manage and control more members of a cooperative.

The portfolio problem arises because when the member invests in the cooperative invest membership level of the cooperative, their investments are tied up in the membership. This then prevents the member's investment from reflecting the risk appetite in the cooperative, this might cause a conflict among members in the selection of commodities or commodities that the cooperatives must market. Additionally, in the decisions of growth, the choice will be whether to follow moderate or aggressive expansion strategy. Lastly, the influence costs problem, is the costs associated with efforts and time taken by cooperative members or managers trying to influence the decisions of their superiors to favour their interests.

4.2 INTERNATIONAL PERSPECTIVE

4.2.1 Cooperatives in Spain

In a study conducted in Spain by Bastida, *et al.*, (2020) in which 264 cooperatives were surveyed, evidence pointed to the role played by female cooperatives as enhancing female entrepreneurship. Respondents indicated that cooperatives provided women entrepreneurs with an opportunity to conduct business in models that aligned with their values, work, and lifestyle. The findings by Bastida *et al.* (2020) also show that cooperative models enhance employment opportunities for women's entrepreneurial activity, even during periods economic challenges. In this regard, it is recommended that governments prioritize responsive policies and programmes to promote development of women owned cooperatives.

According to Hernández-Nicolás, Martín-Ugedo and Mínguez-Vera (2019), cooperatives that have greater female representation on their boards deliver higher returns on investment and operational risk while they have lower levels of debt. This could be due to increased competitive advantage and the fact that women evaluate risks of loss more than men do. In a study of 352 agri-food cooperatives in Spain, Pedrosa *et al.*, (2019) assert that the country's agri-food industry is highly represented by cooperatives. However, in terms of decision making, these cooperatives do not operate like other businesses which results in power rather than salience of stakeholders. However, urgency was found to be the same as for both cooperatives and other forms of business. Earlier, Nicolas *et al.*, (2016) showed that boards with high female representation were more profitable than male dominated ones.

According to Smith and Rothbaum (2013), when women are placed in decision making roles where they control income or assets, children's education and health tends to improve. Thus, income generated by women outside the household, within cooperatives, leads to improved productivity. Consequently, cooperatives are regarded as an effective empowerment tool for women in both the short and long run. These assertions are supported by Fenoy-Castaño *et al.*, (2021) who provide evidence that governance structures within cooperatives that include women have better business management behaviour and financial strategies brought about by the discipline and lower risk-taking behaviour of these women.

Carrasco (2019) asserts that during high unemployment in Spain, women established cooperatives which placed people before capital to attain their socio-economic goals, and these

cooperatives led to improvements in their living conditions. In addition, these cooperatives created employment and empowered women by enhancing their self-esteem, thus creating flexibility and family reconciliation. The strict internal democracy (one of the principles underpinning cooperatives) has led to high women employment levels in cooperatives in Spain (Gabaldón, 2016). Thus, cooperatives play a key role in absorbing the female labour force as these organizations have their own membership criteria based on values and goals set by members at the time of establishment.

4.2.2. Cooperatives in Greece

In a similar vein, Stavroulakis *et al.*, (2014) conducted a study on the status of female entrepreneurs who formed agritourism ventures in Greece and found that cooperatives played a pivotal role in achieving members' goals which include mutual support and pooling of knowledge. The study showed that agritourism provided women with opportunities to earn additional income to support their families. However, major challenges faced by women cooperatives were associated with their level of education which impacted on their management and marketing skills. According to Sergaki *et al.*, (2015), strengths of women owned cooperatives in Greece include economic independence and social inclusion while weaknesses are related to funding issues, administration, and marketing problems.

Chatzitheodoridis *et al.*, (2017) acknowledge the increase in the number of women cooperatives in Greece and further provide evidence that agricultural cooperatives offer women opportunities to earn additional income to support their families. However, the study shows that cooperatives face uncertainty, and viability challenges, during periods of economic instability. The economic instability further leads to a lack of new membership in the cooperatives. However, as argued by Lassithiotaki and Roubakou (2014), most women cooperatives fail to evaluate and use business opportunities and do not adapt to contemporary ways of doing business. In this regard, Lassithiotaki and Roubakou (2014) in their study of cooperatives in Greece, suggest that women should change their perception of entrepreneurship and embrace new ways of doing business for their cooperatives to survive.

According to Poulaki, Lagou and Valeri (2021), argue that women owned cooperatives have contributed significantly to the development of communities and the economy in general. According to George *et al.* (2019), agricultural cooperatives, including female owned cooperatives, contribute significantly to agricultural production and marketing in Greece. On

this, Gidakou (2015) provided evidence that female entrepreneurship in the form of cooperatives were a recognized form of entrepreneurship in Greece. However, as articulated by Zaridis *et al.*, (2015), female cooperatives face problems associated with economic and management although economic crises also adversely affect the agricultural sector. Finally, in Greece, some cooperatives venture into marketing cooperatives to ensure that they have control of the financial transactions and directly distribute their fresh produce to cut out the middlemen (Batzios *et al.*, 2021). In addition, this method of marketing agricultural fresh produce enhances the cooperative's bargaining power which leads to higher productivity and profitability.

4.2.3. Cooperatives in Indonesia

According to Wijers (2019), women play a key role in smallholder production of dairy. In a study conducted in Indonesia, evidence suggest that women's contributions are often not acknowledged, and women owned cooperatives tend to suffer inequality issues in relation to farm size and resource-related support that they receive, compared to their male counterparts. In a study in Indonesia, Mujanah *et al.*, (2019) established that collective ambition and organizational commitment played a key role in the running of the women owned cooperatives. Collective ambition is one of the principles underpinning cooperatives which states that members should have a common goal. According to Madrah *et al.*, (2020), returning migrants to villages in Indonesia are integrated back to their villages through village government structures and are encouraged to participate in cooperatives for survival.

Violinda (2018) presents evidence through a structural equation modelling those dynamic capabilities of members of cooperatives together with organizational structure are positive contributors to the performance of cooperatives in Indonesia. Although Indonesia has many cooperatives, there are very few large female owned cooperatives (Semaun, 2018). According to Semaun (2018), women cooperatives are recognized for their role in reducing unemployment, wealth creation, and enhancing their family economy and self-esteem. Thus, women have been empowered from being housewives to entrepreneurs who run successful micro-businesses which contribute positively to local economic development.

4.2.4. Cooperatives in Brazil

Lyon, Mutersbaugh and Worthen (2019) conducted a study on how corporate economic initiatives in the coffee farming industry promotes gender equity in Brazil and established that although such programmes fail to improve gender equity, they are vital in improving organizational participation, access to services and land titles is by women. Chaddad (2015) also asserts that value chains in Brazil assist cooperatives and contract farmers with market linkages which is crucial for the success of cooperatives. In a study of female entrepreneurs in Brazil, by Church, and Truitt (2017), established that most cooperatives preferred planting short variety crops to obtain quick cash flow for working capital purposes. In Brazil, according to Church and Truitt (2017), female cooperative owners are growing in terms of their financial knowledge and business development. For the success of female farmers, Brazil has seen an increase in the number of women obtaining formal land titles and there are strong women's movements behind land rights (Deere, 2017). Most cooperatives in the agricultural sector are production cooperatives.

There is an increase in agricultural cooperatives in Brazil that is mainly driven by the fact that they are voluntary in nature, with government support through requisite legislation, technical support, and access to markets (de Oliveira Dias, 2018). In addition, these cooperatives have strong relationships with local farmers, authorities, and the communities they operate, in which is an essential ingredient to their sustainability and growth. In that regard, de Oliveira Dias (2018) concludes that agricultural cooperatives play a crucial role in efficient and effective agricultural production. However, according to Brandão and Breitenbach (2019), several problems beset agricultural cooperatives, and these include the fact that cooperatives compete with other organization for markets and as such, cooperatives struggle to compete in oligopoly markets. Furthermore, in cooperatives, management participation is low, and members tend to show opportunistic behaviour.

4.2.5. Cooperatives in India

In a study by Altenbuchner, Vogel and Larcher (2017), although women participate in organize farming in India, there are several challenges that they face. They take on farming activities as an additional workload and seem to be excluded at cooperative level and in training programmes which reinforces gender inequality in agriculture. In India, women owned agricultural cooperatives are promoted widely mainly as a poverty reduction tool

(Dohmwirth & Hanisch, 2018). However, according to Dohmwirth and Hanisch (2018), despite the support that women receive, they face greater challenges with controlling their income and making productive decisions compared to those farmers with unorganized farming activities.

According to Pattnaik and Lahiri-Dutt (2020), women work as additional hands in family farms which is different from the work that they perform in a commercialized agricultural set up. In terms of cooperative membership, productivity and farm size, Kumar *et al.*, (2018) found evidence showing that there is a supportive relationship between cooperative membership and yield, and that profitability is higher for small-scale cooperative farms than for large ones.

These findings have implications on household income generation by small scale agricultural cooperatives in India. Thus, small scale agricultural cooperatives lead to increases in income generation for households. The world's largest milk producer is Amul Dairy Cooperatives in India with milk produced by at least 13 million producers (Llamas & Jomo, 2018). Llamas and Jomo further state that cooperatives are viewed by the United Nations as a contributor to global development as they deal with social and economic empowerment of previously disadvantaged pockets of the society. Cooperatives are also people-centred and as such, cooperatives enhance economic solidarity.

4.2.6 Cooperatives in Iran

Makvandi (2015) aimed to identify factors affecting marketing management in the summer crop farmers of Ahwaz Township, Iran. In his findings, factors are categorised into infrastructure factors, technical factors, economic factors, information and communication factors, extension and educational factors and participation factors. The results from the factor analysis revealed that the seven mentioned factors explained 70.372% of the variation of affecting factors on marketing management (Makvandi, 2015). However, among these factors, Makvandi never mentioned the effect of government support in terms of policies such as easy access of farmers to credit; nor government protection policies such as tariffs and setting minimum prices for products to protect farmers. From the developed world agricultural cooperatives dumping their products to the country. Further, the important effect of signing contracts with customers guarantees the markets for the product which in return improves the business planning and reduces the marketing risks. Only if, Makvandi had not left out these two critical factors there might have been increased variant explanation to above 80%.

4.2.7 Pakistan

A study was conducted by Ahmad (2016) to investigate a serious decline in the production of cotton due to untrained stakeholders, who are cotton growers, commission agents and ginnerers. The findings were that the cotton growers had a skills gap, in production practices, assessment of quality characteristics of cotton, control of factors involved in low production and quality. The farmers skills regarding value addition options were questionable, their skills regarding management of marketing costs and skills regarding packing material. The commission agents had skills gaps in the assessing quality characteristics of cotton. They had challenges in acquiring price information, labour and its costs management, transportation, storage, grading, packaging, control of losses and control of factors affecting price and quality of cotton.

Lastly, the gaps were noticed on how they were managing farm operations involved in ginning process, management of problems, labour management, up-gradation of machinery which resulted in lack of business competitiveness. The challenges in total quality management, includes poor marketing strategies, no knowledge of government policies, lack promotion of institutional linkages, no transportation, and lack of storage facilities. The capacity of losses management, getting extension services, and finally packing and acquisition of technical knowledge (Ahmad, 2018). To conquer with the above findings, is the study done by Khan et al below.

Khan *et al* (2016) conducted research to observe numerous factors leading to yield losses during harvesting and post-harvesting. They found that 91% of farmers reported fruit injuries during picking. Many farmers (67%) reported that 20% of losses of the total yield occurred during picking. (51%) and 70% of farmers did not have transport capabilities and storage facilities, so losses occurred during these stages. They recommend that rough handling should be avoided during the harvesting operation. Furthermore, due to the defective marketing system, the farmers get a low income which discourages the farmers from adopting recommended orchard management practices. They therefore recommend that the government should pay due attention to the establishment of an effective citrus marketing system (Khan, Khan & Anium, 2016)

4.2.8. Cooperatives in Sri Lanka

Fernando et al. (2021) analysed and compared the organisational attributes of two forms of collective organisations: cooperatives and farmer companies (FCs) in the Sri Lanka rice sector. They analysed and compared a range of organisational characteristics such as ownership, control, benefit, governance, marketing, and external factors of cooperatives. They revealed that cooperatives and FCs have similar control, benefit, and attributes. They had different ownership and governance attributes. These FCs accepted external investments while the cooperatives accepted products from non-members. The FCs were more specialised in the specific type of rice grain sold to regional and specific markets. Both types of collective organisations had received substantial governmental financial support, however, cooperatives were also strongly influenced by external governmental departments and exempted from tax.

4.3. REGIONAL PERSPECTIVE

In developing countries attempts to organize farmers into cooperatives have often failed. Although cooperatives have the potential to supply farm inputs and market farm products that are both important for agricultural development (Hoyt, 1989). Dongre and Paranjoti (2020) argue that cooperatives entail social innovative activities that are aimed at meeting social goals. Cooperatives get to engage in social innovation as a strategy to serve the community. Agricultural cooperatives have made an impact on food systems around the world for generations. Farmers in a cooperative make decisions together and share profits among all members, rather than with outside investors. These researchers ought to investigate farmers cooperatives' challenges by collecting international, regional, and South African evidence to support their case.

▪ Challenges facing farmers in comparison to cooperatives

Farmers on their own who are not in cooperatives, face different problems from general cooperatives. Farmers face problems that emanate from geopolitics. These problems include but are not limited to, the asymmetrical advice on neoliberal economic policies by International Monetary Fund and the World Bank to developed nations' government interventions to their farmers relative to the interventions of developing nation's governments for their farmers. This asymmetric advice includes issues of intervention of developed nations' governments in

agriculture such as subsidies, tariffs, setting minimum prices on the farms' products. On the other side, developing nations' governments are told not to intervene in agriculture.

Cooperatives inherit problems by their mere formation. These inherited problems by mere formation include but not least; horizon problem, free-rider problem, portfolio problem, control problem, and influence cost problem. The combination of the two categories, farmers, and cooperatives, to form farmer's cooperatives precipitates further problems, including a shortage of suitable management or leadership. Especially in the developing nations, where help is needed by these farmer's cooperatives to navigate the issues provided by inherited problems (Hoyt, 1989).

Some inherited, by the mere formation of cooperatives and issues that come with constraints that come from asymmetric treatment of developing nations relative to developed nations by International Monetary Fund and World Bank. The leadership needs to do proper planning and development of cooperatives such as ensuring adequate business volume, equipping the cooperative with enough equity especially during the start-up, and signing market contracts with customers to reduce markets risks.

Then, this study is constructed as follows (Dongre & Paranjoti, 2020): First, this article presents the advantages that developed nations have over developing nations on the farming industry. These are advantages such as developed nations' government interventions in agriculture to ensure the long-term survival of agriculture and food security in their nations. Government interventions also include subsidies, tariffs, and setting minimum prices on the farm products to prevent farm products' dumping in the nations.

The second conventional cooperatives issues encountered, are challenges which reduce their effectiveness as cooperatives. These are horizon problems, free-rider problems, portfolio problems, control problems, and influence cost problems. Third, the issues that precipitate from farmer's cooperatives having inadequate leadership in their helm are presented. Leadership is required to help the farmer's cooperatives to navigate first the problems that are inherited from conventional cooperative formation and second problems that precipitate from the asymmetric treatment of developing nations' farmers by International Monetary Fund and World Bank, which leads to little or nongovernment support. Thereafter, this study discusses empirical findings and then concludes from these discussions (Dongre & Paranjoti, 2020).

4.3.1. Cooperatives in Ethiopia

According to Woldu and Tadesse (2015), agricultural cooperatives play a key role in assisting economically weak farmers in less developed economies. These cooperatives assist farmers through potential bargaining power and income generation. However, Woldu and Tadesse (2015) acknowledged, that female farmers are still marginalized from playing a role in such as cooperatives. Woldu and Tadesse (2015) conducted a study among 1117 households and 73 agricultural cooperatives in Ethiopia in which were found participating as agricultural cooperatives. The research discovered that, they were mainly favoured, educated male household heads and landowners over poor women without resources. Thus, the study found the access to participation in cooperatives was mainly gender biased which created a huge barrier for women's participation.

In a study by Mohammed and Lee (2015), they provided evidence to support the same narrative, of how cooperatives contribute to rural development. However, the study found that cooperative membership was mainly male dominated. The participation from women to found to be less than 25 percent. However, of importance was discovered, that cooperatives failed as expected, mainly due to lack of member participation in planning, marketing of products and saving. Some cooperatives faced managerial challenges relating to transparency, governance, and efficiency which in turn led to elevated levels of corruption. Other challenges were on a macro level such as poor road infrastructure, lack of energy, and minimal value chain opportunities such as agricultural processing.

Srinivasan and Sundaram (2020) provide evidence that agricultural cooperatives in Ethiopia play a vital role in income generation and poverty alleviation. Cooperatives also assist farmers with input and marketing of their produce. In this regard, cooperatives in Ethiopia account for at least 85 percent of total input supply to the public. In a related study, Fufa (2016) established that indeed, cooperatives play a vital role in poverty alleviation in Ethiopia as they cut out the role of middlemen, thereby keeping prices of produce low. In a study comprising 14 cooperatives in Ethiopia, Dorgi (2017) found that there was lack of awareness of the cooperative concept, values, and principles, by members, led to the failure of the cooperatives. In addition, lack of awareness of members' rights and duties were a factor that led to failure of cooperatives. Dorgi used quantitative data from structured questionnaires and qualitative data

from focus groups. One condition that was applied in the study was that the cooperative had to be five years old at the time of the study.

Gashaw and Kibret (2018) conducted a study to ascertain what determines membership of cooperatives in Ethiopia using a sample of 335 smallholder farmers including cooperatives. The study used structured interviews as a survey tool and found that cooperatives have challenges such as no access to training, low membership, low market access, and the fact that many members prefer urban cooperatives to rural ones. Earlier, Esayas and Gecho (2017) established that the success of cooperatives was hindered by membership contributions, farmland size, distance, education level and access to training opportunities.

4.3.2 Cooperatives in Nigeria

In a study to assess socioeconomic factors that influence agricultural production in Nigeria, Anigbogu *et al.*, (2015) found that age, education, experience, farm size, income, and availability of inputs, including seedlings and fertilizer, impacted on the productivity of cooperatives. The study utilized a questionnaire on a sample of 171 cooperatives of which 142 were completed and returned. Finally, the study recommended that the government of Nigeria should consider assisting farmers with access to credit and for the mechanization of operations. Adejo *et al.*, (2017) concur with Anigbogu *et al.*, (2015) on the challenges facing cooperatives but added that most cooperatives, have problems accessing credit. This problem is exacerbated by the fear of loan repayments by members of the cooperative. As stated by Baruwa *et al.*, (2016), cooperative with members who come from better socio-economic backgrounds and have access to inputs follow better land management practices.

Prior to these studies, Oluwatayo (2009) had surveyed 292 respondents in Nigeria to ascertain whether cooperatives have a role to play in enhancing food security in the country. They established that respondents who participated in cooperatives were more food-secured than those who did not. In addition, male headed households were more food insecure than female headed households. They established that food is usually pooled among female headed households which reduced chances of food insecurity among female headed households. Furthermore, Olumese and Onemolease (2018) showed that cooperative societies contributed to job creation. However, some cooperatives had problems associated with a lack of the education that is required for business management. These sentiments were also shared by

Kagbu and Issa (2015) who further found that women owned agricultural cooperatives had inadequate capital and experienced low return on investment.

4.3.3. Cooperatives in Uganda

In Uganda, women participation in agriculture is extensive but they face a lot of obstacles to generate meaningful income to support their families (Theeuwes *et al.*, 2021). Some of the obstacles include lack of trust by men, restricted movement and freedom and additionally household duties. Thus, the study provided evidence that development of small-scale cooperatives was the most viable avenue to reduce inequality in farming activities. Women need further opportunities to develop inter organizational skills and to access financial resources. Previously, Verhofstadt and Maertens (2015) had sought to establish the effectiveness of agricultural cooperatives as a poverty reduction tool and found that indeed cooperatives increase general household income and lead to poverty reduction. However, the larger benefits seem to be accrued by those cooperatives with larger farms and operating in remote areas.

4.3.4. Cooperatives in Zambia

In Zambia, Dube, Numbwa and Guveya (2016) conducted a study to establish factors that contribute to crop diversification among small scale farmers that own cooperatives. The study used a sample of 60 cooperatives, and a structured questionnaire was employed as the data collection instrument. It established that crop diversification was, influenced by factors such as investment in farm equipment, gender of head of household, and production of cash crops. However, factors such as the age of household head, the farm size, and its proximity to markets adversely impacted on crop diversification. In assessing whether female farmers in Zambia produce lower yields due to the use of infertile land, Burke and Banda (2018) found that the distribution of quality fertile land is not in favour of women. The findings confirmed even after controlling for the effects of skills and access to inputs. Thus, it is evident that women farmers are disadvantaged in their agricultural sector.

In a study comprising a sample of 400 small-scale farmers in Zambia, Nkomoki, Bavorová, and Banout (2019), used a household questionnaire survey to ascertain factors that influence food security in that country. The study established that higher levels of education of the household head, land ownership and size of cooperative increased the chances of household

food security. In addition to these factors, Siwale (2019) produced evidence that Zambia cooperatives and smallholder farmers had challenges with access to collateral as well as the distance between the farming project and the location of a financial services provider to access credit.

4.3.5. Cooperatives in Tanzania

Rwekaza *et al.*, (2021) conducted a study in the Bukoba and Moshi districts to examine the membership and member fulfilment of participative obligations, participation in internal democracy in the primary Agricultural Marketing Cooperative Societies, members' engagement in cooperative business, member ownership and decision making in the primary Agricultural Marketing Cooperative Societies, and primary Agricultural Marketing Cooperative Societies' member access to democratic rights. Rwekaza *et al.*, (2021) found that members were not following the established procedures for acquiring memberships. Also, internal democracy levels were higher in the Moshi District primary Agricultural Marketing Cooperative Societies compared to those in Bukoba. Further, the democratic practice in primary agricultural marketing cooperative societies was, exercised, more when joining the AMCOs and in electing board members. On the other hand, not all primary Agricultural Marketing Cooperative Societies' members were selling their produce in the primary Agricultural Marketing Cooperative Societies.

Rwekaza *et al.*, (2021) therefore recommend that the board and managers should involve members in decision making as the cooperative members are the principal owners of the cooperative society, thus requiring that they practice their democratic rights to own decisions made. Rwekaza *et al.*, (2021) further state that such decisions sometimes are not clear in terms of correlation between internal democracy with the performance of the cooperatives and longevity of a business. Even if the democracy in the business is correlated to member satisfaction, there is no evidence that when there is a democracy, members are more satisfied in cooperatives. Again, Rwekaza *et al.*, (2021) do not specify the type of cooperative contracts signed. It is either a conventional cooperative contract or it might be the new generation cooperative contract and diverse types of contracts present different problems to the cooperatives.

On the other hand, Bruynis *et al.*, (2001) find no correlation between democracy and the performance of the cooperatives. They establish a correlation between business volume and

member satisfaction. The correlation they discuss is between the performance of the cooperative and having sufficient equity before starting up, maintaining an adequate business volume, and clear marketing agreements between cooperatives and customers. Rwekaza *et al.*, (2021) might not be in a full grasp of the problem, and thus may not have reached a clear conclusion solution.

The solution might be, in the structure of the cooperative contract, as number of, cooperatives might be suffering from the free-rider problem. The problem is in the contract that these cooperatives members' sign. The property rights are not sufficiently, defined, which means it therefore becomes difficult to enforce the demand. Therefore, individuals do not bear the full cost of their actions nor receive the full benefits they create. Those who make a high contribution to the organisation in terms of capital base or value creation must have high individual voting rights in the cooperatives, and those with low capital base and value creation must have low individual voting rights.

The finding that internal democracy was higher in Moshi District primary Agricultural Marketing Cooperative Societies compared to those in Bukoba might be, attributed to the different contract types that the members of cooperatives sign. Moshi district might be signing a new generation cooperative contract, where property rights are clearly defined. The member contribution to the cooperative is highly regarded, and members' benefits in the cooperative are, linked to the members' contribution. If the Bukoba district cooperative members had signed the conventional cooperative contract, where the property rights were not clearly defined, then there would be no clear implementation of the members' rights. How a member contributes to the cooperative does not matter, the benefits and liabilities are borne by all if the individual is a member of a cooperative (Rwekaza *et al.*, 2021).

4.3.6 Cameroon

Momo-Lekana (2016) investigated the factors that contributed to the fall of the coffee cooperatives in the post-liberalisation period in Cameroon. The research argues that although the proximate causes of the collapse of the agricultural cooperatives can be attributed to the country's macroeconomic policy shift from the pre-adjustment to the post-adjustment period, the nature of the cooperative system as 'government institutions' in the pre-liberalised economy was its biggest problem. This predisposed newly established cooperatives to an eventual collapse. As such, it is understandable that coffee cooperatives fell with government

withdrawal from the economy after the country adopted the International Monetary Fund and World Bank-imposed neoliberal macroeconomic policies (Momo-Lekana, 2016). This finding is in line with most observations around the world that most developed countries set minimum prices for the farmers' products and subsidise their farmer cooperatives to keep them afloat.

In contrast, Carlberg *et al* (2006) find that proper planning and development, as well as good control of input and output costs, are critical factors which ensure the long survival of the farmers' cooperatives. Additionally, Gamevaske (2011) finds that the selection of a core product that is suitable to the natural environment and market needs was especially important. Signing the marketing contracts with the customers. Thus, guaranteeing access to the market is also seen as an especially important part of farmers' cooperatives. Another success factor in the cooperatives was conducting a proper feasibility study to ensure that a choice of the core product is appropriate for the target market. Whilst the input prices and output prices are appropriate for a farmer's cooperate or business. All these activities are performed by managers, and good management leads to high performance.

4.3.7 Cooperatives in Kenya

A study was conducted in Kenya to assess the extent to which the cooperatives are successful in that country. The study finds that Kenya has a thriving cooperative culture, particularly in the agriculture sector, managing 72% of coffee sales, 95% of cotton sales and 76% of dairy product sales. The study further finds that their success extends beyond the agricultural sector, with 63% of Kenyans directly or indirectly deriving their livelihoods from cooperation's. In addition to this, in Kenya they contributed 45% of the GDP in 2007. The extent of this success can be as strong, as the support government support, specifically through the Kenyan Ministry of Trade, Industry and Co-operatives (Tshishonga and Okem, 2016). The Kenyan farmers' cooperatives' attributes are not made clear regarding what Kenyans are doing right. However, their cooperatives are successful. This Tshishonga and Okem study only highlighted the achievements of Kenya in the agricultural sector. Therefore, it is not clear how these achievements can be applied in other environments such as South Africa to improve the effectiveness and longevity of cooperatives.

4.3.8. Cooperatives in South Africa

Matsane and Oyekale (2014) investigated factors that influence marketing of vegetables in the northwest Province in South Africa using a structured questionnaire. They showed that access to credit and storage facilities, poor producer prices, and transportation costs were major challenges facing these farmers who are in cooperatives. In addition, the study showed that inaccessibility of roads and the size of the transport vehicles were both inhibiting the survival of cooperatives in the province. Income generation by these farmers was influenced by the size of the farm, number of employees, access to storage and access to extension services. Khumalo (2014) on the other hand, asserts that the current challenges facing agricultural cooperatives in South Africa relate to training, creation of enabling environment for these organization to operate in, and access to funding.

According to Mpandeli and Maponya (2014), small scale farmers including cooperatives face a plethora of challenges. These challenges were documented during surveys and focus group meetings. It found that, agricultural cooperatives had problems accessing market information, transporting their produce, and meeting the costs of inputs. In addition, according to Ngema, Sibanda and Musemwa (2018), agricultural cooperatives and stallholder farmers face the challenges of accessing markets for their produce and the lack of adequate irrigation infrastructure. They established that smallholder farmers require irrigation infrastructure and education to improve their food security. In a survey consisting of a sample of 359 smallholder farmers, Myeni *et al.*, (2019) identified resource constraints and capacity building as major obstacles facing smallholder farmers in South Africa. Capacity building raises awareness of credit facilities available and improves knowledge among farmers which in turn improves productivity and enhances chances of survival.

Ducastel and Anseeuw (2018) claim that agricultural cooperatives were pivotal during the apartheid regime as they positioned themselves between the farmers and the Land Bank, and further contributed to the country's self-sufficiency and maintained low food prices. However, as argued by Ducastel and Anseeuw (2018), cooperatives have, since the dawn of democracy, transformed significantly with certain, large cooperatives seeking listing on the stock exchange. Listing on the stock market means that the principles underpinning cooperatives, might, change to suit the requirements of the stock market which is capital and profit oriented.

According to Sinyolo and Mudhara (2018), smallholder farmers including cooperatives face a low uptake of enhanced farm inputs and weak linkages to markets. This creates high transaction costs which results in lower profit margins. Consequently, farmer groupings like cooperatives help smallholder farmers reduce these transaction costs and enhance their chances of survival. Sinyolo and Mudhara (2018) used a sample of 984 households and established that farmer groupings resulted in higher usage of modern farming methods, such as the use of inorganic fertilizers in their farming activities.

Most smallholder farmers use less than two hectares of land and are dependent on that land for economic livelihood. Despite challenges such as the lack of capital assets, smallholder farmers play a key role in local economic development and contribute significantly to economic growth and development in Africa (Kamara et al., 2019). Okbanderias and Okem (2018) investigated the sustainability of notable growth in the number of newly registered cooperatives in South Africa. The study identified factors that contribute to the high failure rates of cooperatives. The findings of the study show that financial incentives and the creation of government support institutions are not enough to foster sustainable and successful cooperatives (Okbanderias & Okem, 2018). Their findings are vague, and more work needs to be done, as there are no clear and concrete recommendations of what needs to be done, which could be incorporated by policymakers in their planning.

Notwithstanding, Bijman (2016) finds there is a combination of five factors that promote the ongoing success of agricultural cooperatives in the Netherlands. These five factors; the Netherlands has an enabling cooperative legislation, cooperatives in the Netherlands have been able to maintain effective member control through innovations in internal governance, membership heterogeneity has been kept low, despite growth and internationalization of agricultural cooperatives, Dutch cooperatives have been pragmatic in establishing and dismantling federative cooperative structures, and cooperatives have chosen explicit strategies to their position in the food chain. Again, Bijman is not clear how these factors correlate to the longevity of cooperative, cooperative members' satisfaction, the profitability of cooperative and cooperative business growth. Gamevaske (2011) mentions noticeably clear the factors that are important for the success of the cooperative.

Gamevaske argues that the selection of core products that are in line with market demands and signing a market contract with a customer to secure a market for cooperative products contribute to the success of the cooperative. Collaborating with a customer during the planning and development stage of the cooperative is important, as well as during the feasibility stage of the farmer's cooperative. Likewise, Dendup and Aditto (2020) find that there is a positive and meaningful relationship between the performance of agricultural cooperatives and size and age of agricultural cooperatives, education and leadership experience of the chairperson, trust and participation of members, and government supports.

Furthermore, Tshishonga and Okem (2016) explored the challenges that the South African cooperative sector is, confronted with. Despite the concerted support of the sector in the past two decades. The researchers argue that for cooperatives in South Africa to truly become sustainable, they must work towards the radical application of the principles and values of the cooperative movement. These are voluntary and open membership, democratic member control, member economic participation, autonomy, independence, education, training and information, cooperation among cooperatives, and concern for the community. Tshishonga and Okem provided recommendations, such as democratic member control, but economic participation might lead to the free-rider problem. Conventional cooperative contracts usually result the free-rider problem, where individual performance and contribution is not tied up with their benefits.

Those who contribute less equity or with less economic participation in the cooperative want to have the same voice and benefits as those who contribute more to the cooperative. Furthermore, autonomy and independence might lead to the control problem, therefore a special skill in leadership, accompanied by a certain minimum education level of the individual member and some agricultural knowledge or experiences are required to implement such recommendation. The training and information for the members who are less educated require hands-on practise, therefore functional cooperatives are needed for these individuals to obtain this opportunity.

Many studies do not find any correlation between what Argwings-Kodhek (2004) and Tshishonga and Okem (2018) as their views recommend the performance and effectiveness of the cooperatives. Bruynis (2001) finds that key success factors of cooperatives are sufficient equity before starting up, maintaining an adequate business volume, and marketing agreements.

Likewise, Gariveneska *et al*, (2011) find that success factors of the cooperatives are a resolute initiator and leader, government financial and technical support. They also found that training and education has a partial effect on the effectiveness of the cooperative. A resolute local leader would be capable to create suitable contracts for the cooperative, which ensures that the freerider problems are eliminated. The voluntary and open membership, democratic member control, member economic participation, autonomy and independence is then possible in the cooperative. At the same time, it is necessary to provide tailored education, training, and information for each member in the cooperative, and to implement a cooperative's common vision, addressing the concerns for the community.

Furthermore, Tshishonga and Okem (2018) argue that the practice of dependence on the state should be minimal, and cooperatives should ensure that, they are linked to addressing socioeconomic issues for which they are established. This contrasts with European Union's Common Agricultural Policies (CAP) which provides three forms of protection: income support through direct payments to farmers; market measures to combat price or demand drops; and rural development. This implies that developed countries employ protectionist macroeconomic policies whereas Ortman and King (2007) attribute the success of agricultural cooperatives in South Africa to agricultural cooperatives serving as agents on agricultural marketing boards, and the Land Bank provides subsidized loans to farmers (Ortman & King, 2007).

Tshishonga and Okem (2018) recommend that the developing economies' governments should not support their cooperatives, whilst the developed economies do support their farmers' cooperatives. Carlberg (2006) finds that a strong local leader who is dedicated to ensuring that a cooperative works effectively is the main success factor required by any cooperative. He goes on to discuss the feasibility study, in which marketing agreements, low operating costs and member capital base, output price stability and input price stability are seen as other key success factors required in the cooperative.

Additionally, Tshishonga and Okem (2018) argue that there is an urgent need for an increased understanding of the rationale for the establishment of cooperatives through education and training of co-operators. They argue that there is a need to allow the organic growth of cooperatives instead of the government facilitating false growth through unsustainable financial and non-financial incentives. They never clarify the exact measures that need to be addressed to ensure that cooperatives thrive in these communities. Contrary, Mom-Laka 2016

finds that when the Cameroon government stopped supporting the Cameroon coffee growers' cooperatives by shifting the macroeconomic policies to not supporting the agricultural cooperatives, the cooperatives collapsed.

Likewise, Ortmann and King (2007) argue that when the South African government reforms agricultural cooperatives to be inclusive of other cooperatives and to incorporate neo-liberal macroeconomic policies as suggested by International Monetary Fund and World Bank, the South African agricultural cooperatives collapsed. Similarly, in the successful countries.

Agricultural cooperatives are heavily assisted by their government, such as the European Union countries, the Federation of Russia, India, Japan, and America implement protectionists' macroeconomic policies (such as subsidies, tariffs, import quotas and protectionists laws) to help their agricultural cooperatives to thrive. How the South African farmer's cooperatives can grow organically whilst other developed countries undercut the pricing of their products in the market by dumping their products in the developing countries, developed countries price their products below costs in the developing countries.

Diedericks et al (2021) propose a business Incubator programme for South African agricultural cooperatives to address the deficient performance and ineffectiveness of South African farmers' cooperatives. They propose that this incubator programme should focus on agricultural business support, technical production training, management training and market access to improve business viability. They call this proposed incubator programme a theoretical enterprise development model based on a Modified Agricultural Business Incubator (MABI) (Diederichs, Sihlobo, Driederichs and Nel, 2021). This proposal is in line with findings by Bruynis *et al.* (2001), Carlberg *et al* (2006), Garnevaske *et al.* (2011), and Dendup and Aditto (2020), which will directly address issues of management/leadership tasks such as conducting sufficient feasibility studies, creating effective operations management (controlling of input and output costs), securing markets by signing market contracts with customers, optimizing land use and efficient use of resources such as choosing a core product that is suitable for the natural environment and that is in line with customers' needs, and setting an adequate member capital base.

▪ **Inanda township, KwaZulu-Natal, South Africa**

Tshishonga and Bandyambona (2018) explored how the Inanda Farmer's Association contributes towards the development and sustainability of cooperatives in the Inanda area in eThekweni Municipality, South Africa. Further, Tshishonga and Bandyambora (2018) argue that the failure of community-based cooperatives in dealing with challenges such as poverty, unemployment, and inequality is seen in most of them. Perhaps it is, due to a lack of understanding of cooperative principles. The lack of support from cooperatives themselves and other institutions such as government and the private sector. On the contrary, the relationship between the lack of understanding of cooperative principles and support from cooperatives themselves with cooperative longevity, growth and profitability has never been established.

Furthermore, it is not clear what kind of support from the government and the private sector might improve the effectiveness and performance of these cooperatives.

The government must be behind the development and sustainability of cooperatives, in Nanda, for them to gain access to finance, technical training. This would assist in minimising product prices in the market. Also, the private sector should be supportive of the concept as well, by partnering with cooperatives especially in the planning and development stages. Even increasing opportunities of signing market agreements with the private sector might improve the recommendations of their study. Moreover, the private sector could support with marketing agreements, business volume, agreements in input prices which affects output prices and total equity. If all stakeholders, including local leadership in both public and private sector could have the same vision of granting support, the result would be better performance and effectiveness of cooperatives.

Furthermore, Tshishonga and Bandyambona (2018) argue that agricultural cooperatives at Inanda are facing, multiple challenges such as lack of land, lack of access to markets and the lack of access to finance. In addition, lack of knowledge about cooperatives, lack of business skills compounded by poor infrastructural facilities. These challenges hinder, the progress of cooperatives. However, they are not clear how to address these challenges, nor whether the sequence of addressing these challenges, should be concurrently or sequentially.

If sequentially then, which challenges need to be addressed first and which ones need to be confronted last? After addressing the first ones there may be no need to address the others

because they may just fall into place. Sometimes acknowledging that there is a challenge is not good enough. For instance, lack of access to land, lack of access to markets and the lack of access to finance could have been attended, during the feasibility study of the cooperative. Lack of access to markets could have been resolved, by involving the members of customers' companies during planning and development and by signing market contracts with the customers' companies during these stages. The access to land could have been addressed by choosing the cooperative's core product that is suitable naturally to the environment and in line with customer demands. That would leave only the lack of access to finance as a challenge.

However, if addressing these challenges concurrently, there could be a different outcome. The limited availability of land could be addressed in the same stage, the planning and development stage, by conducting a proper study of how to optimise and efficiently use the current land and other available resources. Having done a proper feasibility study, worked with customers during the planning and development stage, addressed efficient and optimal use of land, and having addressed the market issue, the access to finance could have been easy. Additionally, it is not clear in this study of Tshishonga and Bandyambona (2018) if the leadership or all the members in these cooperatives have the lack of business skills. If it is all members, the researcher has to date found no studies showing a correlation between the members of cooperatives' business skills and business longevity and profitability. On the other hand, it is leadership. Dendup and Aditto (2020) and Hejkrik *et al.* (2021) in their studies find that there is a correlation between cooperative leadership business skills and the longevity and profitability of a cooperative.

▪ **King Williams town, South Africa**

Khapayi and Celliers (2016) investigated the main limiting factors that prevented emerging farmers from progressing from subsistence to commercial agricultural farming in King Williams Town, Eastern Cape Province, South Africa. They found that the specific limiting factors emerging farmers face are poor physical infrastructure such as poor roads, lack of transportation to the markets from the farms, lack of marketing skills and information, poor market infrastructure, and high transaction costs. Other factors include insufficient land availability to expand production, lack of agricultural implements to better production, poor production, and farm management skills, as well as low education levels which results in an inability to interpret market information to be used in production planning and marketing.

These negative findings by Khapayi and Celliers (2016) mostly emanate from poor management and the absence of strong local leadership. Strong leadership is needed that will be responsible for organising planning and developing the cooperatives.

There are several tasks that should be carried out to strengthen cooperatives. They involve organising feasibility studies, involving the potential customers in choosing the core product that is suitable for the natural environment of the area, and signing market contracts to secure the markets for the cooperatives. In addition, it is necessary to ensure that the input costs and output prices are controlled, and that proper operations practices are adhered to. When the farm cooperatives are properly run, the infrastructure problems will take care of themselves.

The recommendations emanating from such vague findings become problematic to policymakers to implement since recommendations are similarly vague. Subsequently the recommendations given by Khapayi, and Celliers (2016) put too much burden on the government. These recommendations are for the government to have a crucial role to play in increasing market participation of emerging farmers through encouraging group marketing, upgrading of roads to enable smooth accessibility of farmers to output markets, and the establishment of local point sales in farming rural areas. They go on to recommend the government should provide planned workshops to all farmers to equip them with marketing knowledge (Khapayi & Cellieers, 2016). A better solution would be to find a strong and good local leader with vision, business, and management capacity, who is well educated, with an enthusiasm for innovation and being open-minded

Dendup and Aditto (2020) in their study conducted in Bhutan reveal challenges in agricultural cooperatives remarkably like those found in King Williams Town, such as poor market, production issues like inaccessibility to inputs, and weak group cohesion among members which hinder the performance of agriculture cooperatives. However, Dendup and Aditto (2020) provide more concrete recommendations that policymakers can easily implement, such as the agricultural cooperatives should be involved in contract farming, value addition of products, product processing, and education and training of leadership.

These studies have revealed that developed nations' agricultural cooperatives face internal challenges whilst receiving a lot of support from their governments. On the other hand, the developing nations' agricultural cooperatives face both external challenges and internal challenges in their cooperatives. Developing nations' agricultural cooperatives receive little to

no support from the government as most of these nations were instructed by the International Monetary Fund and World Bank to stop supporting their agricultural cooperatives. Most developed nations get support from their governments in the form of subsidies, easy access to capital, and minimum prices being set for agricultural products. However, the excess agricultural products are sold below cost in developing nations' agricultural products markets which drives the farmers' cooperatives right out of the market and sometimes to bankruptcy.

If the farmers' cooperatives are provided with the opportunity to participate in the market, they could improve with time. For instance, illiterate people learn better by participating and doing rather than being taught theoretically. Hands-on development is more effective for those who have limited education. Therefore, access to a market would improve chances for these illiterate members of farmers' cooperatives to learn and improve. However, such an opportunity is not awarded to these farmers due to price undercuts caused by dumping. Additionally, in smaller cooperatives, certain types of fixed costs must be spread across relatively few units of output, and there are few opportunities to take advantage of economies of scale. If these cooperatives fail to spread their fixed costs across relatively few outputs, and they do not get government subsidies they are out of business.

The cooperatives in developing countries should create contracts that reflect the contribution of each cooperative member's capital base and effort contribution during the start-up of the cooperative. This might partially address the problem of proportion patronage. If the cooperative already exists, the cooperative can rectify this issue by looking for external funds instead of internal funding. Furthermore, Dendup and Aditto (2020), suggest that cooperatives should be involved in contract farming as opposed to traditional farming value addition product addition. Other traditional problems of the cooperatives can be addressed by forming strategic alliances with other cooperatives of common interest. These two alliances address the widespread problem but keep their business identities.

Another issue is that the literacy level amongst the developed nations is generally higher relative to the developing nations. Therefore, obtaining a dedicated leader that has a vision, business, and management, capacity, who is well educated, with enthusiasm for innovation and is open-minded as Garnevaske *et al.* 2011 recommended, is one of the critical factors for the farmers' cooperatives. Tshishonga and Okem (2016) recommended the adherence of cooperatives to the principles and values of cooperatives such as democratic member control

and cooperation among cooperative's members for the cooperatives to improve their performance.

However, cooperation among the members and democratic control among the members mainly depends on trust. If the leader seems not to understand what she or he is doing members tend to be rebellious and question everything that a leader does, but when the leader has an unobstructed vision and is educated, trust builds up and cooperation among members increases. Thus, it can be deduced that the education and training of farmers' cooperative leaders might be necessary because there is a high failure rate of farmer's cooperatives in developing nations relative to the developed nations.

Further, to what has been identified as extremely successful factors of the farmer cooperatives, is planning and development, operations control of input costs and output prices, and securing the market with customers. These tasks mainly fall under the management of the farmers' cooperative. Good management and leadership are the main factors in the success of any farmers' cooperative.

Many challenges that have been identified in the literature review above, including access to the market, cooperation amongst the members of the cooperatives, high transaction costs, insufficient land availability, poor production, poor training, and a variety of needs of the cooperative's members, can be addressed by a leader with a good business capacity. Garnevaske *et al* (2006) identified that the management and governance work is done voluntarily in the initial stages of the development of cooperatives. Government subsidies and other government financial support in the developed nations, help the farmers' cooperatives to endure this period. Farmers' cooperatives in the developing countries have great difficulty getting competent leaders relative to a developed country. This might be associated with the high failure rate of the cooperatives in the developing nations.

Existing studies reveal that, dedicated leadership with vision and business capacity is an extremely important success factor for the farmers' or cooperatives. Other factors that are extremely important are doing a feasibility study before any project of farmers' cooperative is taken, also securing enough cash flow for cooperative or enough cash, during start-up, of the cooperative. Signing of the market contract with cooperative customers to reduce the market risks, working with customers' company members. During planning and development of cooperatives to choose the core product that is, suitable to the natural environment and

customer needs. These plans assist, as the highly controlled input costs and output prices of cooperatives operations which can result to cooperatives gaining a competitive advantage

4.4. CHAPTER SUMMARY

Most of the studies described in this chapter highlight the internal factors that farmers are facing which can mitigated and be overcome. However, external factors such as subsidies and dumping of products from developed countries are not mentioned. Good planning, education, and market infrastructure (Khapayi, 2016), lack of access to land, and the lack of access to finance (Tshishonga and Bandyambona, 2018) can be improved with time if the opportunity to participate in the market is awarded to these farmers. However, such opportunity is often not awarded to these farmers due to price undercuts caused by dumping.

This chapter has explored the cooperative movement in more than four selected countries. The review shows that in the industrialised/developed countries, cooperatives were bottom-up movements that emerged as a means of addressing prevailing socio-economic challenges. Although this approach produced some positive results, in the developed countries it stifled the development of cooperatives since government control prevented them from putting into practice the principles and values of the cooperative movement. The next Chapter discusses the cooperative sector in South Africa.

CHAPTER FIVE

THE COOPERATIVE SECTOR IN SOUTH AFRICA

5.1 INTRODUCTION

This chapter focuses on the cooperative sector in South Africa. Two periodic eras, each era having a significant impact on the current condition of South Africa's cooperative sector, are described in this chapter. The chapter also presents the situation since the cooperatives were established by the democratic government to stimulate local economic development. The objective is to explain the origins of some of the ongoing challenges that the cooperative sector faces, as well as to consider the government's policy responses. The chapter concludes by reflecting on South Africa's cooperative sector as compared to the countries discussed in previous chapters.

5.2 EVOLUTION OF COOPERATIVE MOVEMENTS IN SOUTH AFRICA

Cooperative movements have been in existence in South Africa since the 1800s although they have taken various forms since their inception. Historically, cooperatives have played an integral role in poverty alleviation and reducing unemployment in the country (Bretos & Marcuello, 2017). Much earlier, Packel (1939) asserted that the primary objective of a cooperative is to improve the economic wellbeing of its members, going beyond financial and monetary benefits to include quality of product and service, ownership, and satisfaction of

selfhelp. According to Van Niekerk (1988), cooperatives in South Africa started with the registration of a consumers' cooperative in 1892 under the Companies Act.

Consumer cooperatives, as initially defined by Stein (1933) are a union of consumers to seek to eliminate the role of the go-between and other stakeholders such as employers and private creditors to take collective control and ownership of cooperatives. Subsequently, since 1892, more and diverse cooperatives were formed, which spanned various economic sectors, with the largest being agriculture (Ortmann & King, 2007). These cooperatives grew rapidly in the wake of the industrial revolution in the 1900s. However, the growth in the number of cooperatives as regulated by the Companies Act posed a regulatory challenge as some cooperatives failed, exposing members to huge financial and liability risks.

These cooperatives were registered under the Companies Act until the passing of the Cooperatives Act in 1908, followed by the Cooperatives Societies Act of 1922 (Act No. 28 of 1922). The latter legislative law focused on agricultural activities. According to Farming in South Africa (1929), the Act aimed to establish a system of creating cooperatives based on the universal principles of the sector. The Act sought to protect farmers and ensure the cooperation was a safe undertaking in South Africa. The Act was enacted due to failed cooperatives between 1892 to 1921 and hence, it sought to curtail repetitive failures of cooperatives in the country. According to the Act, the administration of the Act was vested with the Registrar of Cooperative Societies

The Cooperatives Societies Act of 1922 contained three schedules as general provisions. These were the model regulations for:

- (a) *A co-operative agricultural society with unlimited liability.*
- (b) *A co-operative agricultural society with limited liability.*
- (c) *A co-operative trading society with limited liability.*

The Act provided provisions for limitation about membership which limited membership to individuals carrying farming activities including the production or trading of agricultural products. However, the Act further stipulated that anyone can be a member of a trading cooperative irrespective of their profession. In addition, a cooperative was granted rights to

refusal of buying products or commodities from the society. Only trading was limited to its membership. The Act further provided directions, provisions, and requirements for the establishment of cooperative societies in South Africa. These included the purpose for which these cooperatives established, qualifications for membership and the minimum number of members, procedures for establishment and registration, responsibility of members. The power, and duties of officials, how to form central cooperatives, the structure ultimate purpose of such organizations, procedure for liquidating a cooperative society, and penalties for transgression for registration (Farming in South Africa, 1929).

The South African government later enacted the Cooperatives of Act No. 91 of 1981 to try to improve the law around the establishment of cooperatives in the country. The Act, further repealed in 2005 after parliament passed the Co-operatives Act, No. 14 of 2005.

The new Act sought to provide for the formation and registration of cooperatives, the establishment of the Co-operatives Advisory Board and the winding up of co-operatives. The Act premised on the universal principles underpinning cooperatives which include self-help, self-reliance, self-responsibility, democracy, equality, and social responsibility. In addition, the legislative framework sought to create employment opportunities and to facilitate broad-based economic empowerment and eradicate poverty. The Act envisaged that the country's economy would benefit from the establishment of a variety of economic enterprises in the form of cooperatives. The legal framework would also provide a supportive legal environment to enable these cooperatives to thrive. In doing this, the law provides for targeted support for emerging cooperatives, especially for those cooperatives owned by women and Black people.

Despite support provided by the legal framework and through various enterprise development agencies, the Department of Trade and Industry acknowledges that cooperatives still fail in South Africa. One reason for the failure of these cooperatives is the lack of coordinated and systematic support for these enterprises. Thus, to deal with the challenges faced by cooperatives, the government enacted the amended Co-operatives Act 6 of 2013 which seeks to address skills issues and enhance compliance with legislation. It ensures that monitoring and evaluation of cooperatives development is done appropriately and effectively.

5.3 FORMS OF COOPERATIVES IN SOUTH AFRICA

Cishe and Shisanya (2019) describe a cooperative as an association of persons who unite voluntarily with the aim of addressing the problem they have in common, whether economic, social, or cultural through a collective enterprise. In another definition by Birchall (2004) cooperatives are a self-help group of people who come together to meet the needs they have. Since cooperatives benefit not only an individual but the community at large, the government of South Africa has come in full support of cooperatives (Cishe & Shisanya, 2019). The main cooperative in South Africa was in the agricultural sector, which was, formed, with the aim of boosting the economic wellbeing of a farmer (Van der Walt 2005).

There are all forms of cooperatives in South Africa which are in line with global trends. Cooperative organizations are, in all sectors of the economy although the agricultural sector is the largest (Marcis, Bortoluzzi, de Lima & da Costa, 2019). The Cooperatives Act 14 of 2005 identifies and provides for the registration of three types of cooperatives, namely, primary cooperative; a secondary co-operative; and a tertiary co-operative.

According to the Cooperatives Act 14 of 2005.

- Primary cooperative means:
 - *a co-operative formed by a minimum of five natural persons whose object is to provide employment or services to its members and to facilitate community development.*
- Secondary cooperative means ○ *a co-operative formed by two or more primary co-operatives to provide sectoral services to its members and may include juristic persons.*
- Tertiary cooperative means ○ *a co-operative whose members are secondary co-operatives and whose object is to advocate and engage organs of state, the private sector, and stakeholders on behalf of its members and may also referred to as a co-operative apex.*

Within these three broad forms of cooperatives, the Act further mentions specific types of cooperatives which include but not limited to housing co-operative, worker co-operative, social co-operative, agricultural co-operative, co-operative burial society, financial services cooperative, consumer co-operative, marketing and supply co-operative, and service cooperative.

A brief discussion of four selected common forms of cooperatives is provided below.

- Worker cooperatives are, owned and controlled by employees that have an interest in the business. These employees have an equal vote in the way the business runs. These cooperatives are a variation of business corporates in the sense that they have a personal stake in business ownership (Vieta, Quarter, Spear & Moskovskaya, 2016). According to the Cooperatives Act 14 of 2005, worker cooperative means:
 - *a primary co-operative whose main objectives are to provide employment to its members, or a secondary co-operative providing services to primary worker co-operatives.*
 - Financial Services Cooperatives which provide financial products and services to its members. These products and services span from savings, and insurance, to investments. The primary objective of such cooperatives is to ensure members have access to services at reasonable premiums and rates of interest. According to McKillop, French, Quinn, Sobiech and Wilson (2020), members of financial cooperatives are owners and benefit immensely from the financial gains that the organization accrues. According to the Cooperatives Act 14 of 2005, financial services cooperatives mean:
 - *a primary co-operative whose main objective is to provide financial services to its members or a secondary co-operative that provides financial services to a primary co-operative.*
 - Agricultural Cooperatives are established to get members to work together in the production, processing and marketing of agricultural products and supplies, including inputs to its members. Agriculture cooperatives are defined by Marcis, Bortoluzzi, de Lima and da Costa (2019:1112) as “a community of people who have voluntarily united to achieve economic and social goals”. Agricultural cooperatives are the most common drivers of local economic development in most third world countries.
 - According to the Cooperatives Act 14 of 2005, agricultural co-operative means:
 - *a co-operative that produces, processes or markets agricultural products and supplies agricultural inputs and services to its members.*
 - Cooperative Burial Societies are established for the provision of funeral benefits to their members and their dependents. According to the Cooperatives Act 14 of 2005, a cooperative burial society means:

a co-operative that provides funeral benefits, including funeral insurance and other services to its members and their dependents.

As discussed above, there are several forms of cooperative societies in South Africa that fall within the ambit of the legislation. The four types of cooperatives discussed above are by no means an exhaustive list but are meant to provide the context on the nature of the sector.

5.4 REGISTRATION REQUIREMENTS OF COOPERATIVES IN SOUTH AFRICA

For a cooperative to be registered, it must comply with the requirements of the Cooperatives Act 14 of 2005 as amended. A cooperative is created as a legal entity with the Companies and Intellectual Property Commission (CIPC) as prescribed in the amended Co-operatives Act 6 of 2013. According to the Cooperatives Act 14 of 2005, Section 6, an application to register a cooperative must be made by a minimum of five persons for a primary cooperative (as is the case with agricultural cooperatives). The application is made to the Registrar of Cooperatives.

The application submission must contain the constitution of the cooperative, a list of founding members, a list of directors, and proof of payment of a prescribed fee. The application is made in a prescribed form which is submitted together with proof that a meeting of the members was convened in which the constitution was adopted, and the first directors elected. Section 20 of the Act requires that a cooperative maintain a registered office in the Republic and any changes to the entity's physical address must be communicated to the registrar within fifteen days of such a change.

Agricultural Cooperatives are covered in Part 4 of the Cooperatives Act 14 of 2005. Part 4 Section 3(1) stipulates the main objectives of a primary agricultural co-operative are one or more of the following:

- a) to undertake the marketing of any agricultural product or anything that is derived from an agricultural product; to acquire, or to acquire control over, any agricultural product or anything derived from an agricultural product, and to dispose of it.
- b) to process an agricultural product or anything derived from it, manufacture it, and dispose of the product or of the agricultural product and anything derived from it.
- c) to hire, buy, produce, manufacture, let, sell, or supply services or things required for purposes of farming.
- d) to hire, buy, acquire, produce, manufacture, let, sell, or supply any article for consumption.

- e) to hire, establish, erect, use or make facilities available for use in connection with farming.
- f) to render services which are necessary and useful in farming.
- g) to render any other services, including services which relate to buying, selling, and hiring of fixed agricultural property.
- h) to farm and dispose of farming products, process products or manufacture articles and dispose of them; and
- i) to undertake insurance business which relates to farming risks for farmers.

Section 4(1) further provides directions for debt financing of cooperatives where a farm or farm produce may be pledged as collateral for the loan. Any loans from a member to the cooperative are the responsibility of the cooperative. The Act provides a list of loan transactions which include farming implements, inputs, etc.

5.5 TRENDS IN COOPERATIVE SOCIETIES IN SOUTH AFRICA

According to the baseline study conducted by the department of trade and industry (DTI) between 2010 and 2012 most cooperatives were registered in KwaZulu-Natal (26% percent). However, the food and agriculture cooperatives have a mortality rate of 89 percent (survival rate of 11 percent) compared to the sector average of 83 percent (DTI, 2010). The housing cooperatives have the lowest mortality rate of 68%. According to Rena (2017), the high mortality rates in the cooperatives sector is due to poor networks among cooperatives and the existing support mechanisms that fail to support the entire value chains of some cooperatives.

Between 1922 and 1994, an average of 1 444 new cooperatives were established every decade. These were established under the Cooperatives Acts of 1922, 1936 and 1981. Entrants into the cooperative sector increased to 3 362 new cooperatives (57 percent increase) between 1995 and 2004. An exponential growth in the registration was witnessed between 2005 and 2007 which saw 1 288 new cooperatives (72 percent increase) being registered. As in March 2009, 22 030 cooperatives were registered (DTI, 2010). The DTI Baseline Study indicates that the high cooperatives registration during 2005 to 2009 was attributable to the creation of a conducive environment through the enactment of the Cooperatives Act of 2005. In addition, the provisions to the Act mandated government agencies to provide financial support through grants. Thus, it could be argued that the growth in the registration of cooperatives was due to the availability of grant funding provided by the government. The growth in cooperatives became rapid

thereafter with approximately 142 000 cooperatives in the country by the 2015/16 budget year (CIPC, 2016).

The DTI Baseline Study further revealed that more than 50 percent of cooperatives are in rural areas and are typically less than two years old. The country's cooperative sector is also weak and small with the majority being at start up stage. In terms of membership, most cooperatives have less than ten members and are majority female owned (64%) with youth between 16 and 34 comprising 40 percent of membership.

5.6 CHALLENGES IN THE COOPERATIVE SECTOR

Despite a resounding growth in the number of cooperatives in South Africa, the industry has experienced an alarming mortality rate (Rena, 2017). Cooperatives in South Africa often collapse, and their chances of survival are slim due to a plethora of factors. South Africa is in a state of initiating and implementing cooperatives as a measure of economic development, alleviating poverty, and addressing unemployment issues (Thabo & Mbohwa, 2015). As such, government policies and strategies on cooperatives have not been put in place.

Cooperatives in South Africa are becoming prominent; however, the National Cooperative Association is no longer effective, hence the cooperatives face the challenge of standing on their own (Rena 2017). As much as cooperatives contribute to local economic development (LED) within communities, there are challenges that often hinder the effectiveness of cooperatives in South Africa. Khumalo (2014) has noted different challenges that South African cooperatives face. These are financial and technological inaccessibility which lead to poor markets, lack of knowledge as far as cooperatives are concerned, lack of leadership and management skills within cooperatives, cooperatives not being independent and cooperatives being highly politicised. From the study that was conducted in Gauteng Province, the findings revealed that cooperatives lack capital and survival strategies (Vivence, 2021).

In an earlier study conducted in the Limpopo province by Van der Walt (2005), the findings state that cooperatives face many challenges These are poor management, lack of skills, in fighting of members, financial challenges, and the deregistration of cooperatives soon after registration. Raidimi and Kabiti (2019) assert that skills development initiatives are available in many educational institutions. Even through, these resources needed to harness through improved communication between education institutions and farmers. For instance, according

to Zwane (2019), livestock cooperatives in South Africa face conflicts, arising from poor leadership and selfishness by some opportunistic individuals within the organization.

In this regard, Zwane (2019) recommends that leadership assist with capacity building to farmers, when new policies are introduced. More specially in the advent of droughts and other natural disasters situations. In such cases, farmers should get organized and work as a team to fight the effects of natural disasters instead of competing among each other. Related to natural disasters is the issue of human-induced soil degradation which leads to poor soil fertility and declining yields (Lee, 2017). In this vein, Lee advocates for the use of mechanized methods to cultivate fields to avoid soil degradation. Without adequate extension services, poor soil fertilizer may be difficult to treat and could lead to the failure of cooperative projects. On this, Paterson *et al.*, (2015) argue that despite numerous soil tests done for small scale farmers in South Africa, the main problem is that these soil analyses are done for specific crops and can thus is not generalized for other rotational crops.

Another striking factor is that of the high transaction costs associated with the procurement of agricultural inputs (Cousins, 2015). Cousin's advocates for collaborated and systematic system of purchasing these inputs to lower transaction costs for these cooperatives. Daum and Birner (2020) posit that cooperatives face problems relating to collection action, which makes it difficult for them to share machinery. However, Daum and Birner (2020) acknowledge that the formation of cooperatives is vital for the organization to have access to services, credit, and training. In a study by Rogerson and Nel (2016), cooperative development support is most prominent in the Gauteng, Limpopo, and Eastern Cape provinces of South Africa, whilst job creation from cooperatives is notably high in Gauteng, Eastern Cape, and North-West provinces. This further leaves the question of why the country's most populous province of KwaZulu-Natal does not feature on either cooperative development support or employment creation from these cooperatives.

5.7 CHAPTER SUMMARY

This chapter has discussed the origins and development of cooperative societies in South Africa. It is evident from the discussion that the leadership of this country has sought to spur economic development by promoting local economic development initiatives, such as cooperative societies. However, due to rent seeking behavior, legislation has been changing rapidly to protect both cooperative members and the other economic players in the ecosystem.

The legislation has developed in line with international best practice to consist of primary, secondary, and tertiary cooperative societies. At the turn of the millennium, amendments to the legislation to provide cooperatives with development support led to a massive increase in the number of registered cooperatives in the country. However, as discussed in this chapter, the growth in the number of cooperatives has not come without its inherent risks and challenges. The availability of funding has had commensurate growth in the number of cooperative societies. None the less, the mortality rate has been exceedingly high owing to several reasons. The chapter concludes by drawing on literature that indicates the impact of cooperative societies on job creation versus development support that they receive. Interestingly, the KwaZulu-Natal province does not feature on the list despite being the second most populous province after the Gauteng province.

The next chapter presents the research methodology used in this study.

CHAPTER SIX

RESEARCH METHODOLOGY AND DESIGN

6.1 INTRODUCTION

This chapter presents the research design and methods used in this study. It presents the research blueprint, and the specific techniques to be employed to identify, select, process, and analyse information about the research problem in question: what challenges are encountered by female entrepreneurs in the small to medium-scale agricultural sector in Pietermaritzburg in KwaZulu-Natal? The research design and methodology allow the study to deal with the issue of how data will be collected and how data will be analysed. The chapter starts by presenting the philosophical worldview, research design, methodology, approach, study site and target population. In addition, the chapter deals with the sampling method, sample size, data collection instruments, data analysis techniques, data control measures, and ethical issues. It closes with a summary of the chapter.

6.2 PHILOSOPHICAL WORLDVIEW

This study falls into to the paradigm of phenomenology, which is a disciplinary field in philosophy. The discipline of phenomenology is the study of structures of experience or consciousness, according to Leedy and Ormond (2015). Phenomenology studies the

experiences from a subjective point of view. It is characterized by sensory qualities of seeing, and hearing, and what it is like to have sensations of various kinds (Holman, Adams & Ellis, 2013; Neubauer, Witkop & Varpio, 2019). These are experiences that cover the emotions, awareness, memory, and the like. This study will benefit from phenomenology as it will study the participants' conscious experience of the challenges encountered by female entrepreneurs in the small to medium-scale agricultural sector in Pietermaritzburg in KwaZulu-Natal as experienced from the subjective point of view.

6.3 RESEARCH DESIGN

A research design is a detailed plan of how the study will be conducted. Creswell (2014) defines a research design as a research blueprint or a detailed plan of research action. This study will use a case study design. According to Yin (2012), a case study research design allows a study to examine data within a context. A case study research design also allows for the selection of a small and geographical area of study with a limited number of participants. Moreover, a case study research design investigates a contemporary real-life issue in a detailed manner by examining relationships between existing contextual conditions (Johnson & Christensen, 2012). Kaler and Beres (2010) state that a case study research design studies real-life context in an empirical manner, especially when boundaries and the research problem are not clearly defined.

This type of research design uses many sources of data, to study one research problem. In agreement with this, Ivankova (2015) states that a case study research design focuses on a single event, or behavioural case. Several scholars state that the case study research design allows researchers to collect, analyse and report data in a systematic manner. A case study design has been selected because it will allow up-close, in-depth research and produce firsthand information about what the researcher intends to investigate and conclude (Rashid *et al.*, 2019). The research design will enable the researcher to examine data within the context of its use and occurrence. The design is suitable for the study because it will allow for the observation of the phenomenon under study that will add a unique aspect to the richness of the data. Variations in terms of data collection instruments will lead to the generation of in-depth data that make it easy to understand and explain the complexity of the research problem.

The case study for this research is a group of female entrepreneurs in the small to medium scale agricultural sector in Pietermaritzburg which is the capital and the second-largest city in the

province of KwaZulu-Natal (Statistics South Africa, 2016). Pietermaritzburg was founded in 1838 and is currently governed by the Msunduzi Local Municipality. Its Zulu name, 'uMgungundlovu' is the name used for the district municipality. Pietermaritzburg is popularly called Maritzburg in English and Zulu is alike and is often informally abbreviated to PMB.

It is a regionally important industrial hub, producing aluminium, timber, and dairy products, and is the main economic hub of the uMgungundlovu District Municipality. The public sector is a major employer in the city due to the local, district and provincial governments being located here. Pietermaritzburg is home to many schools and tertiary education institutions, including a campus of the University of KwaZulu-Natal. In 1991, it had a population of 228,549. The current population is estimated at over 600,000 residents (including neighbouring townships) and it is home to one of the largest populations of Indian South Africans in South Africa (Statistics South Africa, 2016). The study is aimed at investigating female entrepreneurs in the small to medium-scale agricultural sector in Pietermaritzburg.

6.4 RESEARCH METHODOLOGY

There are three types of research methods, namely quantitative, qualitative, and mixed methods. Quantitative research methodology collects data that is converted into statistics by putting the data into categories, sequence order or measured units. Data which is collected using quantitative research methodology is presented using graphs and tables. Qualitative research methodology is an in-depth investigation into a phenomenon in which data is not in the form of numbers. Mixed methods combine quantitative and qualitative research methods. The data collected is in-depth and statistical and is used to understand a phenomenon under study.

6.4.2 Qualitative research methodology

This study makes use of a qualitative research design. According to Michael and Cochran (2002), qualitative research methods seek to unearth experiences and attitudes of participants and deal with such questions as what, how or why regarding the phenomenon. This research design enables the researcher to study attitudes and behaviours of the participants within their natural setting. This explains why qualitative research is concerned with qualitative phenomena involving quality (Rajasekar *et al.*, 2013; Aspers & Corte, 2019). As such, some of its characteristics include being non-numerical, descriptive, applying reasoning and using words to get the meaning, feeling, and describing the situation. Qualitative methods comprise three

most common methods, which include participant observation, in-depth interviews, and focus groups.

In this research, the researcher adopted the case study method to explore the ‘what,’ ‘how’ or ‘why’ of a phenomenon under study: challenges facing female entrepreneurs within the small and medium business scale: a case study of agriculture cooperatives in Pietermaritzburg. Qualitative methods comprise three most common methods, namely including participant observation, in-depth interviews, and focus groups. To ascertain key information required for this study, the researcher employed in-depth interviews and focus groups.

This study uses a qualitative research methodology that allows the researcher to investigate the meaning that participants attribute to the situation, event, behaviour, and interactions with others. Saldana (2009) states that a qualitative research methodology is designed to reveal underlying factors to a phenomenon or underlying meaning to an action. In other words, a qualitative research methodology investigates interpretations, meanings, symbols, processes, and relations of social real life. The qualitative research methodology generates descriptive data that must be interpreted using systematic and rigorous methods of transcribing, coding, analysing trends and themes. The focus of qualitative research methodology is everyday life and people’s experiences that can help formulate theories or conceptual frames for better understanding of the research problem and how to deal with the problem (Collins & Stockton, 2018).

The study uses qualitative methods because the method creates an in-depth understanding of the phenomenon under study. Therefore, this method benefits this study as it is aimed at generating an in-depth understanding of participants’ attitudes and experiences of female entrepreneurs in the small to medium-scale agricultural sector in Pietermaritzburg. By using a qualitative research methodology, the data collected has an enhanced level of detail which provides more opportunities to glean the insight needed to understand the research problem. In doing so, a qualitative research methodology helps to understand issues that affect female entrepreneurs in the small to medium-scale agricultural sector in Pietermaritzburg.

The method is also used because it is flexible and can adjust in the research environment. In addition, the qualitative method is used because the study can be carried out with minimum costs because it uses smaller sample sizes, which saves on costs. This allows for quick research findings to be obtained. Qualitative methodology is also used because it provides an openended

research process. The open-ended structures of qualitative research make it possible to get underneath superficial responses and rational thoughts to gather information from an individual's emotional response (Bryman, 2017; Mirriam, 2009).

In qualitative research, Creswell (2014) states that the objective is exploratory and descriptive rather than explanatory. The descriptive nature of qualitative research allows the researcher to provide a description of the experiences of the participants, which either sustains or confronts the theoretical assumptions on which the study is based (Meyer, 2001; Creswell, 2014; Bryman, 2017). The current research is interrogative, since it aimed to bring new understanding and meaning to the topic of female entrepreneurs in the small to medium-scale agricultural sector within the South African context. Extraordinarily little research has focused on female entrepreneurs in the small to medium-scale agricultural sector. Within the tradition of qualitative research, there are three broad categories of data collection: participant observation; interviewing; and the use of personal documents (Creswell, 2014). In the present study, interviews were used as the main method of data collection. A semi-structured interview approach was adopted, which facilitated an understanding of the problem from the perspective of the participants under investigation.

6.6 STUDY SITE

A study site is a geographical place where a study is conducted. The study was conducted in Pietermaritzburg. The figure below presents a map of Pietermaritzburg.

Figure 6.1: Pietermaritzburg Map



Source: Map data, afriGIS (2018)

The Msunduzi Local Municipality (MLM) is referred to as the 'City of Choice'. It is only 45 minutes by road from Durban (Africa's busiest port); one hour away by road to the new King Shaka Airport; one hour by air from Pietermaritzburg Airport to O.R. Tambo International Airport in Johannesburg; and 90 minutes from the central Drakensberg Mountain resorts. The Msunduzi Local Municipality is one of four municipalities in the uMgungundlovu District.

6.7 GEOGRAPHICAL LOCATION

The MLM covers a total area of 634 km² and is situated on the N3 highway at the junction of an industrial corridor from Durban to Pietermaritzburg and an agro-industrial corridor from Pietermaritzburg to Estcourt. The MLM comprises three areas, including the former Pietermaritzburg borough, the greater Edendale and the Vulindlela tribal area.

6.8 DEMOGRAPHIC AND ECONOMIC OVERVIEW

The MLM is characterised by population growth, statistics from the 2011, census show that the population of the MLM was 618 536 in 2011. This reflects a population growth of 1, 2% per annum between 2001 and 2011 (Statistics South Africa, 2012). The MLM emerged as the main

economic hub within the uMgungundlovu District Municipality. The economy is supported by a vibrant manufacturing industry, retail trade, businesses, finance, and government service sectors. Specifically, the main economic sectors of the municipality and their contribution are the following: Community services (29%), finance (24%), transport (13%), trade (12%), manufacturing (12%) and informal businesses (10%) (Msunduzi Local Municipality, 2016).

6.9 DEMOGRAPHIC PROFILE OF MSUNDUZI LOCAL MUNICIPALITY

The total population is estimated to be 67 000, which was counted in 2016. Therefore, the three categories of the population are categorized as follows: 1) Population under 15 accounted for 31, 5 % (670 000); 2) Population between 15 and 64 accounted for 64, 7 % (670 000); and 3) Population above 65 comprises 3.8 % (670 000).

Table 6.2: Demographic Profile MLM

Profile	2011	2016
Total population	618 536	670 000
Population under 15	26,7%	31,5%
Population between 15 and 64	68,3%	64,7%
Population above 65	5,0%	3.8%
Total percentage	100%	100%

Source: MLM (2016)

6.10 TARGET POPULATION

Target population refers to the entire group which the researcher could have collected data from where findings from such data may be generalized (Creswell, 2014). According to Yin (2009) the target population usually has varying characteristics, and it is also known as the theoretical population. The researcher's target population in this study is female-owned cooperative enterprises in the agricultural sector in Pietermaritzburg.

6.11 SAMPLING METHOD

Sampling is the process of selecting a small portion of the population to represent the entire or target population in a research study (Ghauri & Gronhaug, 2002). There are two types of sampling methods, namely probability and non-probability methods (Etikan & Bala, 2017).

Probability sampling allows all subjects of the study to have an equal chance of participating in the study. This method, also called the random sampling method, provides a fixed and known opportunity of selecting participants (Etikan & Bala, 2017). The method allows the study to generate conclusive findings which are statistical in nature, with little bias and quite objective.

The non-probability sampling method is a sampling method where participants are selected to be part of the sample using the principle of non-random selection. The basis of selection is arbitrary. For this reason, the possibility that one will be chosen to participate in the study is not specified and not known. Non-probability sampling is prone to bias, is subjective and inferences are analytical (Gill, 2020). Nonetheless, for this study, participants have been selected to participate in the study using a non-probability sampling method in which the selection of subjects or units into the sample is by judgement of the researcher.

Moreover, purposive sampling has been used to select cooperative members and community members where the researcher purposely selected those relevant to and suitable for the study (Sarantakos, 2005; Gill, 2020). Purposive sampling is known as a subjective, judgement or selective sampling method. Participants are chosen to participate in the study based on the judgement of the researcher. A researcher uses his or her experience and knowledge to generate a reliable sample. The purposive sampling method is chosen because the method is one of the most cost and time effective sampling methods available.

The method has also been chosen because of its effectiveness in investigating contemporary and anthropological issues, such as entrepreneurship, where findings generated help understand the research problem under study. The researcher has purposively selected female cooperatives at the primary level and secondary level (small to medium scale cooperatives) within the agricultural sector in Pietermaritzburg because they have the characteristics of the population needed and are in line with the research objectives.

6.12 SAMPLE AND SAMPLE SIZE

Sanders (2010) stipulates that the sample size of a study most typically refers to the number of subjects or units chosen from the entire population from which data is gathered. However, a sample size can be a designated sample size, which is the specified number of subjects or units selected for data collection and the final sample size that is the number of subjects or units for

which data is collected (Silverman, 2013). The sample for the study was selected from the target population as identified. A sample size of 20 is deemed adequate to provide data and information, as this number allows for in-depth investigation; provides acceptable breadth and depth of focus; as well as insight into the subject matter. Furthermore, it was manageable for the researcher in terms of time and cost.

Table 6.3: Sample Size

Number of female cooperatives selected	Number of female cooperatives	Number of female cooperatives
Primary level cooperatives	150	10
Secondary level cooperatives	156	10
Total	306	20

In short, a total of 20 female-owned agricultural cooperatives in Pietermaritzburg were selected for the study. Diversity was beneficial for an in-depth understanding of the problem because the findings were informed by the perspectives of people involved at various levels. Therefore, 10 cooperatives at the primary level and 10 cooperatives at the secondary level were selected, with the intention of depicting a true reflection of what is happening within the agricultural sector in Pietermaritzburg.

6.13 DATA COLLECTION INSTRUMENTS

Data collection describes how the data required for the study is retrieved from the participants. The process of data collection is discussed in the sections below.

6.13.1 In-Depth Interviews

In-depth interviews are used to collect data in qualitative research and involves conducting interviews with sampled individuals to explore their perspectives on the phenomena under investigation (Creswell, 2014). This technique was chosen because it offers the opportunity to capture rich, descriptive data about people’s behaviours, attitudes, and perceptions, and to unfold complex processes (Gill, 2008; Gill, 2020). In agreement, Stringer (2007) has stated that

semi-structured interviews increase the validity of information gathered because participants tend to share their opinions, values, attitudes, and beliefs in relation to the context of the research problem. Data is deliberately collected using semi-structured interviews that have a less structured format with some level of flexibility in approach. Babbie (2010) states that the researcher is at liberty to adjust the questions and change the direction of the interviews.

Predetermined questions are used to initiate discussions and the interviewer can follow up on a discussion angle by asking further questions not included in the interview guide. This interview format gives respondents freedom to express themselves fully and allows the interviewer space to pursue lines of enquiry opened by the interview (Yin, 2009). This is also what Booth, Papaioannou and Sutton (2012) mean when they say that semi-structured interviews allow participants to answer questions in a more detailed manner. Semi-structured interviews are suitable because they have allowed rich and detailed information to be collected on the challenges faced by female entrepreneurs in the small to medium-scale agricultural sector in Pietermaritzburg. Semi-structured interviews create an informal atmosphere that allows participants to be honest and open enough to share their views on the subject under study.

6.13.2 Justification for using interviews

Creswell (2014) argue that interviews are valuable tools for collecting data in qualitative research. The one-on-one interview method allows the researcher to interact with the participants and to observe non-verbal cues during the interview process. In this study, a semistructured interview method has been used to allow for an open, in-depth discussion of the research topic. This type of interviews enables the interviewer to gather information from the participant without providing any categorization of the issue at hand (Denzin & Lincoln, 2005; Bryman, 2017). Interviews enable the researcher to gain insight and understanding of the participants' constructs during the dialogue. According to Creswell (2014), the interview method provides room for clarity and further probing of the discourse under investigation, and it further builds trust between the interviewee and interviewer.

6.13.3 Preparing for the interview

Creswell (2014) states that interview preparation is essential for effective data collection. In preparation for interviews, the researcher must have reviewed sufficient literature on the

discourse and should also view himself/herself as an interviewee. In this study, the interviews were conducted after a thorough review of literature to understand the themes and issues relating to the discourse.

6.13.4. Establishing a relationship with the interviewees

According to Creswell (2014), at the start of the interview, the interviewer must introduce themselves to ensure that the interview is assured of the credentials of the interviewer should help to develop a good relationship with the targeted participants. For this study, the researcher visited the participants before conducting the interviews. This enabled the researcher to establish a good relationship with the participants and this made the recruitment of the participants much easier to handle. The researcher also identified and used suitable interview rooms which created a conducive atmosphere for the interviews as suggested by Creswell (2014) and Bryman (2017). A voice recorder was used to store the conversation, and this was discussed with the participants prior to the commencement of the interview. The participants were informed of the process of recording and transcribing the interview as part of data collection.

6.13.5. Conducting the interviews

As recommended by Creswell (2014), the researcher initiated the interviews with a broad question and encouraged the interviewees to keep talking by nodding her head during the process. In some cases, the interviewee was encouraged to elaborate on some issues raised as this is recommended during in-depth interviewees to get the true meaning of a phenomenon (Creswell, 2014).

6.13.6 The role of the interviewer

One of the main roles of the interviewer is to probe the phenomenon under study (Emans, 2019). This is done primarily to encourage the interviewee to provide more information on the phenomenon being studied. In doing this, and as per the recommendation of literature, probes were as neutral as possible to avoid bias (see Creswell, 2014; Emans, 2019). Probing was achieved easily because the interview questions were open ended which encouraged discussions. This further allowed interviewees adequate time to express their feelings and respond in their own words during the interviews as put forward by Polit and Hingler (2009)

and Weller *et al.*, (2018). However, it should be noted that it is not possible for interviewers to be neutral all the time and hence subjectivity in the research should be acknowledged (Parker, 2014).

When tracking the interviews, it is recommended that interviewers show interest and speak closely to the content for the interviewee to answer the questions freely. This, according to Creswell (2014), is important and allows the interviewer to ask questions for clarity and to further understand the progress of the interview. Interviewers are expected to repeat their own words and the feelings of the interviewees to understand the subject matter comprehensively (De Vos, 1998).

6.13.7 The role of the interviewee

In this study, open ended questions were used as a data collection instrument. This was done to put the participants at ease and enable free and open participation in the interview. This further enabled the participants to qualify their responses and explain the meaning of their answers in detail, as suggested by Roulston (2018).

6.13.8 The interviewer as the main data collection instrument

The researcher collected the data without the use of research assistants which made the data collection more robust and in context. Thus, the researcher was able to make decisions regarding the sequence of questions as the interview progressed. All interviews were voicerecorded and then transcribed into meaningful descriptions as recommended by De Vos (1998) and Palmgren and Liljedahl (2019).

6.14. Data collection measures

Although qualitative research has been criticized for lacking rigour and for generalization of findings (see Denzin & Lincoln, 2005), its proponents argue that the issue of generalizability of results is problematic as no two individuals can experience the same problem the same way. Thus, the validity of the qualitative research framework depends on the how the researcher provides details to enable unbiased interpretation by the reader (Abib & Hoppen, 2019). To avoid subjectivity, the researcher should adequately describe the social context in which data collection and analysis was done (Horsburg, 2003; Hayashi Jr, *et al.*, 2019; McGrath *et al.*,

2019). To avoid subjectivity, a researcher may use triangulation where multiple data sources are used in the investigation to produce understanding of the phenomenon.

6.14.1 Credibility of the research

To ensure the credibility of the study, the researcher employed qualitative research methods that have been used in previous studies and as informed by literature. All participants were given an option or right not to participate or to withdraw from the interview process at any time. According to Shenton (2004), ensuring these protocols are followed is important as data is only collected from those who freely want to participate in the study.

6.14.2 Transferability

According to Ryan, Coughlan and Cronin (2007), transferability refers to the chance of the study findings being like research done in the same subject matter and the same environment. In this study, the researcher ensured transferability was achieved using research objectives and guidance from the theoretical framework in developing the interview tool.

6.14.3 Dependability

As suggested by Creswell (2014), the researcher employed research questions to guide future studies in female cooperatives in the agricultural sector. The research questions led to the development of in-depth interview questions which later produced thematic areas for discussion.

6.15. DATA ANALYSIS

The voice recording was first translated from IsiZulu to English then transcribed verbatim in plain text. During the transcription phase, the main question posed to the interviewees was written as the subheading for each transcribed data. Pages were numbered sequentially, and interviewees were assigned codes for identification purposes. However, identity of the interviewees was removed to ensure confidentiality of the participants. Recorded transcripts were transcribed within 24 hours of the interview to ensure the recalling of the discussion and the emotions and body movements of the participants. However, it should be noted that the discourse on the subject matter focused primarily on analysing spoken words which were

transcribed into readable data. The data was then read by the researcher to identify themes, it was read several times to understand the constructs and discourses.

More interviews were conducted to understand more constructs and to develop a deeper understanding of the discourse. This was done to ascertain information saturation. Three further interviews were conducted to reach this saturation point. During the interview phase, constant review of literature was done to ensure the credibility of the findings. This process is supported by Gibbs (2002) who states that during qualitative data collection, an interactive review of literature must be conducted to ensure stability of the findings.

6.15.1 Thematic analysis

As per the assertions of Brown and Clarke (2006), thematic analysis is pivotal to the qualitative data analysis and patterns arising for the data are used to describe the phenomenon under study. Thematic analysis is a method for identifying, analysing, and reporting patterns (themes) within data (Brown & Clarke, 2006; Kiger & Varpio, 2020). This study employs the thematic analysis approach which has enabled the researcher to organize and describe data in a sound and rich manner (see Boyatzis, 2013). These themes are discussed in detail in the next chapter.

6.16 ETHICAL CONSIDERATION

The researcher obtained a gatekeeper's letter from an Agriculture organization named Jonaka Development and Associates, which works with the Msunduzi Municipality, to conduct the study. Ethical clearance was obtained from the University of KwaZulu-Natal, and a second gatekeeper's letter was obtained from Pietermaritzburg's Msunduzi Local Municipality. Participants were free to discontinue their participation at any time during the research process. The anonymity, confidentiality and dignity of the respondents were upheld and respected. To comply with ethical considerations in conducting research, all participants provided verbal consent to be interviewed and to participate in the research.

The participants therefore willingly participated in the study after they were approached by the researcher (Leedy, 2000; Neuman, 2000) and the research purpose and process had been explained to them. While it is widespread practice to request written consent, Silverman (2009) states that highly formalized ways of securing consent should be avoided in favour of fostering relationships in which ongoing ethical regard for participants is sustained. In this study, verbal

consent was deemed appropriate. In support of this form of consent, Fritz (2008) has argued that the strength of qualitative research often lies in the informality of the communication as well as the interactive nature of the research process.

The purpose of the research was explained to the participants and the participants were told that should they wish to withdraw at any point during the interview, they could do so. Permission to record the interview was also obtained from the participants and none of the participants had difficulties with the tape recording of the interviews. It was further explained to the participants that their information would remain confidential and that the specific content of individual interviews would only be discussed with the supervisor. The supervisor and the participants were unknown to each other. In the final report, the identities of the participants were removed, and alias names were used for the participants. As a result of the personal nature of the content of the research interview, the researcher found it appropriate to emphasize the confidentiality of the information and to establish trust with the participants in the early phase of the interviews.

At the end of the interviews, both the participants and the researcher debriefed by talking about the interview process itself and the impact of the interview. The aim of the debriefing was to ensure that the participants were not left emotionally traumatized from the interview, although it was interesting to note that the participants stated that they enjoyed the interviews. These observable benefits of the study were immediate. The participants all appeared to engage freely in the conversations, and this indicates that the interview process allowed the participants to share their experiences in a safe environment, without feeling judged.

This experience itself could have been therapeutic for some of the participants as it allowed them to give voice to their experiences, which is particularly salient in a society where women's voices are marginalized and silenced (Motsemme, 2002). As outlined in Chapter One, the researcher hopes that this study will add to the sparse literature on challenges faced by female cooperatives or entrepreneurs in the small to medium-scale agricultural sector in both South African and international literature.

It is also hoped that the findings, although they cannot be generalized, will add value to society in general by providing insights into the challenges faced by female cooperatives or entrepreneurs in the small to medium-scale agricultural sector in South Africa and thereby enable society at large to understand these experiences.

6.17 SUMMARY

This chapter has presented the philosophical worldview and research design for the study, followed by the research methodology for the execution of the study. The specific research methodology was chosen because of its relevance to the research problem. The chapter also provided information on the study site, the population, sample methods, data collection instruments and data control measures. The chapter ended by discussing issues of research ethics, and the chapter summary.

The next chapter presents, discusses, and analyses the findings generated in this study.

CHAPTER SEVEN

DATA PRESENTATION AND DISCUSSION OF THE FINDINGS

7.1 INTRODUCTION

The previous chapter presented the research methodology underpinning this study. This chapter presents the data and discussion of the findings. The chapter is divided into four sections. Section One deals with the research process that guided this study. Section Two presents the research questions the study set out to interrogate in this study, whilst Section Three presents the data and discussion of the findings and Section Four presents the summary to the chapter.

7.2 SUMMARY OF THE RESEARCH PROCESS FOLLOWED

The data collection process started after the researcher was granted a gatekeeper's letter from the organisation under study and she then sought ethical clearance from the University of KwaZulu-Natal to conduct the study. The researcher emailed all cooperatives that were purposively recruited to make a sample. The researcher saw it as an important duty to ask for consent from all the service consultants that were selected as participants. Consent was sought

before the researcher started the process of collecting data. All the service consultants recruited to be part of the study received a consent form that provided enough information on the nature of this study. One week after giving participants the consent form, the researcher collected data by using semi-structured in-depth interviews. The data was then analysed by employing a deductive thematic analysis technique where coding and the generation of themes was informed by existing ideas or concepts.

7.3 GOVERNMENT SUPPORT

The objective of the study was to examine the challenges faced by female farmers in terms of government support services.

7.3.1 Lack of extension support services

The study found that although extension services are critical to female cooperatives, the support services that female cooperatives receive is inadequate. Here is what one participant said. Her views reflected the views of several participants:

“We have support services from government, but the problem is that the support services are inadequate. As emerging female cooperatives, how can we contribute to increased agricultural growth with minimum support services”? (Interviewee 3, 2017).

In agreement with this, another participant said:

We cannot have rural agricultural development and positive influence on the farm income when we have insufficient support services (Interviewee 13, 2017).

The findings showed that although most of the participants receive extension support services from government, these were inadequate. The views presented above concur with Aliber and Hall (2012) who found that female farmers in rural areas in KwaZulu-Natal (South Africa) were receiving unsatisfactory extension support services from government. They explained that, if well utilised, extension support services can help to introduce new technological innovations and identify challenges that female cooperatives face in their agri-business. It is therefore important for government to embrace the local government-based extension support services and bring agriculture extension officers to extension centres, especially those in rural

areas. This will help to bring extension services nearer to female farmers, especially in rural areas. Hart and Aliber (2010) state that agricultural extension officers are there to work directly with farmers and agribusiness companies.

Therefore, there is a need to put pressure on government to ensure that agricultural extension officers aid female farmers to make better decisions to increase agricultural production. Caris (2016) states that the role of agriculture extension officers, armed with modern techniques and the latest information on agriculture, is to communicate this agricultural information to female farmers. In support of the findings above, Bienabe and Vermeulen (2011) propose that agriculture extension officers should provide consultation with female farmers running cooperatives. This can be done by providing guidance and demonstrations, and by giving talks on the latest agricultural technologies and how to take advantage of these technologies

Anyike (2011) argues that agriculture extension farmers should run agricultural seminars and create opportunities for female cooperatives to work with other experts in agriculture as a way of learning more and developing new agricultural methods to enhance production. Most of the participants said that extension officers visit them occasionally.

Here is how one participant put it:

I am not saying that there are no extension officers. The thing is that extension officers visit us occasionally. There is no way we can achieve our business goals relying on our resources. How can we commercialise emerging female farmers without extension officers to provide appropriate extension support services? Sometimes we travel long distances and spend so much on transport to get information we need about our livestock and crops (Interviewee 1, 2017)

In support of the perspective above, Andrew, Ainslie, and Shackleton (2013) find that the strategy of having extension officers who are based in or visit the area helps farmers reduce transport expenses. This is because farmers can get the information, they need within their local area without travelling long distances to get support offered by the provincial officers, as was the case before the collapse of apartheid.

In support of the finding above, Anyike (2011) explains that agriculture extension officers are supposed to be intermediaries between researchers and female farmers, but they rarely visit

farmers. This means that agriculture extension officers do not operate effectively as communicators and facilitators, and do not adequately assist female farmers in their decisionmaking processes and ensure that knowledge is implemented to get the best results for their farming activities. Crais (2016) states that the visit of extension officers to agriculture female cooperatives in rural areas should be promoted as this is one way in which government can effectively extend agriculture services to female farmers. Farmers also reported that they receive support services from community stakeholders:

In addition to extension support services we receive from extension officers, who are government employees, we have support services from nongovernmental organisations
(Interviewee 3, 2017)

In agreement, another participant said that they receive diverse types of agricultural support services:

Yes, agriculture stakeholders also provide us with different extension services including communication on agricultural information such as animals, crops, natural resources, and on how best to utilise farmland (Interviewee 2, 2017).

The findings show that female farmers get diverse types of support services, despite these being inadequate. These findings correspond well with Khaile's (2012) study which found that female farmers get different services, including guidance on how to implement proper irrigation schemes, how to fight animal diseases, cheaper ways of storing water and how to save on the cost of farming equipment and procedures. A study by Chikazunga and Paradza (2012) found that when female cooperatives are given different support services and understand the services given to them, they tend to use the services on their farms to obtain the best production. In agreement, Moloji (2010) states that, if well utilised, extension officers can play an especially vital role in mobilising female farmers in rural areas.

Farmers can benefit immensely if extension officers organise information and farmers' days and invite different stakeholders including business agencies, trade investments and government agencies such as small enterprise development agency (SEDA) to interact with rural female farmers through presentations focusing on the services they offer to farmers (Ngemntu, 2010). Khaile's (2012) study finds that some extension officers are working closely with female farmers, whilst some rarely visit farmers in the rural areas to empower and support

them. The findings show that farmers are dissatisfied with the service provided by extension officers, the common view is services are inadequate and lack specific and uniform direction.

The researcher also observed that there are no records to show for officers' visits in most female farms visited. There is no proper engagement with extension officers, where sharing information on agriculture activities was done and recorded. Although extension officers provide services to farmers, the quality of the service is questionable because farmers say that there is a lack of follow-up by extension officers. This would be a way of ensuring that the resolutions and recommendations from meetings are implemented. Loge (2015) states that the following up on emerging female farmers helps agriculture officers increase farmers' experience and knowledge of what is happening at the ground level in agriculture. It also gives an indication of the agriculture officers' commitment to providing support to existing emerging female farmers and contributing to their development. Following up on farmers helps to ensure that agricultural skills, experience, and talent are well guided (Khapayi & Celliers, 2016).

7.4 ACCESS TO LAND

The researcher sets out to ascertain the challenges female farmers are facing related to access to land, as discussed below.

7.4.1 Small pieces of land for farming

Findings show that female cooperatives' lack of access to land is hampering their agri-business. Reflecting the views of participants, one participant had this to share:

Land plays a key role in the process of women's agriculture productivity. But the challenge is that we do not have access to land that we can use for our agricultural production (Interviewee 4, 2017).

The view above is supported by another perspective, presented below:

As you may be aware, access to land when supported by other factors, is an important income generating venture in rural areas. Though some female farmers have land, the size of the land they have is not enough to embark on large agribusiness activities (Interviewee 7, 2017).

The study further found that most of the farmers were conducting their farming activities on communal land. The largest size of land amongst female cooperative members was less than seven hectares. There are very few farmers that were part of this study that owned land bigger than seven hectares in size. Many farmers interviewed were engaging in agri-business on communal land.

Here is what a participant had to say:

We do our agribusiness on communal land and there are high numbers of people living on the same piece of land. As a result, the largest piece of land one can have is six to seven hectares (Interviewee 16, 2017).

Getting access to land seems to be a sincere concern amongst female farmers, making it difficult for them to participate in agri-business. The finding is supported by Relating (2011) who observes that female farmers' access to land is one of the many challenges they are facing in Africa, preventing them from taking part in lucrative agri-business. It is therefore important for government to ensure that female farmers have access to adequate land to produce enough for commercial agricultural marketing. The finding that most farmers are producing on land which is about six to seven hectares shows that female farmers have limited access to land. This is a challenge that many emerging female cooperatives in South Africa are facing (Mason, 2012). Lack of access to land makes it difficult for female agri-businesses to be sustainable and earn income from their farm.

This is especially true for vegetable and livestock emerging female cooperatives that rely on the availability of land for grazing, as well as expansion of vegetable and livestock production. Makhura and Makoena (2013) state that although women are side-lined in land ownership, they are the core of the South African economy, and they account for a sizeable percentage of SubSaharan Africa's Gross Domestic Product (GDP). In addition, women in Africa represent about 80% of the agricultural labour force and produce more than 80% of the food. Oldfield (2008) states that woman own less than 1% of the land in Africa. This is partially because of laws and customs that prioritise ownership and land rights for men or kinships controlled by men, thereby limiting women's access and control over land.

This view is supported by Relating (2011) who states that in South Africa, both formal law and customary practice contribute to women's limited access to and control and ownership of land.

In many situations in South Africa, statutory laws are gender-neutral and promote equal rights. However, statutory laws are ineffective because of customary regimes that are patriarchal in nature. The study also found that female cooperatives try to produce quality farm produce. However, the profit realised per beneficiary is meagre because farmers are forced to share their net profit as they are sharing the land. There is therefore the need to de-populate the households if female agri-business is to be sustainable. However, this can only be meaningful if households have adequate access to land.

The study found that some farmers acquired the land they are using through the land reform programme; others bought land using public financial institutions; and some inherited it from family members. Reflecting other participants' views, one participant had this to say:

I acquired the piece of land I am tilling through support from government financial institutions, which is not an easy thing to do. Some of our friends were lucky to have inherited pieces of land that they are now using for their farm production (Interviewee 13, 2017).

The finding is supported by Khapayi and Celliers (2016) who found that emerging farmers face challenges when it comes to funding, making this one as the top concerns for starting and growing the agri-business. However, the DTI (2015) states that through the National Development Plan (NDP), the South African government is prioritising the growth of agriculture and irrigated land production by making funding available to female farmers.

In agreement, Oldfield (2008) states that the South African government is making various funding sources, grants, and incentives available to help new entrants and existing farmers in developing agriculture. However, Randela (2015) argues that land tenure rights in South Africa are practised through traditional cultural lenses that favour men, although women's land rights are now taking shape due to changing inheritance practices. The study therefore shows that women's land rights in South Africa are not only important for women as a group of people, but also for their agri-business, their extended families and society at large.

7.4.2 Access to irrigation water

The study found that most female cooperatives have no access to irrigation water. A participant had this to say:

We do not have reliable water supplies for our farming activities. To me, the lack of irrigation water is the single most important impediment to food production and agricultural expansion in Pietermaritzburg caused by lack of access to land (Interviewee 11, 2017)

Several scholars agree that irrigation water is one of the resources that plays a vital role in female agri-business production (Reardon, 2010; Wynne, 2013; Berg, 2013). Both primary and secondary scale farmers reported the issue of a lack of water for irrigation being a challenge. Many female farmers reported that they were using boreholes as a source of their irrigation water, and some were using river water. However, most of the farmers said that the water was not enough, and this was the reason they were not able to expand their agri-business:

Irrigation water is not enough, and this is hindering us from expanding our cooperatives (Interview, Female Farmer, 2018).

This finding is supported by Kalibwani (2015) who states that farmers in South Africa lack water, but also lack the skills to operate their irrigation systems properly. As a result, there is a reduction in crop production and a waste of water resources. The finding implies that it is not enough for women to have access to land and water because they also need to improve irrigation performance by promoting implementing irrigation scheduling methods and improving system design to enhance female farmers' skills to both control and manage their irrigation systems.

7.4.3 Access to production inputs

Findings show that farmers lack access to production inputs such as seeds, pesticides, and fertiliser, which impedes the smooth running of their agri-business. A participant said that:

Our female farmers do not have easy access to basic agriculture inputs. This is a widespread problem among our female farmers (Interviewee 15, 2017).

The finding above is supported by Aliber and Hall's (2012) argument that South African farmers have problems with accessing agriculture inputs such as seeds, pesticides, fertilisers, agro-chemicals, insecticides, distributors, and suppliers. This is an additional challenge in the agriculture outputs or production demands. This finding is in accordance with Freguin, Anseeuw and D'haese's (2012) view that for emerging female farmers to prosper, they must negotiate for farm inputs to be affordable and accessible. Assefa *et al* (2010) add that even

when inputs such as seeds are available, many emerging female farmers have no proper farming skills, therefore failed to produce crops at needed scales.

The lack of capital therefore affects the farmers' interest in buying and using these chemical inputs. Over and above the input situation, many farmers in South African have no assets, no business historic records, therefore no access to credit. In addition, farmers are afraid to get credit to buy inputs because they are afraid of crop failure and lack of markets to sell their produce, which will mean that they will be unable to repay their debt. This is what one participant said:

Women are scared to get credit for inputs. This is because of lack of education and assets for collateral (Interviewee 10, 2017).

The finding above is supported by Crais (2016) who finds that whether women are working in groups or individually, they are not keen to get loans for their agri-businesses but would prefer to get financial support from government to buy their production inputs. Statistics South Africa and the Department of Agriculture (2010) state that many female farmers do not have assets that they can use as security for loans to buy inputs. The previous property laws of the country, disqualified women from owning a property until 1994 when laws started to change. Randela (2015) feels that women in rural areas are not privy to enjoying the basic human right of owning land, as the land is owned by the Ingonyama Trust or by a man. A woman can only own land when married to man.

This is also echoed by Randela (2015), who declares that emerging female farmers in South Africa lack the right to ownership of property to use to secure repayment of loans for inputs. The situation is different when it comes to female secondary cooperatives. Members of secondary cooperatives are willing to apply for loans from financial institutions because they are more established and can sell their products to formal markets. The finding suggests that female secondary cooperatives which have been in agribusiness longer than female primary cooperatives are more established and have assets that they can offer to financial lenders to secure loans. Findings show that some farmers use inorganic inputs because they cannot afford organic inputs. One participant put it this way:

The problem is that farmers do not have money to buy inputs, so they use inorganic inputs. Besides, inputs are too expensive for green and livestock scheme small female farmers to afford (Interviewee 12, 2017).

Findings also show that some farmers combine inorganic and organic inputs as they cannot afford the inputs they need for production.

These challenges are worsened by transport costs as farmers are required to travel long distances to get the production inputs they need. This finding is supported by Berg (2013) who argues that the combined application of organic and inorganic fertilisers boosts the nutrient contents of soil and is one of the highest productivity contributors to black soil fertility. In the same vein, Fanadzo (2012) mentions that the combined application of organic and inorganic fertilisers is one of the best fertilisation methods of increasing productivity levels and improving the soil fertility.

This view ties up well with the conclusion by Aliber and Hall (2012) that the reasonable application of inorganic fertilisers with an organic medium base increases soil fertility and crop yields. The soil particle aggregates are formed from the combination of soil organic matter and soil mineral particles. According to Fanadzo (2012), this is particularly true in environments where the soil is largely sand, silt or clay. The interviews revealed that female farmers are not technically aware of soil types and treatments applicable to solve any soil damage or dysfunctionalities. Most nutrient suppliers are taking advantage of the cooperatives, when purchasing inputs to enhance farming. The female farmers cannot take advantage of the bulk buying discounts from suppliers and minimise costs.

They cannot collaborate to increase the economies of scale because they live far apart from each other and sometimes they have different planting seasons due to the unpredictable and non-uniform rain patterns. Only farmers operating in groups on the same projects said they can buy production inputs at the same time and benefit from a lower bulk pricing structure. This finding concurs with the Department of Agriculture, Forestry and Fisheries's (2012) finding that farmers in cooperative business benefit from shared ownership, shared risks, liability and profits, and reduced expenditures for operational costs.

7.4.4 Constraints on production

The interviews found that female cooperative entrepreneurs have challenges related to the means of production in particular land. A participant, reflecting other participants' views, put it well when she said that:

One can have a good agriculture business plan, but we have inadequate land to execute our business plans. There is no agriculture business one can do without land (Interviewee 3, 2017).

The data above show that for cooperatives to produce for markets, they need production resources that include land, capital, and a labour force. Poor access to land, capital and labour force causes women entrepreneurs in agribusiness to fail to benefit from opportunities that are available in the agricultural markets. This is particularly relevant when it comes to the quantity and quality of the agriculture products that they can trade. Female farmers are not consistent in producing for their markets because they have insufficient access to resources, especially because land is the most needed resource to facilitate production. The challenges discussed above are closely aligned to women's lack of access to land. The call for land expropriation after the amendment of Section 25 of the South African Constitution makes sense for female farmers and other groups of agribusiness entities.

They need land to achieve even modest success in growing their business, the economy and in reducing chronic unemployment. Unfortunately, the problem is that the land expropriation motion passed in Parliament is not seeking to speed up the transfer of land to individuals or group of people. On the contrary, it seeks only to put more land in the hands of the State which is already struggling to reform and redistribute land that has been in its possession since 1994. Therefore, in as much as one understands and supports the urgent need to address historic injustices and achieve a much more equitable distribution of land, there is need for practical plans about how land will be distributed to deserving groups such as female cooperatives.

7.5 VALUE CHAIN ORGANISATION

One of the research objectives was to ascertain how the value chain organisation affects female cooperatives in the agriculture sector in Pietermaritzburg.

7.5.1 Inbound logistics facilities

The research shows that female farmers lack inbound logistics facilities to access and store their inputs. Here is what a participant said, reflecting the views of other participants:

Many female farmers need inputs but how do you get the inputs and where do you safely keep them after getting them? Some female farmers buy inputs and before they use them, they are stolen because they do not have warehouses to keep their inputs. The same happens to their produce (Interviewee 8, 2017).

Therefore, farmers not only lose their inputs, but their products are stolen because they lack lockable storerooms to keep their produce safe before taking it to markets. The finding suggests that farmers have inventory management challenges as they lack financial skills and storerooms for their products. Cousins (2013) argues that farmers' inputs and products are the core of agribusiness and the lack of storage for inventory when and where it is needed, makes it difficult for female farmers to excel in their business. Chauke *et al.* (2013) state that all agribusinesses need an inventory management system because they must know when to restock farming items, the amounts they need to purchase, the amount to produce, the price to pay, when to sell and the price to sell at. These are complex issues, which can jeopardise female farmers.

7.5.2 Lack of operations logistics

The study shows that farmers' value chain challenges include a lack of operations logistics. Here is how one participant put it:

We have the potential to produce a lot, but the challenge is that we are only able to sell raw materials because we do not have the capacity to convert our produce into finished products (Interviewee 7, 2017)

In agreement, another participant said that:

There is a lot we can do to our produce in terms of turning it into finished goods, but we are not able to do so despite benefits associated with processing our products (Interviewee 6, 2017).

Stevens (2010) agrees that when farmers are encouraged and empowered to process their produce, this makes the agricultural industry and the national economy viable. Ortmann and King (2017) state that encouraging farmers to process their produce is one way of creating employment for the local people. Chauke and Terblanche (2013) concur that encouraging farmers to process their produce has the potential to stimulate the growth of other activities, including services, employment creation and economic empowerment.

This finding is supported by Ferris *et al.* (2014) who argue that Agri-processing presents a huge opportunity to significantly accelerate South Africa's growth and development. Gomo (2012) states that the agri-food industry contributes more than R124 billion to South Africa's GDP and employs more than 451 000 people in the formal sector. Koch and Terblanche (2013) state that the export of processed agricultural products is worth more than R17.2 billion per annum to the country's economy. This is a clear indication of the potential of agri-business. It is therefore safe to argue that the lack of strong policies to develop value-adding activities is detrimental to female farmers, the agri-business, and the national economy.

7.5.3 Lack of outbound logistics

The value chain challenges faced by farmers include a lack of outbound logistics. One participant had this to say:

We have challenges with delivering our products to users because we do not have transport to do so. People who own vehicles charge us extremely unaffordable prices to have our products transported to the markets (Interviewee 4, 2017).

The finding above is supported by another view below:

There is a lot of exploitation going on in the transport industry as transporters demand a lot of money, between R600 and R1400 for a distance less 10 kilometres. High transportation costs are killing female cooperatives (Interviewee 2, 2017).

In support of the findings above, Gray (2014) supports that high transportation costs are amongst the numerous challenges that female farmers are facing in South Africa. High transportation costs mean that farmers have challenges with linking to the markets or consumers when their products are still fresh. In agreement, Gray (2014) states that this lack of transport to markets influences the delivery time for the produce to get to the markets. Williams

et al. (2008) argue that a lack of outbound logistics makes it difficult to dispatch the produce to markets in the best possible condition.

Female farmers incur severe post-harvest losses, and the quality of their produce deteriorates as time is lost during the season of harvesting. These product quality drops occur during harvesting, marketing, transporting and storage (the four stages which are essential to being able to sell the produce). The highest post-harvest losses were recorded in 2016 for horticultural produce in South Africa at 45.32%. A post-harvest loss of 35% was recorded between marketing and consumption (van Averbek, 2012). This finding shows that there is a dire need to develop effective and efficient policies and strategies to solve existing female farmers' problems in outbound logistics.

Findings show that farmers mainly rely on hired transport:

We depend on hired transport or public transport and this makes it hard to deliver quality produce to the markets. By the time our produce gets to the markets the quality of the produce is compromised, especially for those of us that deal with perishable produce (Interviewee 20, 2017).

Here is what another participant said in agreement:

Transport is also unreliable. Sometimes transport fails to pick up or public transport is unavailable because of break downs or protests, and we end up suffering huge losses (Interviewee 19, 2017).

In agreement, Randela (2015) finds that unreliable transport results in the late delivery of produce. This situation is worsened by farmers' lack of storage facilities. They are therefore not able to delay transporting their produce and wait for another day to do it, which results in huge losses in terms of produce quality. Van Averbek *et al.* (2011) argue that transportation on rough roads and in both open and closed vehicles, including public buses, causes damage to the farmers' produce because of elevated temperature and vibrations. Fragile produce such as lettuce, spinach, and tomatoes, become bruised and then fetch lower prices, if they can be sold at all.

The use of poor packaging material that restricts ventilation also causes post-harvest loss and deterioration in the quality of the produce (Perret, *et al.* 2013). As a result, the supply from

female farmers is unreliable for buyers. They can never guarantee either the delivery date or the condition of their produce. However, the research findings show that some female farmers living near roads have access to transport and are better integrated into the value chain organisation than those who are not close to roads:

Some of our friends are lucky. They stay close to roads making it easy to get inputs and to transport their produce to the markets compared to those who stay far away from roads (Interviewee 16, 2017).

Findings, however, show that many of the farmers live extremely far from public roads. In addition, most of the farmers must travel many kilometres on gravel roads that are impenetrable during rainy seasons because they are not well maintained. Farmers therefore rely on carts and other modes of transport to transport their agricultural goods. This leads to delays in the produce getting to the markets. Some can make use of other people's vehicles (known as light delivery vehicles) to transport their perishable produce, but the cost of transportation is generally extremely high. As a result, farmers realise exceptionally low returns on their output.

7.5.4 Low quality of produce

The study found that farmers generate low quality produce for several reasons, including a lack of land, water and capital that are critical value chain and production factors. A participant put it this way:

Agribusiness challenges make it difficult for us to produce high quality goods and services (Interviewee 1, 2017).

Sometimes, the quality of their produce is compromised such that the market rejects their products. In agreement, Gray (2014) states that there is a need to establish a working and consistent value chain locally and globally to address this world phenomenon. The product quality is of ultimate importance since consumers are aware of quality standards on food items and the need for food security is ever increasing in most countries. Thus, inferior quality and low-quality produce makes it difficult for female farmers to enter high-value markets.

7.5.5 Inconsistencies in production

The study found that female farmers are not consistent in their agri-business production:

We have challenges of steadfastness or adherence to quality and quantity of what we produce. The lack of consistency in our pattern of production is caused by several things including limited access to land, lack of access to credit, knowledge and skills, and others (Interviewee 5, 2017).

In agreement, scholars (Williams *et al.*, 2008; Sikwela, 2013; Perret *et al.*, 2013) argue that farmers are not consistent in the way in which they supply agri-products to markets. Firstly, the product quality is poor and secondly, the crop quantity is low. Ngemntu (2010) observes that farmers also lack consistency in producing and supplying products to fresh produce markets and agri-processing industries. Moloi (2010) reveals that some farmers can only produce and supply products to fresh produce markets two to three months annually and then the business comes to a halt. As a result, supermarkets are reluctant to buy from farmers who lack consistency in both quality and quantity. Oldfield (2008) states that supermarkets would rather not deal with emerging female farmers because of their start-and-stop production and supply, meaning that they are not able to sustain their businesses.

7.5.6 Lack of transport

The study found that female farmers do not have transport means to carry their produce to markets that would make them realise good profits. A participant put it this way:

One of our biggest challenges in the value chain is lack of transport that is efficient (Interviewee 6, 2017).

The lack of transport affects both the quality and quantity of what reaches the markets. Quality is compromised by time, especially in fresh produce; while quantity is compromised because they cannot transport large volumes of their produce to the markets. These challenges result in lower prices. The issue of transport is regarded as one of the many challenges female farmers in rural areas are facing. This finding is supported by Relating (2011), who argues that the impact of transport costs on rural emerging farmers is killing their agri-business. Therefore, there is need for collaboration between stakeholders to generate agreements on the steps needed to entrench sustainable, ongoing efficiencies and help emerging female farmers understand transport cost. The Department of Agriculture needs to invest in government sponsored vans that go around in the deep rural areas and collect 2 or 3 times a week from these cooperatives.

7.6 MARKETING CHALLENGES

The study found that female farmers have marketing and sales challenges. One participant put it this way:

In as much as we would want to advertise our products, the cost of advertising is extremely high for small farmers like us (Interviewee 4, 2017).

Another participant said that:

There is poor radio coverage here to advertise and very few people have radios (Interviewee 7, 2017).

In support of the findings above, another participant related that:

The problem is that although one would want to advertise using newspapers, the circulation of newspapers is extremely poor here in rural areas. It takes about 2 to 3 days to get a newspaper's edition of the day making newspapers a poor way of advertising. Most of the people have television, but we cannot afford to advertise on television (Interviewee 9, 2017).

In support of the findings, Msuya *et al.* (2017) posited that female farmers are not able to use available advertising channels for their produce because each marketing channel has associated costs that they cannot meet. Khaile (2012) supports the fact that emerging farmers find advertising expensive and are therefore unable to use the best types and amounts of advertising for their products and situation. The findings suggest that female farmers are not able to effectively communicate with their customers, which makes it difficult for female farmers to inform their customers about the produce that is available in the market and the variety of products useful to them. Female farmers are also not able to effectively use various advertising media channels, with different techniques and methods most suited to their products.

Regarding channels of marketing, one participant had this to say:

The most widely used channel of marketing is neighbours, local traders, and word of mouth - in this order (Interviewee 10, 2017).

In agreement, another participant said that:

The most used advertising channel is our own neighbours, some use word of mouth though there are other less used channels such as spot markets, farm gate sales, rural consumers, and others (Interviewee 13, 2017).

In support of this finding, Machethe (2014) states that neighbours are the most used form of marketing channel, and that the channels that farmers choose to market their produce is critical as this can pose problems and lead to low earnings. Hart and Aliber (2010) state that using neighbours to advertise products creates trust, costs less, counteracts cold calling and builds farmers' brands better than social media. The study also found that female secondary farmers with better income are the ones that can afford better marketing channels. They are the farmers who advertise their produce use more than one marketing channel.

7.6.1 Lack of information on markets

The research found that women in rural areas lack information on market demands and trends because information is costly to acquire. Some women get information on market demands from other participants in the agri-business. The acquired information is mostly unreliable and incredible data since it is not collected by professional marketers. The data is randomly obtained from opportunistic participants and competitors who often take advantage of female farmers (Ortmann & King, 2007). Female farmers also lack information on quality assurance, production prices, the right times to sell their products, the best places to sell produce and knowledge of clientele. Ortmann and King (2007) mention that this accounts for some of the reasons why female farmers lack the ability to trade in a profitable manner in lucrative markets.

7.6.2 Lack of markets in rural areas

Findings show that female farmers invariably have no markets in rural areas. A participant put it this way:

We do not have markets for our products. We must travel to towns such as Pietermaritzburg or Durban to sell our products (Interviewee 7, 2017).

In agreement, Bienabe and Vermeulen (2011) found that farmers in rural areas either have poor or non-functioning markets. Many farmers are found in deep rural areas where there are no formal markets and no Agri-processing industries. This leaves them susceptible to manipulation and losses. As they are unable to get their produce to the formal markets in towns

and cities, female farmers are forced to sell their produce at informal rural markets where prices are low.

7.7 SKILLS LEVELS

Another research objective was to analyse how skills levels affect female cooperatives in the agricultural sector in Pietermaritzburg. The study found that the lack of farming skills was one of the challenges affecting female cooperatives. A participant who put it well said that:

“Most of the farmers here do not have farming skills to operate their livestock production farms” (Interviewee 3, 2017).

Another participant said that:

We have the desire to run our livestock farms skilfully and effectively, but the problem is that most of us are illiterate or should I say with exceptionally low education levels making it hard to operate the livestock farms with the proficiency needed (Interviewee 6, 2017).

In addition, another participant said that:

I have no experience in livestock rearing and that is the main challenge we have here. Even those who have experience - their experience is inadequate (Interviewee 9, 2017).

This finding is supported by Khapayi and Celliers’ (2016) research, which reveals that 52% of the emerging farmers in the Eastern Cape Province have no skills with livestock farming. This is a cause for worry because, for example, calf rearing is important to livestock farmers as healthy calves are the future herd that will make money for the farmer. Their finding suggests that it is difficult for farmers to rear healthy calves that grow into healthy adult cattle because of their lack of skills. The study found that a lack of, or inadequate, skills in livestock is one of the reasons farmers wean their calves too early or too late, which may not be good for the livestock business. This finding agrees with Chikazunga and Paradza’s (2016) study that states that few farmers have plans in place for weaning their calves or are able to keep records for their livestock activities, such as the mother and the father of the calves. Here is what a participant said:

Many of our farmers are not able to tell which cow and bull the mother and father are of the calf or tell when the animal is sick. This means that animals are often lost to preventable and curable diseases (Interviewee 11, 2017).

In agreement, another participant said that:

The challenge is that farmers lack livestock skills. Most of them are not able to diagnose or solve the health problems their animals face. As a result, the conditions end up worsening and animals die (Interviewee 8, 2017).

Gray's (2014) finding agrees with the finding above as he argues that most emerging farmers have inadequate livestock skills and that they rely on neighbouring farmers' skills and knowledge or must call on animal technicians who do not provide their services for free.

The study found that female farmers were able to recognise footrot and mastitis in their cattle. Others said that hygiene practices with their livestock helped them to keep their livestock healthy and prevent diseases from spreading. Some farmers mentioned that calf diseases such as pneumonia can be prevented by cleaning the kraal and ensuring that the equipment used to feed animals is clean is essential to prevent the communication of diseases. Farmers should also clean the hooves of the livestock to prevent foot rot disease. The findings are supported by Khapayi and Celliers (2016) who report that small farmers had some level of knowledge and skills on live stocking but are not adequately informed on animal and farm hygiene. Farmers also reported that they did not have methodical breeding programmes:

We do not have a systematic breeding programme as we just do it as we wish, making it hard for us to achieve the expected results (Interviewee 19, 2017).

The view above is supported by the view from another participant below:

Most of our female farmers do not have adequate experience in breeding and as a result we are not able to achieve the livestock production levels we set for ourselves (Interviewee 16, 2017).

In agreement, Fanadzo *et al.* (2012) find that most of the farmers had no animal husbandry skills. As a result, they did not know how to use artificial insemination but instead had to buy breeds from certified breeders at great cost compared to breeding their own calves. Khapayi

and Celliers's (2016) study finds that 88% of the respondents had no experience in artificial insemination, while 8% perceived their artificial insemination experience inadequate and only 4% viewed their artificial insemination skills adequate. This shows that farmers are under skilled in the essential tools necessary to run their livestock businesses.

7.7.1 Management skills

Challenges reported by female farmers include management skills. A participant put it this way:

Most of the farmers here do not have management skills to operate crop and livestock production farms. We need skills in many areas such as banking, marketing and record keeping if our businesses are to run efficiently and effectively (Interviewee 4, 2017).

Chauke *et al.* (2013) concur with the above view when they state that emerging farmers lack management skills in business management, banking skills, marketing skills, labour management, and service quality management. In addition, Wynne, and Lyne (2014) found that small farmers lack management skills in environmental management, health and safety management standards, pest and disease management, auctioning, marketing management and equipment management which are all important in the running of a successful agri-businesses.

Gray (2014) also argues that empowering female farmers with management skills should go together with educating farmers on the policies that have been developed to assist women's small-scale farming achieve profitable outcomes. These findings are valid because for women's agri-business to be successful, farmers must have skills and knowledge on how farm commodities are produced; the capital needed to run the farm; a desire and ability to keep records; a knowledge of the chemicals needed; knowledge on how to manage human resources; and other skills that can only be achieved through good management skills.

7.8 COLLATERAL AVAILABILITY

A third research objective was to understand how collateral availability affects female cooperatives in the agricultural sector in Pietermaritzburg. The study revealed that the unavailability of collateral is another challenge faced by farmers. A participant had this to say:

The challenge in the agribusiness is that as women we do not have assets, we can offer financial lending institutions to secure loans. How do you get a loan when you have no property to sell to pay back lenders if the business collapses? (Interviewee 3, 2017).

Another participant in agreement said that:

What is holding most of our female farmers back is the measures financial lending institutions put in place. They require us to offer property to secure a loan. As poor as we are where can we get assets for surety? The policy of collateral availability is a setback to us (Interviewee 1, 2017).

Other studies have found comparable results about several small farmers in South Africa who fail to get loans from banks to start and enhance their agri-businesses. Property has strong collateral value to secure bank loans. However, unfortunately, many small-scale farmers do not have property ownership to offer, as they are just starting their businesses. They are mostly farming, under the Ingonyama Trust, land without land ownership, so no guaranteed loans can be accessed from most formal financial institutions. Khapayi and Celliers (2016) state that some farmers are afraid to apply for loans because financial lending institutions are merciless when borrowers fail to pay back those loans. Koch *et al.* (2013) concur that lenders demand their money even when the borrower is not to blame for the failure of business, for example in times of droughts or because of other natural disasters.

Ortmann and King (2017) encourage farmers to get collateral loans since the benefits of lower interest rates are attached, compared to unsecured loans. Collateral loans assist in building a financial healthy credit record and enhance the good credit score. Buyers of bonds are measured through obtained credit scoring or by their performance in terms of meeting payment arrangements and commitments. This study found that sometimes farmers have assets to offer to secure loans but fail to secure loans because their collateral value was inadequate to secure the amount needed on the applied loan. Khapayi and Celliers (2016) share the same sentiment, that many small-scale farmers face the same challenge of not being able to prove ownership of sufficient assets, to meet or exceed the value of the required collateral.

Although collateral is perceived as a challenge to small-scale farmers in accessing the loan finance they need for their businesses, many agree that collateral is a standard practice when lending institutions need to reduce the risk of granting loans to people who cannot pay them

back. Gomo (2012) says that collateral gives the borrowers compelling reasons to continue the repayment of the loan or face losing their collateral assets.

7.9 LEGAL AND REGULATORY FRAMEWORK IN RELATION TO LAND

The fourth research objective was to ascertain how the legal and regulatory framework affects female cooperatives' access to land in the agricultural sector in Pietermaritzburg.

Findings show that the lack of an effective legal and regulatory framework hampers female farmers in agribusiness. A participant put it this way:

As female farmers just like males we have basic needs for more land with secure tenure and associated services to support land activities. The problem is that traditionally as women we are denied our independent rights to land (Interviewee 9, 2017).

Another participant in agreement said that:

The only time we have access to land despite our rights to land is when land is allocated to us through men (Interviewee 1, 2017).

Therefore, the study seems to suggest that domestic relations and cultural systems affect the laws and practices pertaining to women's rights to land because in traditional culture, only men can oversee land. This means that women cannot easily inherit or own land, even though they may need that land to make a living for their families. The challenge is that under communal tenure systems, it is only married men and not women who are formally eligible for land rights and the inheritance of land is to sons, in most cases to the youngest. A participant said that:

I may need the land that I till with my husband for my agribusiness but when my husband dies, the land will be taken by my husband's brothers or my parents in-law (Interviewee 14, 2017). In agreement, another participant said that:

We also have challenges with some organisations such as the South African Development Trust that specify that as women, we may not be issued with certificates of land occupation (Interviewee 8, 2017).

The findings above are supported by Murphy and Willets (2013), who said that South African women are not entitled to own land, nor can they transmit title deeds and land rights. Furthermore, many women are also excluded from owning land and related decision-making processes, such as the restitution process. Ferris *et al.* (2014) state that women in agri-business face challenges because they are excluded from “Kgotlas” where the decision-making process is structured through male domination and through formal prohibitions. “Kgotlas” are the structures, almost resembling councils, which include chiefs and deal with land issues.

Women are expected to be home caretakers. Gary (2014) states that women are seen to be domestically inclined rather than business equals, this prescription is drawn from the discriminatory regulations of the customary law that prescribes women’s role is to take care of the entire family, draw water, collect firewood, perform other traditional gender-based roles. The traditional roles stimulate hardships for women in the farming industry, they must strive to strike the balance between farming and playing traditional women-based roles. The other challenge that women face, is the government’s failure to implement South Africa’s policies and legislation that gives women equal to access to land.

A participant put it this way:

We have nice policies and legislation such as the African National Congress (ANC) land policies, the Reconstruction and Development Programme, the Green Paper on Land Reform of 2011, and the World Bank summary paper on options for land reform and rural restructuring in South Africa. All these policies recognise women’s land rights. But these policies are not helping as expected to end discrimination and ensure that there is gender equity in the ownership of land (Interviewee 5, 2017).

Another participant said that:

When you look at the Communal Property Associations’ Act, it clearly states that the association should run based on democratic norms and ensure that women are members of the communal property associations committee. But this is not happening (Interviewee 2, 2017).

The findings above are supported by Mnkeni *et al.* (2010) who state that South Africa has the best policies and legislation governing rural women’s land rights and access to land, but a lack of political will hinders the implementation of these policies and legislation. In agreement,

Msuya *et al.* (2017) argue that South Africa has celebrated policies and legislation on access to land for its citizens, but there is little conviction or commitment to these. The issue of land transformation is still primarily controlled by males who are traditionally in charge of the land, thereby hampering the effort for genuine land transformation.

7.10 LACK OF INFRASTRUCTURE

The researcher set out to ascertain how the lack of infrastructure affects female cooperatives in the agricultural sector in Pietermaritzburg.

7.10.1 Irrigation infrastructure

Most of the farmers said that they face irrigation infrastructure challenges. A participant said that:

We do not have irrigation structures. If we had regulation structures, then our business would be fine. We also need the operation and management system of the irrigation infrastructure (Interviewee 4, 2017).

Without this resource, it is hard for female farmers to engage in agri-business in a sustainable manner. The study found that some farmer's, mostly the secondary female cooperatives have water irrigation systems. It is important to note that majority of female farmers are using outdated types of water irrigation systems that are not effective. Farmers said that they were using the old furrow-and-sprinkler method. This is because farmers found the modern irrigation systems such as the centre pivot system or drip irrigation too expensive to install. Only a few secondary cooperative farmers said that they were using modern irrigation systems. Those using modern water irrigation systems were able to produce better fresh produce in bigger quantities as it is easy and relatively cheap to generate produce.

This finding is supported by Swanborn (2010) who states that although cash crops such as vegetables and fruit trees are good for high value, some emerging farmers cannot afford sprinklers and drip irrigation because of the high capital investment per hectare. However, van Averbeke (2012) argues that, in some instances female farmers are given irrigation infrastructure by government. The subsidies are not adequate to meet the demands, yet many farmers lack the resources to make use of the on-farm infrastructure provided by local government.

7.10.2 Prevalence of crime

The study found that farmers are battling the challenge of crime on their farm infrastructure. Crime against agriculture infrastructure is common on group-owned projects.

Findings show those farmers' vegetables, engine pumps, transformers, and cables, to mention just a few items, are regularly stolen and this has a negative effect on their agribusiness. The finding is supported by Khapayi and Celliers (2016) who found that the theft of cabling from irrigation systems and other farm equipment has become widespread in rural areas in recent years. Government, farmers, and stakeholders should take steps to reduce the risk of having their equipment stolen.

7.10.3 Mechanism

A few secondary female cooperatives reported that they owned tractors and modern farm equipment for their farmers. Many of the farmers reported that they do not have access to farm specialised equipment. They hire implements from secondary cooperative farmers who exploit them with high rates. A study by WHO (2015) found that in some cases, farmers are asked to pay between R1000 and R2000 to transport their produce to formal markets and pay between R600 and R1600 to hire a tractor.

7.10.4 Lack of transport and poor road networks

Findings indicate that a lack of transport and poor roads are amongst the challenges that female farmers face in their efforts to break into formal and profitable markets. Many farmers are engaging in business where they deal with perishable goods that they need to get to the markets whilst they still have their farm-fresh value. Most farmers interviewed said that they did not have their own transport to get their produce to the markets of their choice. A participant put it this way:

Lack of transport logistics forces female farmers to hire transport that does not come cheaply to take their produce to markets and buy production inputs (Interviewee 11, 2017).

Findings therefore show that farmers find it costly to hire transport. This forces them to rather use carts or wheelbarrows or even to carry their produce on their heads to their nearest markets. These methods all have the risk of spoiling the produce before it reaches its destination. The

findings indicate that sometimes extension officers offer their own transport to female farmers to get their produce to the markets: but this practice is not sustainable. The findings also show that sometimes roads are in such poor condition that even if farmers were to hire transport. This resulting to their produce to likely be spoiled and bruised by the time it reached its destination. Perret *et al.* (2013) suggest that people who own transport are reluctant to assist the female farmers because they are afraid that their vehicles will be damaged on the poor roads.

Those who do agree to transport the produce, charge the farmers extremely high rates because they know that the female farmers are desperate for transport to take their produce to markets. The lack of transport and the poor roads force farmers to sell their produce to local customers at lower prices because they fear that their produce may start rotting. Only a few of the farmers interviewed owned vehicles to assist them get their produce to formal markets and access production inputs. This finding is supported by Philip (2013) who found that most emerging female farmers have no vehicles and moreover, ownership of the “bakkies” (light delivery vehicles) was more common amongst individual farmers than among cooperatives in agribusiness projects.

7.10.5 Long distances to markets

Although agriculture infrastructure development is critical to the viability of agribusiness, farmers complained of long distances to markets:

We do not have logistical infrastructure including cold rooms, pack houses or refrigerated transport to help us keep our produce in good condition as we explore long distance markets (Interviewee 3, 2017).

Rivera *et al.* (2011) argue that long distance markets are partially responsible for the small profits that female farmers make. This is because of transportation costs and costs they incur in paying market agents who market their produce.

7.10.6 Technological barrier

Technology in the agri-business is one of the critical factors that contributes to the success of the agribusiness. However, farmers said that they lacked technology to enhance their farming activities:

We do not have technology for agriculture production used on some farms to help us with farming. We are lagging far behind in terms of technology (Interviewee 9, 2017).

Gray (2014) argues that technology will continue to influence every operation in the agricultural value chain. Williams *et al.* (2008) state that when agri-business has effective technological systems for all aspects of agriculture, transaction costs can be reduced. Technological barriers are also amongst the reasons why farmers are poorly connected to international markets. Moloi (2010) argues that it is hard to take the technologies used in developed countries and effectively apply them to developing countries because of the lack of human capital and financial resources. There is therefore an urgent need for immense commitment from all stakeholders: government, the private sector, and farmers- to embrace technological advancements in the agriculture sector.

7.10.7 Market information infrastructure

Findings show that most of the farmers lacked access to market information.

A participant put it this way:

The specific information that farmers lack is on market prices and the type of produce that is in high demand and when to tailor their business in that direction. We may have cell phones but not all information needed can be accessed (Interviewee 20, 2017).

Many farmers do not conduct market research; therefore, products are randomly priced at the local level and even at national level. There is no information on quality requirements, best marketplaces, and the best times to sell produce. Farmers also have no information on potential buyers. Most farmers have access to mobile phones but are still unreachable since they live in poor network coverage areas. The farmers are keen to use modern technology to enhance their agri-business, but they are still not accessible, because of the deprived areas they work and live in.

Mobile phones can be used by farmers to network with different stakeholders and collate the information needed for the welfare and growth of their business. The scarcity of network connections in most areas results in a few farmers using networks to gather market-related information. In some instances, it is the poor network coverage, the prohibitive cost of airtime,

and data and even the lack of mobile tailored sites that result in poor research or communication.

7.11 BUSINESS CULTURE

One of the research objectives was to ascertain how business culture affects female cooperatives in the agricultural sector in Pietermaritzburg. Scholars argue that culture is key in agri-business and has a measurable influence on the strategic direction of an agri-business (Moloi, 2010). Findings show that although female farmers are passionate and are working hard to make their business grow and take over, they lack attributes to succeed in this business culture. The main shortfall is the lack of skills for making good management decisions and all the business functions, from accounting to production. A participant said that:

The challenge our female farmers have is a lack of understanding of the agribusiness culture. They do not understand the agribusiness behaviour, ethics, habits, beliefs, etiquette and more, making them prone to failure (Interviewee 7, 2017).

Very few farmers are knowledgeable about the expected business behaviour, roles or practices that are applicable, and acceptable, in the professional and social business space. This is attributed by the lack of exposure to education and agribusiness culture. The lack of education has contributed negatively to the farmers' aim to adapt to agribusiness culture. They cannot differentiate between business and social relations, which results in their ideas being taken for granted or dismissed. This affects agri-business negotiations.

The research found that farmers face challenges with the issue of unclear or unknown cultures. For example, farmers explained that in their agri-business, they meet different business partners that are complicated in their dealings. They feel that some partners do not clearly state what they mean because they use ambiguous language:

We meet different people with different sets of agribusiness culture leaving us lost in terms of what to do (Interviewee 9, 2017).

This leaves farmers in a vulnerable position to market predictors; the uneducated business partners can make reckless business decisions since there is a barrier preventing communication in a way that they understand. As a result, female farmers are often defrauded. In some instances, female farmers fail to excel in agri-business because of this high

contextcentred culture. Female farmers also explained that the attitudes and circumstances they experience from stakeholders, especially those that are more experienced, discourage them to grow, as they feel underrated, and they feel they are not as equipped as them. Female farmers also explained that they find it difficult to operate on the same space as men and other forefront competitors. They are not clear of what to undertake for them to gain a competitive edge over competitors in the same agribusiness space as them.

The unclear vision has resulted in unclearly stated values and purposes of their agri-businesses which are made manifest in every decision they make. Even if they are authentic in their business, their insufficient market information about suppliers, customers, and stakeholders leads to shaky and unsustainable moves. Therefore, female farmers do not have a compelling presence in the market which is a foundational element of business culture. This is what Relating (2011) meant when he said that many emerging female farmers fail to understand how different stakeholders communicate with one another, as well as how they deal with each other. There is a need for female farmers to be trained in the agri-business culture as this has an influence on how stakeholders interact and manage the microbusiness and microbusiness factors within agri-business transactions.

7.11.1 Values

Findings also show that female farmers fail to set core values of their business culture. As a result, farmers do not have sets of guidelines to govern members and behaviours necessary to participate in the competitive agri-business environment. As a result, they easily fall out of business. The lack of clear values results in farmers not having set standards and then finding themselves caught by fraudulent agri-businesses that defraud them easily.

7.11.2 Practices

The study found that although farmers claim that their agri-businesses are meant to serve the public, they are failing to invest in marketing and advertising, thus are not visible to consumers. Female farmers are failing to profitably engage with stakeholders and do not discuss their business ideas with others out of fear barriers of entry and sabotage. Therefore, farmers need to ensure that they incorporate values to ensure that they are reinforced, prompted, and entrenched in their everyday agri-business (Machethe, 2014).

7.11.3 Collaboration

The findings show that farmers face challenges due to their poor business culture and lack of collaboration:

We are not able to freely interact in a formal way due to lack of understanding on the importance of collaboration (Interviewee 9, 2017).

Working individually, rather than in associations, results in female farmers missing out on the progressive ideas that would propel their agri-business. Female farmers, however, said that they were willing to work with others, but this was hindered by:

Geographical distance and dispersion from one another making it hard to work together when buying inputs and selling their produce (Interviewee 10, 2018).

In support of the findings, Makhuba and Makoena (2013) state that when two or more farmers work together to realise or achieve an agri-business goal, their efforts pay off and there is support for all. Therefore, there is a need to enlighten farmers about their existence because their cooperatives entail collaboration between all the members. Moloi (2010) re-iterated that for collaboration to work, it requires leadership that is socially based within a decentralised and egalitarian group. This is what female farmers seem to be lacking right now.

7.11.4 Lack of bargaining power

The study found that female farmers have little bargaining power because they have poor access to financial markets and to market information which is critical to lucrative business:

The challenges are that we do not have easy access to financial and information markets despite it being critical to business (Interviewee 4, 2017).

As a result, female farmers are not able to sell their produce at the most profitable prices and times. This loss in profit emanates from female farmers lacking bargaining power. They are forced to under-value their produce and gain less added value generated in the commodity chain. Ngemntu (2010) states that female farmers lack bargaining powers with suppliers when they conduct their business in a long supply chain. This becomes evident where the number of buyers is less, amongst many competitors in the same market environment.

7.12 SUMMARY

This chapter has presented data and discussions of the findings. The chapter has different sections. Section One dealt with the research process that guided this study. Section Two presented the research questions that were set out to interrogate the findings. Section Three presented data and discussions of the findings and Section Four presents the summary to the chapter.

CHAPTER EIGHT

CONCLUSIONS AND RECOMMENDATIONS

8.1 INTRODUCTION

The previous chapter presented, discussed, and analysed the key findings of this study. This chapter deals with the contributions, conclusions and recommendations of the study based on those findings. The chapter also presents the implications of the results and suggests possible actions to be implemented based on the findings. Therefore, the chapter presents the key findings in this study and seeks to suggest specific agribusiness solutions to the challenges faced by female cooperatives in Pietermaritzburg, South Africa. The chapter has the following sections dealing with female cooperatives' challenges related to lack of skills: lack of the implementation of the legal and regulatory framework; lack of markets; collateral availability; lack of adequate government support services; lack of infrastructure; lack of understanding of the business culture; and poor value chain organisation in the agriculture sector in Pietermaritzburg.

8.2 SUMMARY

This section summarises the key findings of the study in relation to the relevant literature reviewed.

8.2.1 Government support services

The study has found that female cooperatives are receiving inadequate support services from government. These government services are, in themselves, inadequate. This finding is supported by Moloji (2010) who states that female cooperatives in rural areas receive insufficient support services from government. There is thus an urgent need for government to strategically utilise agriculture extension support service officers to identify the challenges that female cooperatives are encountering in their agri-business. In addition, government should take advantage of extension support service officers to bring new technological innovations to female cooperatives. However, this can only happen if government is pressurised to adequately support the local government extension support services.

This would bring extension service officers within reach of female cooperatives in rural areas and help female cooperatives to make better decisions to increase their agricultural production. Supporting local government extension services would ensure that female cooperatives benefit in terms of modern techniques. The latest information on agriculture activities would be communicated to them regularly by extension support officers. Oldfield (2008) reveals that investing in extension support officers would enable these officers to provide consultation and actual demonstrations, give talks and seminars to female cooperatives and create opportunities for female cooperatives to work with other experts in the agricultural field. This would help female cooperatives to learn more and to develop new agricultural methods to improve their production. It is concerning that the study found that extension support service officers only visit female cooperatives occasionally.

With only occasional visits female farmers are forced to travel long distances to get information from others when extension support service officers could provide this service locally if more of them were deployed in rural areas. Measures need to be put in place to ensure that agriculture extension officers become intermediaries between agriculture services and female farmers. Extension officers should operate as communicators and facilitators that can assist female

cooperatives in their decision-making processes and in ensuring that relevant knowledge is implemented to get the best results for their farming activities.

Relating (2011) observes that the role of extension support service officers in agriculture should be promoted to all cooperatives. The emphasis of extension support should be effectively seen in the female cooperatives. The study found that female cooperatives are getting only a minimum level of support, from government or its support officers and from certain stakeholders. The services provided by stakeholders include guidance on how to install proper irrigation systems; how to fight animal diseases; knowledge on cheaper storage systems, for waterwise ideas suitable crops and cost-effective farming equipment and procedures. It is therefore logical to conclude that if extension support service officers were sufficient, accessible to all cooperatives and better utilised, they could play a vital role in mobilising and empowering female cooperatives in rural areas. Female cooperatives could benefit immensely from extension support service officers. The information sharing seminars could be introduced where farmers and stakeholders share knowledge and experiences where applicable.

Government agencies such as SEDA (the small enterprise development agency) should interact with rural female cooperatives through presentations focusing on the services they offer to farmers (Moloi, 2010). However, it is important to acknowledge that the findings show that female cooperatives are dissatisfied with the services provided by extension support officers because their services are inadequate and lack specific direction. Therefore, emerging female cooperatives need to be helped with knowledge and skills on how to run their agri-business in the absence of extension support service officers.

8.2.2 Access to land

The study found that female cooperatives had limited access to land. Most of the female cooperatives are producing crops on communal land. The research shows that the lack of access to land is a much anxiety that makes it difficult for female cooperatives to run their agribusiness on an economically and financially viable scale. This finding is supported by Khaile (2012) who finds that, due to the patriarchal system in many regions, female cooperatives in Africa have difficulty accessing land. This obstacle prevents females from taking part in lucrative and sustainable agri-businesses to earn income. This situation is especially applicable to vegetable

and livestock emerging female cooperatives, which all depend on land to run their agri-business.

The study has shown that although women are side-lined in land ownership, they are a core of the South African economy. South African women are represented as a sizeable labour force percentage in the agricultural sector that immensely contributes towards the food security of the country. The lack of access to land is mainly a result of South Africa's traditional laws and customs that prioritise men over women for land ownership and land rights. As a result, female cooperatives' access to and control over land is limited. In support of this finding, Khapayi and Celliers (2016) state that both formal law and customary practice contribute to female cooperative' limited access, control, and ownership of land in South Africa.

In addition, statutory laws are ineffective because of customary regimes that are patriarchal in nature. Government should therefore ensure that female cooperatives have access to adequate land to produce enough for commercial agricultural marketing. Findings show that female cooperatives try to produce quality farm produce. However, the profit realised is meagre because of the limited pieces of land they have available for their agri-business. Female cooperatives need to be given access to adequate land if they are to be sustainable. This would in return de-populate the household's doing agri-business on shared land.

The study found that female cooperatives that do have land, got it through either the land reform programme; through a purchase using public financial institutions; or possibly inherited it from family members. The finding agrees with Aliber and Hall (2012) who state that, through the NDP, the South African government is prioritising the growth of agriculture and irrigated land production by making funding available to female cooperatives. The South African government needs to make various grants and incentives available to help new female entrant farmers to develop agriculture. The land tenure rights issue, which is currently practised through a traditional cultural lens that favours men, needs to be addressed.

The study found that most female farms, have no water for irrigating crops. The farms are situated in areas that are dry and with less to no underground water supply. This is supported by Ayinke (2011) who argues that irrigation water is a principal resource that plays a vital role in the success of female cooperatives in agribusiness production. Both primary and secondary scale farmers reported the lack of water for irrigation as a challenge. Many female cooperatives reported that they were using boreholes as a source of their irrigation water, while some were

using river water. However, it was noticed that most female cooperatives said that they did not have access to enough water, which was the reason they were not able to expand their agribusiness. In support of these findings, Bienabe and Vermeulen (2011) find that female farmers in South Africa lack both the water and the management skills necessary to operate their irrigation systems properly, which affects their crop production. It is therefore not enough for women to have access to land and water as there is a need to improve irrigation performance by teaching them irrigation scheduling methods and improving system design to enhance female cooperatives' skills to being able to both control and manage their irrigation systems.

The study found that female cooperatives do not only lack access to production inputs such as seeds, pesticides, fertiliser and agri chemicals. There is no support for females in the Agri sector, whilst female cooperatives lack the capacity to build relationships with distributors and suppliers of inputs. The lack of relationships with distributors and suppliers hinders the smooth running of their agribusiness. The supplier relationship is a serious challenge in terms of agriculture inputs supply, and results in a decrease in female cooperatives' production. Crais (2016) Suggests that female owned businesses must work twice as hard compared to their male counterparts by ensuring that all farm inputs are affordable and accessible. All the above suggestions are good, however, female farmers lack capital injection or credit access, for setting goals to be reached. In agreement, Andrew *et al.* (2013) found that many female cooperatives do not have assets that can be signed over to lenders to secure loans for inputs.

However, the study found that some secondary female cooperatives can apply for loans from financial institutions. This is because secondary female cooperatives are more established and have more assets than primary cooperatives. As these secondary female cooperatives have been in agribusiness longer and have a better understanding of the agribusiness culture than primary female cooperatives, it is easier for them to secure loans.

The study found that some female cooperatives, especially primary cooperatives, did well using inorganic inputs, while others combined inorganic and organic inputs. In support of this finding, Chikazunga and Paradza (2012) argue that the combined application of organic and inorganic fertilisers boosts the nutrient contents of soil and has one of the highest productivity contributions to black soil fertility. This is because soil aggregates are formed from the combination of soil organic matter and soil mineral particles in clay, sand, and silt. There is therefore a need, especially amongst primary female cooperatives who cannot afford fertiliser

inputs, to promote the reasonable application of inorganic fertilisers with organic resources to increase soil fertility and crop yields.

Findings also show that female cooperatives are not able to employ adequate inputs and get bulk discounts from suppliers and minimise costs as they live far apart from each other. The lack of collaboration amongst the cooperatives often occurs since they have different planting seasons due to the random and changing rain patterns. Female cooperatives need to be promoted so that their businesses can benefit from shared ownership, shared risks, liability, profits, reduced operational expenditures and costs. As it stands, female cooperative entrepreneurs have challenges related to means of production inputs, such as land, operational funds and labour force recruitment and management. Poor access to capital and labour results in the failure of female cooperatives in the agribusiness even though, they can be presented with opportunities in agricultural markets. Failure amongst female owned cooperatives is common when it comes to the quantity and quality of agriculture products traded.

As a result, female cooperatives are not consistent in producing for their markets because they have insufficient access to resources to facilitate reliable production. Therefore, the call for land appropriation, which will follow the amendment of Section 25 of the South African Constitution of 1996, should be supported. This change will assist female cooperatives and other groups of agribusiness entities to access land which is necessary to achieve even modest success in growing their businesses, and the economy, and in reducing chronic unemployment. Although there is a need to address historic injustices and achieve a much more equitable distribution of land, government should put a practical plan in place to ensure that land will be distributed to the deserving groups such as female cooperatives.

8.2.3 Value chain organisation

There are several value chain organisational challenges affecting female cooperatives in the agriculture sector in Pietermaritzburg. Findings show that female cooperatives lack inbound logistics which will enable them to access and store inputs. As a result of a lack of secure storage facilities, they lose their inputs and sometimes their produce to theft. This is because female farmers face inventory management challenges as they lack storerooms for their products. In agreement with this, Moloji (2010) states that inputs and products are the core of the agribusiness and the female cooperatives' lack of or shortage of an inventory when and

where it is needed makes it difficult for them to excel in their business. Government and other stakeholders need to empower female cooperatives with inventory management knowledge and the skills to know when to re-stock farming items, the amounts to purchase, the amount to produce, the price to pay, when to sell and the price at which to sell. This shortfall in knowledge is currently jeopardising their farming attempts.

The findings show that farmers' value chain challenges include a lack of operations logistics. This means that female cooperatives have several distribution, facility, and process challenges. Female cooperatives need to be encouraged and empowered to process their produce as this makes the agriculture industry and national economy viable and helps to create employment for the local people. The finding is supported by Makhura and Makoena (2013) who argue that agri-processing presents a huge opportunity for female cooperatives to significantly accelerate South Africa's growth and development. It is therefore logical to conclude that strong policies need to be put in place to foster value-adding activities in agribusiness and the national economy.

The value chain challenges faced by female farmers extend further, to their lack of outbound logistics. In support of the finding, Ngenmtu (2010) found that high transportation costs are amongst the challenges that female cooperatives are facing in South Africa. This means that female cooperatives find it difficult to link to the markets or consumers when their products are still fresh. Khaile (2012) supports this by stating that the lack of outbound logistics or transport to take their fresh produce to the markets influences the delivery time the produce takes to get to the markets. Dispatching the produce to markets in the best possible condition is difficult, so female cooperatives incur severe post-harvest losses, and their produce quality deteriorates. This occurs during harvesting, marketing, transporting and storage. This finding shows that effective and efficient policies and strategies need to be developed to solve the existing female cooperatives' problems of outbound logistics, especially during the harvesting, marketing, transporting and storage of their produce.

Female cooperatives mainly depend on hired transport that is unreliable, which results in the late delivery of products. This situation is worsened by female cooperatives' lack of storage facilities, as mentioned above, which results in huge loss of stock that can be produced. In addition, Khapayi and Celliers (2016) argue that the use of transportation on rough roads and in open and closed vehicles, including public transport, causes mechanical damage to produce

because of high vibrations and temperatures. As a result, female cooperatives are unreliable suppliers to the market. However, the few female farmers who live near roads have better access to transport and are therefore better integrated into the value chain organisation than the majority who farm and live extremely far from public roads.

Furthermore, female cooperatives use gravel roads that are impassable during the rainy season because they are not accessible and usable. As a result, female cooperatives use carts and other less conventional modes of transport to convey their agricultural goods. This results in a delay in the produce getting to the markets. Although transport through “bakkies” (light delivery vehicles) is increasingly available to transport perishable produce, the cost of transportation is generally extremely high. As a result, farmers earn an exceptionally low return on their output. Collaboration between stakeholders is needed to generate agreement on the processes needed to entrench sustainable, ongoing efficiencies. Emerging female cooperatives must be assisted with transport, and they need to have access to rail infrastructure such as locomotion, service levels, wagons, rails, and branch lines as a way of improving their access to markets.

The research found that female cooperatives generate low quality produce for several reasons including their lack of land, water, and capital. This makes it difficult for female farmers to enter high value markets. In addition, female cooperatives are not consistent in their agribusiness production. In agreement, scholars (Rivera *et al.*, 2011; Van Verbeke, 2012) argue that female cooperatives are not consistent in the way they supply Agri-products to markets. Firstly, their quality is poor and secondly, their quantity is small. In support of the findings, Perret *et al.* (2013) state that female cooperatives lack consistency in producing and supplying products to fresh produce markets and Agri-processing industries because of the poor value chain organisation in the agribusiness industry. As a result, buyers are reluctant to purchase from female cooperatives because of their lack of consistency in both quality and quantity.

8.2.4 Marketing challenges

The study has revealed that female cooperatives have marketing challenges in terms of their ability to advertise their products. In support of this finding, Moloji (2010) argues that female cooperatives are not able to use the available advertisement channels for their produce because these forms of advertising are expensive. Female cooperatives are not able to effectively inform their customers about the products that they have available to sell or the variety of products

useful to them. The study found that neighbours are the most used form of marketing for female cooperatives. Phillip (2013) states that using neighbours to advertise products creates trust, costs less, counteracts cold calling, and builds farmer's brands more efficiently than social media.

Secondary female cooperatives with better income can afford to use more sophisticated marketing channels. The research suggests that female cooperatives are not able to effectively use various advertising media channels, with different techniques and methods most suited to their products. Female cooperatives in rural areas also lack information on market demand trends, quality assurance, production prices, the right times to sell their products, the best places to sell produce, and potential buyers. Sometimes female cooperatives get information on market demands from other actors in the agri-business that is not correct. Some actors are opportunistic, and they take advantage of female farmers.

Moreover, findings show that female cooperatives have no markets in the rural areas. This makes farmers susceptible to manipulation and losses. As a result, female farmers are forced to sell their produce in rural informal markets where prices are low, because they cannot take their produce to urban markets due to bureaucracy and the prohibitive costs of transport. In agreement, Ferris *et al.*, (2014) found that farmers in rural areas have poor and non-functioning markets through which to sell their produce. Government should therefore help female cooperatives in rural areas by establishing agro-processing industries and markets or making it easier for them to access good markets.

8.2.5 Skills levels

The study found that a lack of farming skills is one more of the challenges affecting female cooperatives. For example, female cooperatives lack or have inadequate skills in breeding and raising livestock. As a result, for example, these farmers wean the calves too early or too late, which affects their livestock business. However, some female cooperatives have the knowledge to recognise foot rot, mastitis diseases and pneumonia and how these conditions can be prevented or treated. Ortmann and King (2016) reveal that many female cooperatives do not have plans or schedules for weaning calves and are not able to keep records for their livestock activities. Consequently, female cooperatives rely on neighbouring farmers' skills and knowledge or on animal technicians who charge them a lot of money for their services.

In addition, the study found that female cooperatives do not have methodical breeding programmes because of a lack of knowledge on animal breeding strategies. As a result, they do not know how to use artificial insemination, and are instead buying breeds from certified breeders at a much higher cost than breeding their own calves. In agreement, Khapayi and Celliers (2016) state that 88% of the farmers in their study had no experience of artificial insemination.

The challenges faced by female farmers are compounded by their lack of skills such as business management, banking, marketing, labour management, and service quality management. This is also supported by Moloji (2010), who argues that small farmers lack skills in environmental management, health and safety management standards, pest control, auctioning and marketing management and equipment management. These are all important in the running of a successful agribusiness. The study therefore suggests that female cooperatives have inadequate skills, and they are under skilled to run their agribusinesses. The government must empower female farmers with various management skills through education programmes which have been developed to guide female cooperatives to achieve rational outcomes.

8.2.6 Collateral availability

The study revealed that the unavailability of collateral support is another challenge faced by female cooperatives. The study found that female cooperatives fail to secure loans to start or boost their agribusinesses because financial houses have strong collateral availability policies that require the borrower to offer assets to secure loans. Many female cooperatives are not able to offer property or fixed assets as they are just starting their businesses. Some female cooperatives stated that they are afraid to get loans because financial lending institutions are merciless when borrowers fail to pay back loans. This finding is supported by Koch and Terblanche (2013) who state that lenders ensure that they get back their money even when the failure of the business is out of the control of the borrower, for example in times of droughts and other natural causes.

However, many female cooperatives agreed that the idea of collateral is the method by which lending institutions reduce their risk of granting loans to people who cannot pay them back. Gomo (2012) states that the risk of losing their collateral gives the borrowers compelling reasons to continue payments. Female cooperatives must be encouraged and educated to preferably get collateral loans because they come with lower interests than unsecured loans and

can help to build up their credit record. The education and encouragement required, should highlight that building credit only happens if female cooperatives are able to pay on time.

8.2.7 Legal and regulatory framework in relation to land

Findings suggest that the lack of an effective legal and regulatory framework of land ownership hampers female cooperatives in agribusiness. In other words, the study suggests that traditional cultural domestic relations affect the laws and practices pertaining to women's rights to land because husbands and sons are the only ones who are permitted to oversee land. This means that women cannot easily inherit land, even though they may need the land to start a business. The challenge is that under traditional communal tenure systems, only married men are formally eligible for land rights as the inheritance of land goes to sons only. The study found that women who make up these female cooperatives do not have title deeds for the land, nor can they transmit these or any land rights. They are excluded from land decision-making processes such as the restitution process.

This is what Khapayi, and Celliers (2016) meant when they stated that female farmers, either because of male domination or through formal prohibitions, face challenges because they are excluded from "Kgotlas". These are the decision-making processes and structures. Government needs to implement South Africa's policies and rights for women and their rights to access to land. The findings show that although South Africa has good policies and legislation governing rural women's land rights and access to land, there is a lack of political will, conviction, and commitment to implement the policies and legislation. Failing to implement policies and legislation on land transformation is one way of perpetuating the traditional system of male dominated control of land. This system is hampering the efforts of female cooperatives to achieve access to land and therefore to genuine land transformation.

8.2.8 Lack of infrastructure

In addition, the study found that female cooperatives have irrigation infrastructure challenges. Without this resource, it is hard for female cooperatives to engage in agribusiness in a sustainable manner. Although some secondary female cooperatives have water irrigation systems, the majority still use the old furrow-and-sprinkler irrigation systems that are less effective. This is because female cooperatives find modern irrigation systems, such as the centre pivot system or the drip irrigation, expensive. Therefore, female cooperatives should be

empowered with modern water irrigation systems to produce better and more vegetables. Ortmann and King (2007), in agreement, also state that even though they will benefit from high-value cash crop production, some emerging farmers cannot afford sprinklers and drip irrigation because of their high capital investment per hectare. Female cooperatives should be given resources to access modern irrigation systems and resources to make use of the on-farm infrastructure given to them by local government.

Other infrastructural challenges include crime on farm infrastructure. Items such as engine pumps, transformers and cables are just a few assets that are stolen, which negatively affects female cooperatives' agribusiness. Ferris *et al.*, (2014) concur that the theft of cabling from irrigation systems and other farm equipment is widespread in rural areas. It is submitted that government, farmers, and stakeholders should take steps together to reduce the risk of losing farm equipment and should be putting neighbourhood security patrol measures in place to combat this.

The cost of farming equipment is also an issue in women cooperatives. Some secondary female cooperatives have tractors and modern farm equipment for their farmers. However, many female cooperatives, especially primary female cooperatives, do not have access to farm implements. Therefore, they must hire these implements from other farmers who exploit them through high charges. In addition, most female cooperatives indicated that they did not have transport to ferry their produce to the markets of their choice. In some instances, female cooperatives use carts or wheelbarrows to carry their produce to their nearest markets on their heads. Sometimes, extension officers offer their own transport to assist female farmers to reach the markets, but this practice is not sustainable.

The study also found that most roads in rural areas are in poor condition. This increases the time that perishable goods take to get to the markets. If there was better transport, their produce would reach the market with their farm fresh value intact. To make the matter worse, Gray (2014) finds that people who own transport are reluctant to be hired by female cooperatives because they are afraid that their vehicles could be damaged because of the poor roads and the weight of the load. Those who agree to be hired, charge female cooperatives extremely unaffordable prices because they know that female cooperatives are desperate for transport to take their produce to markets.

Female cooperatives also lack market information on quality requirements to sell their products. Although some of the farmers have access to mobile phones, only a few female farmers use their cell phones to gather market-related information from stakeholders. This is because of poor network on the farms. Although female cooperatives are ready to use modern technology to enhance their agribusiness if empowered to do so, the lack of proper infrastructure on phone networks makes it hard to use modern technology. It is therefore submitted that government and development partners should invest in mobile technology as has been done in Kenya to help farmers network with different stakeholders and collect the information that they need for the welfare of their business. Government strategies should include revisiting the poor network coverage, the prohibitive cost of airtime and data, and the lack of mobile tailored sites to access market-related information.

8.2.9 Business culture

Scholars argue that a business culture is key in agribusiness and has a strong influence on the strategic direction of an agribusiness (Ferris *et al.*, 2014; Gray, 2014). Findings show that in as much as female cooperatives are passionate and are working hard to make their businesses excel, they lack business culture. As a result, they lack the know-how on how to make good management decisions or implement business functions ranging from accounting to production. In short, the study found that few female cooperatives possessed knowledge on the behaviours and roles or practices that are regarded as acceptable in professional and social relationships in the agribusiness environment. This is attributed to their lack of exposure to and education on business culture. As a result, female cooperatives fail to adapt to business culture differences. This results in the rejection of their ideas and business suggestions and derails the success of their agribusiness negotiations.

Furthermore, the study found that female cooperatives struggle with the issue of low context cultures. In the agribusiness, the women meet different business partners that are dishonest in their dealings. The business partners do not clearly state what they mean. They are ambiguous in their actions and communication. As a result, female farmers are exposed to risky agribusiness as their partners tend to be deceptive. In short, female cooperatives can easily be defrauded. In addition, some female farmers fail to excel in agribusiness because of the high context business culture and because of the attitudes and situations they experience at the hands of certain stakeholders, especially those that are more experienced. This leaves female

cooperatives discouraged and dysfunctional. In addition, the high context culture makes female cooperatives feel that they are not respected by other stakeholders.

Moreover, the study found that female farmers felt greatly challenged to engage in agribusiness at all, because there were already many people engaging in the same agribusiness as theirs, making competition very high. This means that female cooperatives need to be empowered with education on how to sustain an unobstructed vision, values, and purpose for their agribusinesses. The lack of vision may be one of the reasons female cooperatives have no compelling presence on the market, which is a foundational element of business culture. This finding is supported by Moloji (2010), who argues that many emerging female farmers fail to understand how different stakeholders do business with one another. Female cooperatives need to be trained in agribusiness culture, focusing on setting values that can be the core of their business culture; agribusiness practices to ensure that they are entrenched in their everyday agribusiness, and the art of collaboration or working with others. They must be empowered with access to, and the bargaining power to deal in, financial markets and market information, which is critical to lucrative business.

8.3 UNIQUE CONTRIBUTION OF THE STUDY: CONCEPTUAL AND PRACTICAL

This research contributes to existing literature on agribusiness by determining and documenting the challenges encountered by female cooperatives and suggesting strategies that might be implemented by the South African government to illustrate the gravity of the challenges faced by female cooperatives. Figure 8.1 below presents a diagrammatic representation of the contribution of the study to the body of knowledge in the discipline of agribusiness.

Figure 8.1: Unique contribution of the study



8.3.1 Lack of infrastructure

The study found that female cooperatives face challenges of a lack of infrastructure, including a wide range of public services that facilitate production, procurement, processing, preservation, and trade. They struggle with input-based infrastructure such as seed, fertiliser, pesticides, farm equipment and machinery, and others. In addition, female cooperatives are struggling because of a lack of resource-based infrastructure that includes water irrigation, farm power/energy, physical infrastructure such as road connectivity, transport, storage, processing, preservation, and others. The study also found that female cooperatives are facing poor institutional infrastructure that includes a lack of agricultural research, education technology, information and communication services, financial services, marketing, and others, as supported by (Maleko & Msuya,2015).

8.3.2 Skills levels

The study showed that female cooperatives face challenges related to their lack of proficiency in certain areas. These can mainly be developed through formal training or experience. Farmers lack skills in farming and lack the management skills necessary to operate crop and livestock production farms. For example, they lack the skills of how to wean calves, identify diseases, and financial and human management, and others, which are skills that need to be taught. Thus, there is need to develop female cooperatives' skills through the transfer of theoretical or practical understanding of agribusiness (Maleko & Msuya, 2015).

8.3.3 Business culture

The study found that that female cooperatives lack an understanding of the model or style of business operations within the agribusiness industry. They face challenges in understanding how various levels of stakeholders deal and communicate with one another. This makes female cooperatives vulnerable to manipulation and causes them to feel undermined by those who have been in the agribusiness for a long time. As a result, female cooperatives fail to uphold their visions and values, and face stiff agribusiness competition (Maleko & Msuya, 2015). The study showed that female cooperatives need support in the areas of business culture skills and the general ability to perform professionally within the agribusiness industry. This is one way of helping female cooperatives to work well with others, to communicate their thoughts clearly, to negotiate business deals, to display a professional image, to interact well with others, and to solve the problems they face (Matete, 2011).

8.3.4 Value chain organisation

The study showed that female cooperatives are poorly interlinked to value-adding activities that convert inputs into outputs. This means that female cooperatives are not properly connected to value-adding activities that make a profit, add to the bottom line, and help female cooperatives create a competitive advantage. The specific challenges faced by female cooperatives include inbound distribution or logistics, farming operations, and outbound distribution or logistics. These include but are not limited to factors such as a lack of markets; the inaccessibility of inexpensive advertising channels; the challenge of expensive and unreliable transport; and the lack of processing industries. In agreement, Skenjaa (2012) states that inbound and outbound logistical problems faced by female cooperatives can be addressed by putting in place resources to promote easy processes for female cooperatives to procure

inputs and to sell their products, and by training female cooperatives in human resource development and agribusiness corporate infrastructure.

8.3.5 Markets

Marketing of the product is still a problem for female cooperatives. The study found that female cooperatives are faced with marketing challenges such as insufficient market facilities; insufficient market information; markets that are located far from their farms; the risk of con artist farmers; low prices and high transaction costs; and many others. As a result, although female cooperatives produce products of excellent quality, they are not able to realise good profits from their produce because of insufficient markets available. Female cooperatives' profits are often lost after harvesting because of spoilage.

8.3.6 Collateral availability

The study suggests that female cooperatives do not have access to capital or loans. This is mainly caused by their lack of collateral assets or property to offer to financial lending institutions to secure loans. There is also their exaggerated fear of collateral loans because they perceive financial institutions as ruthless capitalist lenders that use any opportunity to seize the collateral to recoup their losses. It is therefore submitted that female cooperatives must be educated on the benefits of dealing with the financial markets for the buying and selling of long-term debt or equity-backed securities. In addition, bureaucratic policies, such as the National Credit Act of 2008, prevent female entrepreneurs from accessing credit or funding to finance business growth. This is due the extensive list of requirements, which cooperatives are unable to meet. The act should be revisited for future adjustments as it is currently one of the barriers towards achieving female entrepreneurship.

8.3.7 Lack of the implementation of the legal and regulatory framework

The study found that South Africa has good policies and legislation as narrated in the South African Constitution. The country has good intentions for women and aims to achieve gender equality in all communities. However, this legislation must be strictly enforced, to increase involvement of female cooperatives in agriculture (Maleko & Msuya, 2015)

Although there are policies and legislations promoting equality, it is worth mentioning that cultural inequalities have resulted in the unequal status of women in relation to men. These

inequalities are perpetuated and reinforced by a confluence of unequal relations in their roles, functions, decisions, rights, and opportunities. The situation is worsened by a lack of political will, conviction, and commitment to implement the good policies and legislation available (Maleko & Msuya, 2015). The non-implementation of gender equality laws largely contributes to many struggles which women experience. As in many parts of South African communities, women still have no rights to access land they need for their agribusiness.

8.3.8 Lack of business infrastructure

Findings also show that female cooperatives face challenges regarding the facilities and systems serving the agribusiness. The infrastructural challenges faced by them include internal facilities such as poor roads, lack of markets, market information, and other factors that make agribusiness activity possible. In agreement, McPherson (2011) believes that each component of the business infrastructure should be created and analysed independently of the others. The plan should act as a stand-alone resource for the way the business is to grow and progress well into the future. In agriculture, this includes land to use for crop production and markets to use for selling products (McPherson, 2011).

8.4 SPECIFIC RECOMMENDATIONS

The following recommendations are made based on evidence generated in this study.

8.4.1 Government support services

The study ascertained that female cooperatives are receiving support services from government and some non-profitable organizations. However, this is inadequate. It is recommended that government should strategically utilise local government extension support service officers who are based close to rural areas to assess and identify the challenges female cooperatives face in rural agribusiness. Government should also make use of extension support service officers to bring new technological innovations to female cooperatives in rural areas. This can only happen if government is lobbied to adequately support the local government extension support services as this would bring these services closer to female cooperatives and help them to make better decisions to increase agribusiness production.

Government should put in place measures to ensure that extension support officers act as intermediaries between agriculture services and female cooperatives. Extension support service officers should be trained to operate as facilitators and communicators. They must assist female cooperatives with proper training to enable their decision-making processes and ensure that relevant knowledge is gained to get the best results for their farming activities. In short, emerging female cooperatives need to be helped with knowledge and skills on how to run their agribusiness, with the support of extension support service officers.

8.4.2 Access to land and other factors

The study shows that female cooperatives have limited access to land. Government should therefore ensure that female cooperatives are given adequate land to produce enough for commercial agricultural scale marketing and for the female agri-business to be sustainable. The issue of land tenure rights practised through the traditional cultural lens mainly favours men and this must be addressed to empower women with land, without undermining cultural values. The South African government should also make various grants and credits available to assist emerging female cooperatives.

The study found that female cooperatives are still using old irrigation systems. The government needs to work with institutions of technology to introduce them to new agriculture technology to improve irrigation performance. This can be achieved by promoting the implementation of new irrigation scheduling methods and system designs. This should go together with empowering female cooperatives with knowledge and skills on how to control and manage new irrigation systems.

The government needs to make it easier for female cooperatives to access production inputs such as seeds, pesticides, fertiliser, agro-chemicals, and others. The lack of inputs hinders the smooth running of female cooperatives. The application of inorganic fertilisers with organic resources needs to be promoted, scaled up and commercialised as this combination has been found to be effective in increasing soil fertility and crop yields among primary female cooperatives that cannot afford fertiliser inputs.

Furthermore, government should promote female cooperatives by highlighting the shared benefits of ownership, thus sharing risks, liabilities, profits, and reducing expenditures for

operational costs. There is the need to support the issue of land appropriation as championed by the African National Congress-led government. This would benefit female cooperatives and other entities whose business is dependent on land. However, government should ensure that the strategy of land appropriation does not de-stabilise agriculture and that deserving groups benefit from the land to be appropriated.

8.4.3 Value chain organisation

The study found several value chain organisational challenges affecting female cooperatives in the agriculture sector. Government and stakeholders should empower female cooperatives with knowledge on inventory management and skills on how restocking farming items is done; how to decide the quantities of stock to purchase; the amount to produce; how to determine prices and when to sell. Government, along with development partners, needs to empower female cooperatives with the resources they need to put agro-processing industries in place. This would breathe life into the agricultural industry and create employment for the local people.

Strategic measures need to be developed to deal with female cooperatives' problems of outbound logistics especially during harvesting, marketing, transporting and storage, which were identified as the stages that caused many losses. There needs to be collaboration between government and stakeholders to help entrench sustainable transport by helping female cooperatives to gain access to rail infrastructure such as locomotion, service levels, wagons, rates, and branch lines as a way of improving their access to markets.

8.4.4 Marketing challenges

The study found that female cooperatives have marketing challenges when it comes to their ability to advertise their products. The findings suggest that female cooperatives are not able to effectively use various advertising media channels, with different techniques and methods most suited to their products. Female cooperatives in rural areas also lack information on market demands and trends, quality assurance, production prices, right times to sell their products, best places to sell produce and potential buyers. Government should therefore help female cooperatives in rural areas by encouraging rural agriculture information technology to enable female cooperatives get the marketing information they need and advertise their produce.

8.4.5 Skills levels

The study found that female cooperatives lack farming skills, which shows up in many ways such as the fact that they have no plans for weaning calves and are not able to keep records for the livestock activities affecting their livestock business. Female cooperatives need to be empowered with skills and knowledge in animal husbandry, including methodical breeding programmes, business management skills, banking skills, marketing skills, labour management, and service quality management. In addition, government should empower female farmers with education on policies and legislations that have been developed to guide female cooperatives and help them understand their rights and achieve rational outcomes.

8.4.6 Collateral availability

The research revealed that the unavailability of collateral is a serious challenge faced by female cooperatives. Government and interested development partners should de-mystify the negative view that female cooperatives have about collateral loans and highlight the benefits of collateral loans.

8.4.7 Legal and regulatory framework in relation to land

The research found that the lack of an effective legal and regulatory framework hampers female cooperatives in agribusiness. Government needs to implement South Africa's policies and rights for women and their rights to have access to land. Although South Africa has good policies and legislation governing rural women's land rights and access to land, there is a disparity between policies and political will, conviction, and commitment to implement those policies and legislation.

8.4.8 Lack of infrastructure

Findings show that female cooperatives have irrigation infrastructure challenges. Therefore, female cooperatives should be empowered with the resources to access modern irrigation systems and resources to make use of the on-farm infrastructure given to them by local government. Government, farmers, and stakeholders should combat the theft of farm equipment by putting in place neighbourhood security patrol measures. Government should invest in mobile technology or make the mobile technology environment more conducive for companies to invest in mobile agriculture technology. This may help farmers to connect with

different stakeholders and collect the information that they need for their welfare and the growth of their business.

8.4.9 Business culture

Findings show that female cooperatives lack agribusiness culture and acumen. There is therefore a need to empower female cooperatives with education through seminars, workshops, talks and courses on how to sustain an unobstructed vision, values, and purpose for their agribusinesses.

Female cooperatives need to be trained in the strength of their bargaining power. This will allow them to have access to financial markets and market information critical to lucrative business.

8.5 RECOMMENDATIONS FOR FUTURE RESEARCH

- Future research should explore the main challenges female cooperatives face in the agribusiness industry using a quantitative research methodology to generate a statistical understanding using a statistical approach
- There is a need to conduct a longitudinal study on the challenges faced by female cooperatives in the agribusiness industry in South Africa.
- There is also a need to conduct a comparative study between primary, secondary, and tertiary female cooperatives in the agribusiness industry in South Africa.
- It is recommended that this study be replicated at the local, provincial, and national levels in South Africa. A comparative study should also be conducted of all the provinces to ascertain if there are differences in the challenges faced by female cooperatives in the agribusiness industry in different areas.
- There is the need to conduct a case study focusing on individual female cooperatives in the agribusiness industry that have excelled and those that have failed to find out why this is the case. This may help to generate accurate and female cooperatives- specific information from different growth levels.
- This study can be replicated focusing on female cooperatives, customers, and stakeholders to allow the collection of balanced findings on agribusiness.

8.6 CONCLUSION

This research contributes to existing literature on agribusiness by determining and documenting the challenges encountered by female cooperatives in Pietermaritzburg and by suggesting strategies that might be implemented by the South African government to recognise the gravity of the challenges faced by female cooperatives and be proactive in meeting them. The study found that female owned farming cooperatives in the Pietermaritzburg vicinity include poor value chain organization, limited access to land, lack of agri-business culture acumen, lack of infrastructure, lack of adequate government support, lack of markets, lack of effective implementation of the legal and regulatory framework, and lack of collateral availability.

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APPENDIX A

Research Instrument

IN-DEPTH INTERVIEW GUIDE

WELCOMING REMARKS (RESEARCHER)

I will greet the participant and introduce myself to him or her, allow them to introduce themselves as well. Tell the respondent the purpose of the interview and explain the structure of the interview session to him or her. Then ask him or her to be comfortable before the interview.

PURPOSE OF THE INTERVIEW (MODERATOR)

I will explain to the respondent that issues to be discussed, explain the questions and time allocated for to create ease environment for all participants to have a great understanding of the session.

I will encourage respondents to feel free to express their views. I will remind him or her that there were no right or wrong answers hence their views were especially important. I will make it clear that this research is aiming at getting more information that would contribute to the improvement of the agriculture sector and the Agri business in Pietermaritzburg. The participants will be assured that the information is going to be treated with high confidentiality. That also the respondents will be entitled to their opinions. All respondents will be informed about expected duration of the interview and a request will be made to record the interview session on the audio recording device.

INTERVIEW

As an ice break, I will start with simple questions that need simple answers

- How skills levels affect female cooperatives in the agricultural sector in Pietermaritzburg?
- How does legal framework affect female cooperatives in the agricultural sector in Pietermaritzburg?
- How does capital and markets affect female cooperatives in the agricultural sector in Pietermaritzburg?
- How collateral availability have affects in the female cooperatives in the agricultural sector in Pietermaritzburg?
- How does government support affect female cooperatives in the agricultural sector in Pietermaritzburg?
- How does lack of infrastructure affect female cooperatives in the agricultural sector in Pietermaritzburg?
- How does business culture affect female cooperatives in the agricultural sector in Pietermaritzburg?

CLOSING REMARKS

I will offer an opportunity for any short final comments' participants would like to make.

Thank you very much for your input today, are there are any other comments or remarks on the Research topic or about interviews that anyone would like to make?

Explain that: the information collected will be used for thesis writing and results will be shared in seminars or published without names of participants.

APPENDIX B

Informed Consent

PROJECT TITLE: A CONCEPTUAL FRAMEWORK FOR ADDRESSING CHALLENGES FACING FEMALE OWNED AGRICULTURE COOPARATIVES: A CASE STUDY OF THE AGRICULTURE COOPERATIVES IN PIETERMARITZBURG

FULL NAMES

Students' name: Silindile Ndlovu

School: GSBL

College: Law and Management Studies

Campus: Westville

Proposed Qualification for a Project: Doctoral Business Admin

Postal Address: The University of KwaZulu-Natal, Westville Campus, Durban, South Africa.

Supervisor

Dr. Given Mutinta

Contact: 0312608854

E-mail: Mutinta@ukzn.ac.za

HSSREC Research Office Phumelele

Ximba

Contact: (031) 260-3587

E-Mail: ximbap@ukzn.ac.za

PROJECT LEADER DETAILS

Phone: 0737796644

Email: Slindile.Ndlovu@durban.gov.za

My name is Silindile Ndlovu, and I am a Doctoral degree student at UKZN Westville. I am conducting a study called A Conceptual Framework for addressing challenges facing female owned agriculture cooperatives, a Case study of Agriculture cooperatives in Pietermatzberg, Kwa Zulu Natal. The objective of this project is to understand the factors that influence managing of Parks Recreation facilities. Enclosed with this letter is a list with brief questions on your perceptions of factors that influence the Challenges in managing Parks Recreational facilities Case study of Botanic Gardens of eThekweni. I am asking you to read through the interview guide.

The results of this project will be summarized, and relevant stakeholders will be given a summary report. I guarantee that your responses will not be identified with you personally. The participation is voluntary and there is no penalty if you do not participate in the study. Please put your signature on the dotted lines to show that you have read and understood the contents of this letter.

The duration of the interview will be 45 minutes and there is a plan to audio record the session, permission will be obtained from the respondents. The consent form will be translated in a vernacular language (Zulu)

I..... hereby consent\do not consent to have this interview recorded..... (Full names) hereby confirm that

Mina Ngiyavuma\Angivumi ukuzibandakanya nalolugcwaningo mina Ngiyavuma\ Angivumi no kuqhoshwa kunkulumo.

I understand the contents of this letter and the nature of the research project has been clearly defined consent to participating in this research project.

Ngiyaqonda okuqhukethwe ilencwadi namayelana no gcwaningo olubalulwe kulencwadi yokuvuma noma yokunqaba ukuthi ngizibandakanye kulolugcwaningo.

Participants Signature.....Date.....

I siginisha yo zibandakanya kungwaningo..... Usuku.....

APPENDIX C

DECLARATION LETTER

This is to declare that I.....

Student Name: Silindile Ndlovu

Student Number: 213572456

I will ensure that the respondents' privacy is protected. I will not use the participants names in any of the information gathered from this study or in any of the research reports. Any information received in the study will be recorded with a code number that will be secured. When the study is completed, the key that shows which code number goes with your name will be destroyed. Participants will be made aware of their rights, such as, that: have the right to withdraw from the study at any time without any negative consequences.

I also confirm that respondents have the right to withdraw from the study at any time without any negative consequences.

APPENDIX D

Ethical Clearance Approval



24 August 2017

Ms Sindile Goodness Ndlovu (213572456)
Graduate School of Business & Leadership
Westville Campus

Dear Ms Ndlovu,

Protocol reference number: HSS/0996/0170

Project title: A conceptual framework for addressing challenges facing female owned agriculture cooperatives: A case study of the Agriculture Cooperatives in Pietermaritzburg

Full Approval – Expedited Application

In response to your application received on 29 June 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and FULL APPROVAL for the protocol has been granted.


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 reference number.

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.

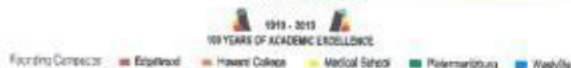
Yours faithfully


Dr Shamla Naidoo (Deputy Chair)

/ms

Cc Supervisor: Dr Given Mutinta
Cc Academic Leader Research: Dr Muhammad Hoque
Cc School Administrator: Ms Zarina Bullyraj

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APPENDIX E

Language editing letter