The Role of Non-Governmental Organisations in Facilitating Smallholder Farmers' Access to Markets in Eswatini

Stambuli Emmanuel

Student no: 215082332

December 2022

Submitted in fulfilment of the academic requirements for the degree

Master of Agriculture (Food Security),

African Centre for Food Security,

School of Agricultural, Earth and Environmental Sciences,

College of Agriculture, Engineering, and Science

University of KwaZulu-Natal,

Pietermaritzburg

Supervisor: Mr. Denver Naidoo

ABSTRACT

Market access is believed to be a necessity for smallholder farmers who produce crops and sell surplus crops for income purposes. The lack of market accessibility is a challenge faced by the majority of smallholder farmers. Lack of market accessibility is caused by various factors such as low levels of production, poor infrastructure as well as issues to do with high transportation costs. However, the role played by Non-governmental Organisations (NGOs) within the agricultural sector has been of influence in facilitating market access for smallholder farmers. NGOs in developing and less developed countries have identified the need to support smallholder farmers and intervene to alleviate poverty and positively contribute to improving smallholder farmer livelihoods. In the Kingdom of Eswatini (KoE), there has been a growing emphasis on smallholder farmer agri-business development to enable smallholder farmers to benefit from market operations. Smallholder farmers are, however, still faced with constraints that negatively influence their participation in various markets. In the KoE, smallholder farmers have often found it difficult to produce crops in large quantities, and crops with good quality for the available markets that are highly dominated by commercial farmers. However, the Ministry of Agriculture in the KoE has managed to collaborate with key international organisations such as the Food and Agriculture Organisation (FAO). As a result, programmes such as the Swaziland Agricultural Development Programme (SADP) have been launched to work with local NGOs to establish marketing platforms for smallholder farmers seeking to engage in agri-business. This has resulted in the need to fully explore the role of NGOs in facilitating market access for smallholder farmers and what the smallholder farmers think about the work that the NGOs do in improving their agricultural livelihoods.

The study focused on exploring the role of NGOs in facilitating market access for smallholder farmers. The study adopted a mixed-method approach, and the data collection was conducted through the distribution of questionnaires to smallholder farmers and the conducting of interviews with NGO representatives. The selection of participants occurred using purposive sampling. The smallholder farmer participants were recruited from various NGOs in the KoE that this study selected. A total of six NGOs working with smallholder farmers in the KoE ensured that several of their smallholder farmer beneficiaries and representatives participate in the study. The questionnaires were analysed using SPSS 27 and the interviews were analysed using Nvivo 12. The study revealed that NGOs do play a vital role in assisting smallholder farmers to have access to markets from the production level to the market accessibility level. Furthermore, the study revealed that smallholder farmers rely on NGOs for production inputs to increase their yields and for NGOs to find appropriate markets for them. The research also found that NGOs have their challenges when it comes to operating with smallholder farmers and facilitating market access for them. Further, the study revealed that a lack of access to funding is a major constraint that smallholder farmers are faced with and are therefore unable to produce

high-value crops which can enable them access to various formal markets. The study recommends that NGOs in the KoE ought to train smallholder farmers more on the importance of establishing their markets in the communities that they come from. The study recommends that market identification, accessibility, and creation for smallholders should be the focus for policymakers and NGOs. Interventions aimed at enhancing market accessibility and participation among smallholder farmers in the KoE should be implemented. There is also a need for the government to play a vital role in assisting NGOs in the KoE to meet their goals. Lastly, it is recommended that a market-led approach to smallholder farmer development be adopted to improve the commercial prospects of smallholder farmers whilst bolstering farmers' livelihoods.

DECLARATION 1- PLAGIARISM

I, Emmanuel Stambuli declare that:

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

2. This dissertation has not been submitted for any degree or examination at any other university.

3. This dissertation does not contain other person 's data, pictures, graphs, or other information unless specifically acknowledged as being sourced from other sources.

4. This dissertation does not contain other persons 'writing unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted then:

a. Their words have been re-written, but the general information attributed to them has been referenced.

b. Where their exact words have been used, then their writing has been placed in quotation marks and referenced.

5. This dissertation does not contain text, graphics, or tables copied and pasted from the Internet unless specifically acknowledged, and the source is detailed in the dissertation and the References sections.

Name & Surname: Emmanuel Stambuli Date: 20 December 2022

Signed: 

LIST OF FIGURES

LIST OF TABLES

ABBREVIATIONS AND ACRONYMS

ACAT: Africa Cooperative Action Trust

ADF: America Development Foundation

CARE: Cooperative for Assistance and Relief Everywhere

ESAFF: Eastern and Southern Africa Small Scale Farmers

GDP: Gross Domestic Product

HFIAS: Household Food Insecurity Access Scale

INGO: International Non-governmental Organisation

NGO: Non-governmental Organisation

PD: Participatory Diagnosis

PMR: Participatory Market Research

SADP: Swaziland Agricultural Development Programme

SCC: Swaziland Conference of Churches

SCF: Save the Children Fund

SPSS: Statistical Package for the Social Sciences

SWAFCU: Swaziland Farmers' Cooperative Unit

TDL: Title Deed Land

UNDP: United Nations Development Programme

WFF: Women Farmer Foundation

Table of Contents

This thesis is a collection of manuscripts (Chapters 4 and 5) where each chapter is a separate entity and hence some repetition across chapters is unavoidable

CHAPTER ONE: THE PROBLEM AND THE SETTING

1.0.INTRODUCTION

This chapter outlines the background, and this is covered in section 1.1. Section 1.2 goes on to outline the problem statement. The research question is outlined in section 1.3. The chapter also outlines the main objective, which can also be translated as the study aim (section 1.4), specific objectives (section 1.4.1 to 1.4.3), and the importance of the study (section 1.5). Section 1.6 outlines the strengths and limitations of the study. Section 1.7 consists of definitions of terms. While sections 1.8 and 1.9 are the assumptions and overview of the research, respectively.

1.1. BACKGROUND

The Kingdom of Eswatini (KoE) is situated in southern Africa. It is the 17th-smallest country in the world, which covers an area of 17,364 square kilometres (BBC News, 2019). BBC News (2019) confirmed that the country's population is approximately 1.3 million. Most of these people have an agriculture-based means of making a living.

A dualistic approach to agriculture is followed by the nation of Eswatini, using both commercial and subsistence farming. The commercial agricultural sector is established and practiced under Title Deed Land (TDL) which occupies approximately 26% of the land in the country and retains nearly 90% of irrigation infrastructure while using modern technologies in crop production such as sugar (Shabangu, 2016). More than 70% of the country's population are smallholder farmers who work in rural areas. This farming model focuses primarily on mixed farming, which incorporates livestock raising and the planting of crops (Mugube *et al*, 2019).

Farmers engaged in crop production and livestock raising on small land plots are known as smallholder farmers (Mugube *et al*, 2019). These farmers only use comprehensive technical systems for their farming efforts (Shabangu, 2016). They are not well off because they live in impoverished conditions, they have insufficient access to new farm inputs, and they have little to no formal agricultural schooling (Thompson, 2011). The Kingdom of Eswatini's (KoE) smallholder farmers are mostly retired civil servants who live in rural areas and farm as a second career (FAO, 2012). Smallholder farmers play an important role in maintaining both food and nutrition security. Smallholder farmers have a significant impact on rising global food production, which helps meet the global demand for food. Smallholder farmers ensure that there is at least a 70% availability of food provided in different countries and regions around the world. However, for these people, problems remain linked to food and nutrition security. For this study, it is crucial to bear in mind that smallholder farmers have various market participation opportunities. However, smallholder farmers who attempt to support safe livelihoods encounter many obstacles that preclude them from gaining market access. Smallholder farmers face problems in getting

access to the market. The issues are further compounded by the lack of business knowledge (Evans *et al.*, 2012). Smallholder farmers in rural areas have little knowledge of the operation of the food market. A lack of market operation understanding leaves them to sell their surplus produce to nearby households within the communities (Kangethe & Serima 2014). Thus, their revenue is poor, since nearly everyone in the village produces enough food to fulfil their basic needs. Smallholder farmers also face problems because of transportation concerns.

The appropriate fresh farmer vegetable or crop produce markets are in towns and cities. Finding transportation means in rural areas with poor road infrastructure becomes a challenge for a farmer who cannot access transportation to markets (Stringer *et al.*, 2008). As a result, overproduction results in spoilage and causes the smallholder farmer to produce solely for subsistence with no income. Because of this, the market demands should be re-evaluated, according to Kangethe and Serima (2014:184), as farmers may lose interest in growing crops if they are unable to meet the market's wants despite an increase in production. As a result, the issue of the market's needs must be revisited in terms of crop quality. This concludes that NGOs support the government in promoting the production of crops for smallholder farmers and start-up markets for them.

This would boost smallholder farmers' livelihoods in rural areas while also generating agribusiness opportunities (Nyambo *et al.*, 2009). In many countries, most governments now see it as their duty to ensure that smallholder farmers have secure and remunerative market access. NGOs also play a role in linking smallholder farmers to foreign markets. Thus, this study aims to examine NGOs' roles in assisting farmers in the KoE with market access.

1.2. PROBLEM STATEMENT

Market access is affecting many farmers in the Kingdom of Eswatini (KoE). Nevertheless, the smallholder farmers, who are engaged in agriculture, stand to benefit if market access problems, such as weak agricultural skills and lack of information on market operations, are tackled. Rural land yields have generally decreased over the past decade due to unreliable rainfall patterns, unregulated grazing, unexploited crop rotation, input prices, and the HIV/AIDS epidemic (FAO, 2012). Thus, many smallholder farmers find it difficult to produce many crops and crop quality for the local market, dominated by commercial farmers.

According to Simelane (2011), smallholder farmer production and marketing activities were aided by co-operatives. Eswatini's Ministry of Agriculture has collaborated with major international organizations such as the Food and Agriculture Organization. As a result, Swaziland Agricultural Development Programme (SADP) was launched to work with local NGOs such as Eswatini Kitchen to develop marketing channels for smallholder farmers who want to start an agribusiness company (FAO,

2012). Isibuko Serenity Foundation is an example of a KoE-based NGO that focuses on smallholder farmers' market access. To investigate NGOs' role in facilitating smallholder farmers' market access in the KoE is the study's focus. This is important to the research since it helps locate the prominent linkages NGOs can play between smallholder farmers and market access.

1.3. RESEARCH QUESTION

How do smallholder framers perceive market access, and what role do NGOs play in that regard?

1.4. MAIN OBJECTIVE

To explore smallholder farmers' perceptions of market access and the primary role of NGOs.

1.4.1. Specific Objective 1

To understand market access perceptions of Smallholder farmers based on the work done by NGOs.

1.4.2. Specific Objective 2

To investigate the determinants that influence smallholder farmers to have and not to have access to markets after being trained by NGOs.

1.4.3. Specific Objective 3

To investigate the role of NGOs in facilitating market access for smallholder farmers.

1.5. IMPORTANCE OF THE STUDY

The focus of the study is on market access for smallholder farmers. One of the problems that smallholder farmers generally must contend with is seeking admission to the market. The research becomes essential due to the problems smallholder farmers worldwide face while trying to enter markets. Therefore, it is the aim of this study to draw attention to the issues that exist in the smallholder farming community of the KoE. Further, the research additionally integrates an element that literature has so far ignored. This new dimension would reveal why some farmers in the KoE have access to markets while others do not.

Since smallholder farmers have difficulty accessing the market, NGOs must be included as important stakeholders that can link smallholder farmers and markets. As a result, investigating the role NGOs play in helping smallholder farmers gain market access is crucial for the researcher conducting this study, as NGOs have not been studied concerning this aspect in the KoE.

1.6. STRENGTHS AND LIMITATIONS

Strengths for this research include obtaining data for easily analysed objectives using thematic, content, and descriptive quantitative analysis. The study provides the researcher with the raosoft online software known as a sample size estimation tool. This is made more accessible for the researcher to increase sample size accuracy and decrease sample size calculation errors. However, with quantitative data methodology, it can be not easy to find secondary quantitative data. This is going to be the limitation

of this study. A key strength of this study is embedded in qualitative data methodology. For instance, collecting secondary data such as NGO documents and research articles is easy to conduct.

However, the limitation is that qualitative data collection can be time-consuming—generally, the language barrier is a significant limitation during the study. However, as a strength, the solution is to ask for the assistance of a first language speaker familiar with the siSwati language to assist with interpretation. Also, trained siSwati enumerators will assist in the data collection.

1.7. DEFINITION OF TERMS

Non-Governmental Organisations (NGOs): Omofonmwa and Odia (2017: p 248) define NGOs as "groupings that are outside the domain of government in the areas of formation, funding, management and the processes and procedure in which they carry out their sets of objectives geared towards cultural, socio-economic and political transformation of all facets of the society". However, for this study, the focus is on NGOs with their key objectives focused on agricultural work, mainly work to do with smallholder farmers in marginalised communities of the KoE.

Smallholder Farmers: Farmers that are involved in crop production and the raising of livestock on small pieces of land (Mugube et al, 2019). These farmers mainly have no use of extensive technological systems for their farming activities (Shabangu, 2016). For this study, smallholder farmers will also be those individual farmers whose agricultural work is primarily focused on producing crops on small pieces of land. It, therefore, excludes smallholder farmers that have a focus on livestock production. The term smallholder farmers may be used interchangeably with the term small-scale farmers. However, the meaning remains the same for this study.

Markets: Markets in this study are defined as the actual organised centres where the trading of agricultural crop production is and can be conducted by farmers, commercial and smallholder farmers.

1.8. ASSUMPTIONS

- It is assumed that the questionnaire and interview participants were not deceptive with their responses. The participants answered to the best of their capability and in honesty. The reason is that their identity was protected using pseudonyms.
- It is assumed that this study is an accurate representation of the current situation in the KoE regarding the struggles of smallholder farmers accessing markets. The reason is that the country is dominated by large-scale commercial farming that utilises technology for good crop production with high quality for market access. Simultaneously, smallholder farmers only have a limited use of comprehensive technical systems for their production and market access efforts.

- It is assumed that smallholder farmers that have access still lack the necessary skills and information on the market operation. As a result, they have struggles in maximising profit gains from the crops they sell.

1.9. OVERVIEW OF THE STUDY

Chapter One has been the introductory chapter of this study. It has introduced the study's overall focus on the role of Non-governmental Organisations (NGOs) in facilitating market access for smallholder farmers in the KoE. This chapter has also laid down the statement of the problem which the overall research seeks to unpack. It has also established the main objective (aim) and objectives of the study. Chapter one has also provided this study with a brief description of the study area.

Chapter Two is the literature review chapter. This chapter looks at some of the literature from different studies that relate to the understanding of NGOs. Chapter two contains other subheadings and discussed literature surrounding the smallholder farmer sector globally, continental, and the smallholder farmer sector in the KoE. This chapter looks at the challenges experienced by smallholder farmers regarding market access; it also looks at how smallholder farmers can be linked to markets by NGOs for better income opportunities; it includes the KoE case and the discussion component.

Chapter Three will be the research methodology chapter. It will focus on the research design component, the research approach; sample and the sampling method component; the participants were chosen and the data collection section.

Chapter Four is a manuscript that is written to achieve *specific objectives one and three*. It presents thematic and descriptive analyses of data collected in Chapter three. The results are therefore, presented in tabular formats and further discussed by the researcher.

Chapter Five takes a similar approach as that of Chapter Four. It is also a written manuscript. However, the chapter aims to achieve *specific objective two.* It does this by using descriptive analysis on the data collected in the third chapter of this study.

Chapter Six is both the conclusion and recommendation chapter of this entire research.

CHAPTER TWO: A REVIEW OF LITERATURE

2.1. UNDERSTANDING NON-GOVERNMENTAL ORGANISATIONS: AN INTRODUCTION

Non-governmental organisations (NGOs) come with great diversity. This diversity is simply because they range from different multiple institutions and groups that operate independently, outside the influence of governments and businesses. According to the World Bank (1990), NGOs' diversity makes it challenging to develop a simple definition. The World Bank (1990) elaborates on NGOs, stating that NGOs support international development as private agencies in industrial countries. NGOs can include charitable and religious organisations responsible for mobilising private funds for development, distribution of family planning and food services, and community organisation promotion.

Scholars have come with their very own different definitions of what constitutes an NGO. However, this is based on different NGO conceptualisations. The different conceptualisations of NGOs also make it difficult to have a single, clear, valid definition of what NGO is. The different conceptualisations of NGOs, there are known as advocacy NGOs and operational NGOs (Lewis, 2010). Advocacy NGOs are responsible for defending and promoting specific causes like fighting against social injustices and for women's equal rights. Several NGOs are politically based and are actively involved in campaigns to achieve broad ideals within the 'umbrellas' of social justice, human rights, and environmental movements (Paul, 2000). A great example of a political advocate NGO is the American Development Foundation (ADF). Within democratic processes, an increase in citizen participation is achieved by providing advocacy training and technical assistance offered by the ADF (Stuart, 2013). For instance, ADF supported several NGOs in Croatia that were advocating for human rights and democracy and led to the change of the country's public policies regarding refugee rights. However, operational NGOs are quite different from these.

Operational NGOs are defined by their service delivery (Mostashari, 2005; Bromideh, 2011). They are project-oriented. Operational NGOs work towards getting projects done from the time the projects are designed to the time they are implemented (Stuart, 2013). A good example of an operational NGO comes from South Africa through the Green Trust, which is held by World Wildlife Fund South Africa (Stuart, 2013). The NGO is involved with promoting indigenous knowledge through projects like the Traditional Healers Partnership Project and supporting subsistence and sustainable fisheries. However, for this study's purposes, the used definition is that offered by Omofonmwa & Odia (2017).

Omofonmwa and Odia (2017: p 248) define NGOs as "groupings that are outside the domain of government in the areas of formation, funding, management and the processes and procedure in which

they carry out their sets of objectives geared towards cultural, socio-economic and political transformation of all facets of the society". However, for this study's purposes, the focus is on NGOs that have their key objectives focused on agricultural work, mainly work to do with smallholder farmers in marginalised communities of Eswatini.

2.2. THE GLOBAL EMERGENCE OF NON-GOVERNMENTAL ORGANISATIONS

NGOs have not always been in existence from the beginning of time. The early presence of NGOs dates to 1839 through the establishment of International non-governmental organisations. About 1083 NGOs have been known to have existed by the year 1924 within the 20th century. The main reasons for the existence of these INGOs was for anti-slavery purposes, where they acted as movements against slavery and movements against women's suffering (Banks et al., 2015). However, it was after the formulation of the United Nations Organization in 1945 that the term "NGO" came into popularity with its usage (Lewis, 2010) The popular use of the term was influenced by the rising number of NGOs and their importance in the 20th century due to the globalization phenomenon.

On the international stage, NGOs were seen to pave the platform that would counterbalance capitalist enterprises' interests with NGOs emphasising humanitarian issues, developmental aid, and sustainable development (Banks et al., 2015). As the 20th century ended, NGOs played a greater role in the 1980s as they assumed a more developmental role than before (Lewis, 2010). The more significant tonal donor saw NGOs' importance as they brought in new ideas and solutions to the longstanding development problems characterised by the inefficient government to government aid and ineffective development projects (Gooding, 2017). NGOs' work was also involved in the new thinking and ideas that dealt with gender, participation, and poverty alleviation work, which had a people-centred approach (Lewis, 2010). Examples of some of the NGOs established in the 20th century were Save the Children Fund (SCF), which was founded in 1919 by Eglantyne Jabb after World War One; The Oxford Committee against the Famine, currently known as Oxfam was established in 1942 (Lewis, 2010). The NGO was involved in providing famine relief to Greek Civil War victims. While Cooperative for Assistance and Relief Everywhere (CARE), a United States-based NGO, was established after World War Two. CARE was responsible for sending food packages to Europe in 1946 (Lewis, 2010).

The rise of NGOs on the global stage also led to their rise on the African continent upon which they played and kept playing a prominent role (Matthews, 2017). NGOs within the African continent have grown substantially. For example, in Kenya, NGOs had grown to 400 percent between 1997 and 2006 (Matthews, 2017).

The agricultural sector has become one of the arenas in which NGOs play a vital role in improving farmers' lives. Literature denotes that many of the NGOs within the agricultural sector are concerned

with dealing with market inefficiencies, collapsing of extension services, issues of inputs access and use, and issues of production. However, these majority of issues affect small-scale farmers. Literature depicts that smallholder or small-scale farmers make most of the agricultural contribution in developing states with approximately 90% contributions (Kangethe & Serima, 2014). For example, in Tanzania, 80% of the marketed surplus is produced by smallholder farmers. In Namibia, 90% of the population engages in smallholder farming. While in Eswatini, 40% of agriculture's contribution to the country's Gross Domestic Product (GDP) comes from smallholder farming (Stringer et al, 2008). However, these groups of farmers experience challenges concerning market accessibility, as commercial farmers largely influence markets.

2.3. THE SMALLHOLDER FARMING SECTOR

2.3.1. The Smallholder Sector in the World

As one of the principle economic occupations globally, smallholder agriculture employs over 70% of the world's poor living in rural areas. It stands as a source of income for many of these people. On a global scale, 60% of global agriculture is accounted for by smallholder households, most of which are made up of women as participants within the sector, growing diverse crops and rearing different livestock that fit into a home (Poole, 2017). To further illustrate the vast nature of smallholder farming globally, the world bank (2016) states that the global agricultural arena is comprised of an estimated figure of 500 million smallholder farming households (ASFG, 2013).

Globally, half a billion farms are smaller than 2 hectares with this figure further decreasing in various countries. According to Fan et al (2013), this results from several factors, such as rural populations' growth, non-labor-intensive urban growth, distortionary land policies, and formal and informal barriers to rural-urban migration. Despite such a small figure for smallholder farms, they produce four-fifths of food in the developing world (FAO, 2011; Fan et al, 2013). The small land sizes for smallholder farms form the basis of understanding a smallholder farmer's global definition. Hence, Mugube et al (2019) define smallholder farmers as individuals involved in crop production and the rearing of livestock on small pieces of land. However, Shabangu (2016) further characterises them as farmers with no use of extensive technological systems in their farming activities. Hence their preference for farming on small pieces of land. However, according to Lowder et al (2014), it is important to note that the dynamics of a smallholder farmer may change from region to region or country to country. Lowder et al (2014) further illustrates that what is considered a small-scale farm in Latin America, or the Caribbean may be regarded as a large-scale farm in Sub-Saharan Africa and vice-versa. The definition of a smallholder farmer may be constituted based on crops grown, the amounts they are being produced, and the kind of livestock being raised. The definition may also be constituted based on agro-ecological and socio-economic considerations such as market access (Lowder et al, 2014). However, for this study's purpose,

a smallholder farmer is an individual whose agricultural work is primarily focused on producing crops on small pieces of land.

2.3.2. The Smallholder Farming Sector in Africa

The agricultural sector in Africa is the most prominent economic activity on which most Africans are dependent on for their livelihoods. Across the continent, agriculture is a contributor of approximately 15% of the Gross Domestic Product (GDP) (FAO. 2016). However, this varies from country to country within the continent. For instance, agriculture contributes about 56% of Sierra Leone's GDP; 42% of Malawi's GDP comes from agriculture, while South Africa's GDP has 2.5% of its agricultural activities (Kamara et al, 2019). However, the majority of these distributions come from the smallholder farming sector.

The diverse nature of smallholder farming systems on the African continent makes it difficult for them to be defined with a single definition (Kamara et al., 2019). The nature of their diversity is due to the heterogeneous nature of the continent's agroecology, geography, socioeconomics, and demography. Although land size is always at the centre when defining smallholder farming systems in Africa, with land sizes of two-hectares or less being considered a characteristic that forms a definition of a smallholder farming system in Africa (Kamara et al., 2019). However, most of these smallholder farming systems with less than two-hectares in land size are found in sub-Saharan Africa.

In sub-Saharan Africa, smallholder farming is believed to be the driver for ending poverty (Sims & Kienzle, 2016). However, this stands as a paradox belief with growing poverty levels around smallholder farmers intensifying with little government's effort to alleviate the poverty challenge. With high levels of poverty intensifying across the region, food insecurity issues are also exacerbated with households failing to support their food intake with low food accessibility. Yet agricultural practices remain the backbone of overall growth amongst sub-Saharan African countries. Nonetheless, there is a great need to ensure competitive agricultural practices amongst smallholder farmers to ensure that poverty and food insecurity are reduced within the region.

2.4. MARKET ACCESS CHALLENGES EXPERIENCED BY SMALLHOLDER FARMERS

Market access for many smallholder farmers is one issue that affects smallholder farmers' market access. In the context of smallholder farmers, Ngqangweni et al (2016 p. 2) define market access as “the ability of these farmers to seize available market opportunities." However, opportunities to seize available markets are not feasible for many smallholder farmers, attempting to produce crops for profit-making means. The reason is that the majority of smallholder farmers experience market access challenges. Literature pin-points some of the common challenges that smallholder farmers across the globe experience and these include; lack of sufficient agricultural inputs such as seeds and farming

tools, lack market access information, lack of proper agricultural skills for good quality produce as well as high transportation costs (Stringer et al, 2008; Fan et al, 2013; Kang'ethe & Serima, 2014; Ogutu et al, 2014; Ngqangweni et al, 2016;). However, in their paper titled "*Learning from the South: common challenges and solutions for small-scale farming",* Stringer et al. (2008) categorise challenges faced by small-scale/smallholder farmers into two forms, namely, political, and socio-economic as well as biophysical challenges.

According to Stringer et al. (2008), smallholder farmers' political and socio-economic challenges involve poverty, maintaining a sustainable livelihood strategy, coping with changes to agricultural and rural policies, and global food market dynamics. Similarly, socio-economic challenges could involve limited access to infrastructure, markets, and technologies as well as a lack of human capital as mentioned by Fan et al (2013). On the other hand, biophysical challenges regarding smallholder farmers accessing markets involve dissimilar degradation and most importantly, climatic variability (Stringer et al, 2008). As a result, several smallholder farmers previously pursuing farming as an agribusiness enterprise, end up giving up on this aspect resorting to subsistence farming (Kang'ethe & Serima, 2014). Smallholder farmers also opt to pursue subsistence-oriented activities due to limited infrastructure access that includes transportation networks and market facilities (Ogutu et al, 2014). This exacerbates transaction costs and lead to the lowering of smallholder farmers' profit margins. Hence, a pursue of subsistence-oriented activities.

2.5. THE ISSUE OF FOOD INSECURITY

Available literature shows that food insecurity is a global epidemic that hits the hardest on countries from the global South (Chitiga-Magubu et al., 2013; Sasson 2012; Argaw & Shewankena, 2018). Most of the literature has indicated that food insecurity is most associated with starvation and malnutrition (Argaw & Shewankena, 2018; Faber et al, 2011; Chitiga-Magubu et al., 2013; Sasson, 2012).

Sub-Saharan Africa is one of the leading global regions heavily affected by food security with over 239 million people experiencing the plight of food insecurity on the continent (Sasson, 2012). Both socio-economic and political issues cause this plight. Amongst the socio-economic issues is poverty. Due to poverty, people in developing countries cannot gain access to food (Fawole et al, 2015). War and political instability are the other cause of food insecurity in sub-Saharan Africa. War becomes responsible for disrupting agricultural activities of an area (Fawole et al, 2015). There are frequently fewer persons in a location who can carry out farming activities because of population displacement. A decline in food output may result from this (Fawole et al, 2015).

Globally, food insecurity is a problem, especially in the African continent's rural areas. It continues to persist despite several attempts by governments and other organisations. With this, people's perceptions

of food insecurity have risen. A study conducted by Ntwenya et al. (2015: 4784) in Kilosa District, Tanzania, showed that food insecurity perceptions amongst individuals varied between agricultural seasons. Approximately 63% of households that had been surveyed worried about insufficient food during the rainy season. At the same time, nearly 50% of the households worried about having insufficient food during the harvest season. Due to food insecurity, nearly 68% of households consumed foods they did not prefer due to limited resources. A 71% of households had limited food consumption due to a lack of resources like money.

2.6. LINKING SMALLHOLDER FARMERS TO MARKETS

Several literatures have looked at how smallholder farmers can overcome various challenges for better access to markets and ultimately improve their livelihoods (FAO, 2012; Fan et al, 2013; ILO, 2017). While some have focused on identifying the importance of cooperatives within rural settings, Fan et al (2013) looked at the importance of policy options in strengthening smallholder farmers' agricultural potential. In their report titled "*From Subsistence to Profit: Transforming Smallholder Farms",* Fan et al (2013) pinpoint a need for a policy environment that supports and nurtures smallholder farmers to overcome the challenges that they face. They emphasise the need to improve production among smallholder farmers through strong links to both input and output markets; to have policies that ensure that smallholders have access to better infrastructure and agricultural services; the need for better access to capital and capacity building more in particular for the youth in agriculture; and also the need for enabling land policies that support smallholders to expand their operations through land acquisition or renting (Fan et al, 2013; ILO, 2017). To achieve a more knowledge-based and mechanised agricultural model, there is a need for reorienting economies away from labour-intensive agricultural practices. The above will assist in promoting what is known as context-specific farm-size policies.

Furthermore, establishing productive social safety nets can help smallholder farmers couple up productivity-enhancing tools with social safety net support to ensure that they remain engrossed in agriculture-based economies (Barrett, 2008). The existing linkage between productivity-enhancing tools and social safety net support could help smallholder farmers augment their incomes and deal with shocks while acquiring the necessary skills for more productive agricultural activities or practices. According to Fan et al (2013), interventions for this could include conditional cash transfers resulting from household participation in primary schooling and health services. Also, as agricultural enhancement productivity, initiatives to do with social protection are key for promoting vocational training and other education schemes tailored to smallholder farmers' technical needs. However, these cannot act as stand-alone as they will require the backing of national research and extension systems tailored to promote smallholder-friendly and smallholder accessible technologies.

Moreover, tools that offer farmers with added incentives to take productivity-enhancing risks such as switching to high-value crops and an adoption of new technologies, are necessary for smallholder farmers to increase their resilience to myriad shocks that include price and weather. However, smallholders cannot adopt such risks on their own as they require the help of key private institutions, governments, and NGOs to begin to tap into risks such as investments in infrastructure and insurance schemes. Moreover, climate change is a huge challenge being experienced by smallholder farmers in terms of their level of production (Kom *et al.*, 2020; Belay *et al.*, 2017). As a result, adopting climate change mitigation and adaptation policies within the agricultural sector is critical for assisting smallholder farmers in managing risks while improving productivity. The stated initiatives will ensure the improvement of risk mitigation and adaptation strategies for smallholder farmers.

Key policies should also aim to promote pro-smallholder value chains (Ndlovu, 2020). To build smallholder resistance to shocks and improve smallholder farmers' productivity and livelihoods, it becomes essential to link smallholders to agri-food value chains. This can come in the form of formal and informal markets as stated by Dlamini-Mazibuko (2020). This ultimately encourages smallholders to push for high volume production while maintaining the specific and strict high-quality standards of what they produce. However, the challenge that stands is when companies prefer to contract themselves with farmers that have access to nonland assets such as paved road access or irrigation schemes. These become barriers to smallholders' livelihoods and need to be overcome. Hence it becomes essential for vertical and horizontal coordination among smallholder farmers, rural market cooperatives, and producer associations (Mavimbela, Masuku & Belete, 2010; Fan *et al.*, 2013). As a result, smallholder farmers tend to experience lower transaction costs, access to market information is improved, and there is increased bargaining power that smallholder farmers tend to experience (Makhura, 2002).

A shift away from policy-oriented means to mitigating smallholder farmers' challenges takes us into looking through a territorial approach to agro-enterprise development. In the article, *Linking Smallholder Farmers to Markets in East Africa* by Sanginga *et al.* (2004), the territorial approach to agro-enterprise development is discussed. Within it, several steps have pin-pointed that focus on "empowering mountain communities to identify market opportunities and develop rural agro-enterprises" (Sanginga *et al.*, 2004 p. 288). It is important to note that linking smallholder farmers to markets form part of participatory market research (PMR).

The first of the eight steps adopted within PMR is building strategic partnerships and selecting pilot sites (Sanginga *et al.*, 2004). In this step, smallholder farmers can create partnerships with key stakeholders such as agricultural research organisations, extension services, and government departments, NGOs, the private sector, and business support services (Ramountain 2017; Ngaka &

Zwane, 2018; Simelane, Terblanche & Masariramba, 2019). Such key stakeholders can play a pivotal role in providing smallholder farmers with necessary training and tools for their agricultural activities.

The second step within PMR includes participatory diagnosis (PD) and community visioning. A pooled analysis with smallholder farmers and communities is essential for understanding community assets and opportunities and creating a collective vision of desired conditions (Eidt *et al.*, 2020). Within this step, a preliminary list of enterprise options for community income generation is evaluated (Njuki *et al.*, 2007). While step three focuses on forming PMR groups that consist of both men and women who represent their communities. These groups receive training from market facilitators (Njuki *et al.*, 2007). The training is based on market information collection and analysis as well as the selection of enterprise options. Step 4 focuses on visits to nearby major markets, supermarkets, hotels, and retail markets are essential. Such visits help identify crop varieties and products, packaging systems, price information, delivery modes, crop quality, and many others. Also, potential buyers are identified during these visits, and they assist in ensuring that contact with them is made (Cook, 2014). Step 5 where an evaluation of enterprise options goes together with step four. However, step five focuses on a range of criteria such as reliable market demand existence, the selected option's profitability, and the benefits of each enterprise option (Sanginga *et al.*, 2004).

Also, steps six, seven, eight and nine look into farmer experimentation and participatory technology development, design and implementation of agro-enterprise projects, facilitating support services for enterprise development, as well as strengthening local institutions and promoting gender equity respectively (Sanginga *et al.*, 2004). To have a more intensive but sustainable, market-oriented production, and overcome production constraints, smallholder farmers should be competitive (Siebrecht, 2020). Therefore, there is a requirement for new information, knowledge, innovation, and skills, which forms part of PMR's step six. Step seven intensifies a selection of appropriate options for managing enterprises. While step eight has a massive focus on making smallholder farming profitable by developing business support services and market institutions such as market information, business skills training, microfinance, and credit. These are critical for fostering an entrepreneurial culture within rural communities, but they also ensure that markets in rural areas work for the poor. Lastly, step nine of the PMR focuses on decreasing gender inequalities due to smallholder farming (Stevens, 2017). As a result, in step nine, PMR makes efforts to ensure that farmers' organisations are inclusive of both men and women and can foster collective action production systems and marketing systems.

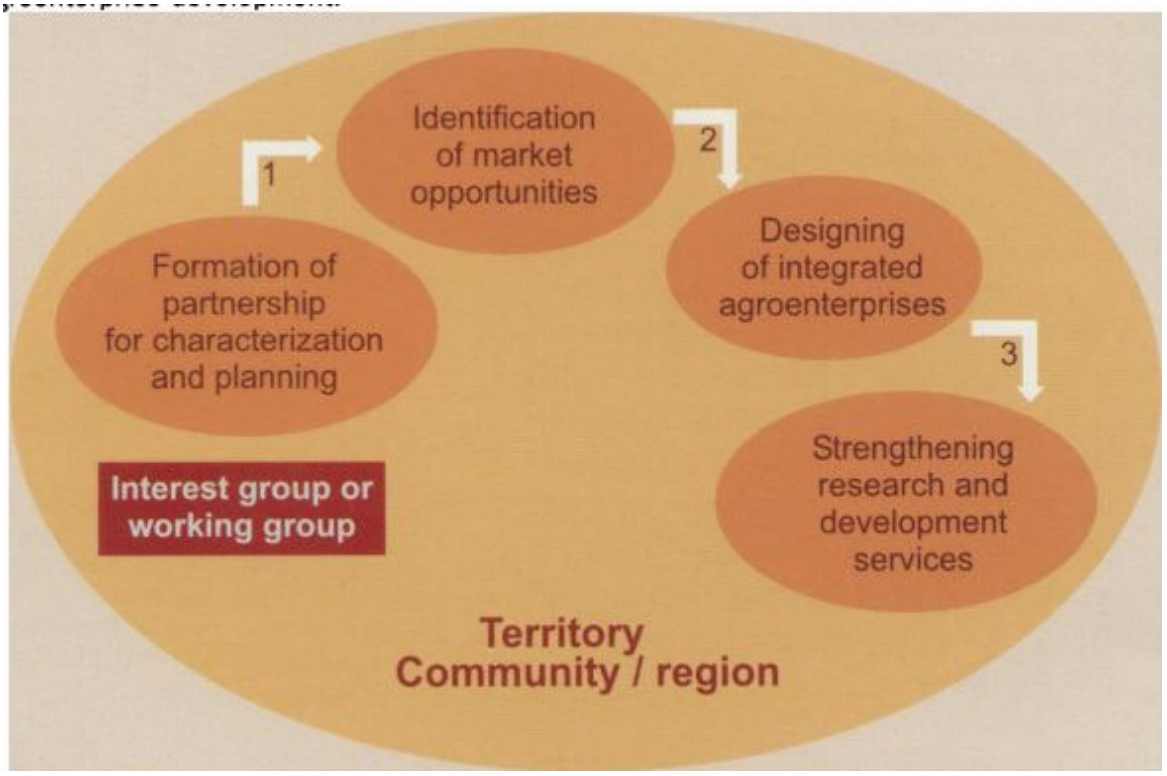


Figure 2.1: Overview of Participatory Market Research for Linking Smallholder Farmers to Markets. Source: Sanginga *et al.*, (2004)

Additionally, the Committee on World Food Security (2011) states that some of the strategies that support ways smallholder farmers can be linked to markets as stated through the PMR strategies in the article *Linking Smallholder Farmers to Markets in East Africa* by Sanginga (2004). As discussed by the Committee on World Food Security (2011), several of these ways to link smallholders to markets include collecting comprehensive information markets that have a linkage to local, national, or regional food systems within rural, urban, formal, and informal places. The establishment of both policy and institutional arrangements, which include innovative partnerships, should empower smallholders, particularly women and youth. This should consist of providing both women and youth with an equitable role in the design and implementation of contractual arrangements (Committee on World Food Security, 2011; Sanginga *et al.*, 2004; Fan *et al.*, 2013). On the other hand, ILO (2017) speaks of contract farming models as an intervention for linking smallholder farmers to markets and overcoming market access challenges. Within contract farming, buyers and farmers are obliged to having a forward agreement where value chains within markets are made available for smallholders (ILO, 2017). As a result, secured markets and stable prices become available to smallholder farmers once access to technical assistance and inputs such as hybrid seeds have been improved (Nyambo *et al.*, 2009)).

2.7. THE SMALLHOLDER FARMING SECTOR IN ESWATINI

The smallholder agricultural sector in the country is largely comprised of rural communities. In a general sense, smallholder farmers hold approximately 2 hectares of land; however, in the KoE, most of the farmers own less than 1 hectare of the agricultural land. The World Bank (2011) further mentions that only 2% of households in the KoE hold 4 hectares or more. This means that within the Kingdom, approximately 98% of the households practice smallholder farming as a subsistence activity and not as a commercial activity due to limited market access for their various products. However, smallholder farming in the KoE remains vital for its rural population (FAO, 2012). However, for more than decades, rural land yields have often decreased due to; unreliable rainfall; uncontrolled grazing; unexploited crop rotation; input costs; and the HIV/AIDS epidemic (FAO,2012). As elsewhere on the African continent and in the world, smallholder farmers in the KoE are not exempted from market access challenges. Smallholder farmers require access to markets, the kind of markets appropriate for their crop productions such as spinach, legumes, and tomatoes.

Most smallholder farmers in the KoE lack access to appropriate markets that can sell their produce. The biggest challenge amongst smallholder farmers in the KoE is finding markets for the products that they grow. It is such an enormous challenge because low-price imported products frequently flood local markets (World Bank, 2011).

Other key additional challenges experienced by smallholder farmers in the country in accessing markets include lack of access to water sources at the production level. A limited supply of water for crops to grow leads to low crop production (Shabangu, 2016). The KoE, over the decades, has been hit with drought events, which has negatively mainly affected smallholder farmers in their quest for good quality crop production fitting for the available local markets (FAO, 2012). Furthermore, access to transportation means becomes a barrier to smallholder farmers attempting to access markets. Poor road infrastructure and lack of vehicle means to transport produce to nearby markets exacerbate the market access challenge for most smallholder farmers attempting to produce crops for profit-making.

To address some of the challenges smallholder farmers face regarding market access, studies have been conducted in Eswatini. A study conducted by Simelane (2011) focused on assessing "the role of cooperatives in smallholder farmer dairy production and marketing in Swaziland". The study found that cooperatives' role regarding smallholder farmer production and marketing activities was a positive one. Several programmes have also been set up and established in the KoE through the assistance of the local government and international organisations to address key challenges experienced by smallholder farmers in the country (Masuku *et al.*, 2016). One of the programmes, the Swaziland Agricultural Development Programme (SADP) organised by the Ministry of Agriculture and funded

by the European Union and the Food and Agricultural Organisation, aimed to perform the role of establishing markets for smallholder farmers in the KoE through the integration of the Eswatini Kitchen. As an enterprise, the Eswatini Kitchen would act as an intermediary between markets and smallholder farmers. The factory became responsible for making smallholder farmers' purchases to make its sauces, jams, and chutneys for local and international markets (FAO, 2012). As a result of the SADP, over 20 000 smallholder farmers received training to practice suitable agricultural activities to grow more and produce market-organizations' assistance for high-income earnings (FAO, 2012).

2.7.1. The Agricultural Policy Framework in Eswatini

The government's agricultural policies within the KoE are formulated by the government to increase crop production that ensures that the country is self-sufficient in maize. The policies are also meant to establish fruit and vegetable production to increase rural income and improve nutrition (Gina, 2018). As a result, this encourages smallholder farmers to produce cash crops. Several projects such as, Maguga dam project, Komati Downstream Development Project, Lower Usuthu Smallholder Irrigation Project and Smallholder Agricultural Development Project have been embarked by the Ministry of Agriculture to ensure the country meets its goal of having an increase in crop production (Manyatsi & Mhazo, 2014).

The key agricultural policies in the KoE can be found within the department of agricultural extension and services as formulated by the Ministry of Agriculture. The department of agricultural and extension services has the responsibility of promoting crop production and improving human nutrition (Ministry of Agriculture, 2016). The provision of agricultural extension services to farmers is the primary activity undertaken by the department. This activity is accompanied by advice to farmers on how they can improve their farming systems and technologies, increasing productivity and ultimately improving their standard of living (Ministry of Agriculture, 2016).

2.8. THEORETICAL REVIEW

The welfarism paradigm is used to base the theoretical review. Welfarism is an ideology that promotes community and individual social well-being. Certainly, the focus is on who gets what, where, and when (Smith, 1974). Welfare theorists, for example, claim that social well-being can only be achieved when everyone in a certain region is treated equitably and justice is common. It first appeared in the 1970s as a means of addressing societal issues such as poverty and hunger (Dietrich, 2006).

The welfare approach is distinguished by its emphasis on resolving social concerns such as poverty and food insecurity. The welfare paradigm, according to Smith (1974), presents chances for practical work that can help to the understanding and solution of contemporary social problems with spatial dimensions. As a result, this philosophy informed the study in the sense that it provided guidance on

how people's social well-being may be improved through market access. Welfarism also informs this investigation of how non-governmental organizations (NGOs) have served as welfare providers in poor rural communities by facilitating smallholder farmers' access to markets (Jang, 2008). Smallholder farmers in the KoE would benefit from greater market access, which would improve their livelihoods and those of their communities. Although there are links between income and better living conditions, Kirk *et al.* (2018) claim that an increase in income does not always ensure a better life because households may mismanage finances. Nonetheless, according to this study, successful market participation will increase household income and enhance agricultural livelihoods.

2.9. ANALYTICAL FRAMEWORK

This section provides a list of the variables collected for each objective and how they were analysed. This section is fully expanded in the methodology chapter.

Objective	Variables Collected	Method of Analysis
To identify market access perceptions of smallholder farmers based on the work done by NGOs	Gender of respondents, Age of respondents, Off-farm income, Marital status, Farm income, contact with NGO, Access to credit, Access to extension, Formal education.	Descriptive Analysis using SPSS
To compare smallholder farmers who have and do not have access to markets after being trained by NGOs.	Gender of respondents, Age of respondents, Off-farm income, Marital status, Farm income, contact with NGO, Access to credit, Access to extension, Formal education.	Regression Analysis using SPSS
To investigate the role of NGOs in facilitating market access for smallholder farmers.	NGO Name, Years of Operation, Challenges Faced, Successes experienced, Position of respondents	Descriptive Analysis using SPSS

Table 2.1: Description of Analytical Framework

2.10. DISCUSSION AND CONCLUSION

Non-governmental organisations (NGOs) are organisations that operate independently away from the influence of governments. The majority of NGOs work with the aim of not making a profit (Mazibuko,

2000). Their primary responsible deals with addressing socio-economic, political issues, and ensuring accountability (Klugman, 2000). NGOs can be international, national, and community based. The scope of work of international NGOs is at the global stage with global outposts dealing with specific worldwide issues. Stuart (2013) understands national-level NGOs to be key social partners that uphold a country's constitution while receiving government recognition in their operations. Community-based NGOs operate to improve local communities' lives at the local community level (Ngcobo, 2014). Despite having the different forms of NGOs, it is important to note that they all operate to defend, advance, or promote a certain cause (Lewis, 2010). In agriculture, NGOs can also play the role of supporting farmers, particularly smallholder farmers in improving their productions and market access.

Smallholder farmers experience challenges concerning market access. The lack of market information exacerbates these challenges. Smallholder farmers, particularly those in rural areas, have no idea how food markets operate. A lack of market operation understanding leaves them to sell their surplus produce to nearby households within the communities. As a result, they do not earn much income because almost everybody within the community practices at least some subsistence farming form. Access to markets for small-scale farmers also becomes a challenge because of transportation issues. The appropriate fresh farmer vegetable or crop produce markets are in towns and cities. Finding transportation means in rural areas with poor road infrastructure becomes a challenge for a farmer who cannot access transportation to markets. As a result, produced surplus ends up being destroyed, and inevitably, the smallholder farmer begins to grow only for subsistence means forsaking income generation. As a result, Kang'ethe and Serima (2014:184) mention that "the issue of market needs to be relooked because it can be frustrating if these farmers increase their production and yet market is not adequate.

Based on the above, Kang'ethe & Serima (2014) propose the need for NGOs to facilitate the production of crops amongst smallholder farmers and initiate market access. This would lead to an improvement in rural communities' livelihoods, particularly among the smallholder farmers while also creating agri-business opportunities for them (Nyambo *et al.*, 2009). However, it is also evident that in Eswatini, there is a dearth in literature that focuses on exploring the role of NGOs in facilitating access to markets for smallholder farmers.

CHAPTER THREE: STUDY AREA DESCRIPTION AND RESEARCH METHODOLOGY

3.0. INTRODUCTION

This chapter explains the research methods of this study in detail. It also explains the implemented methodology for this dissertation. The chapter begins by explaining the choice of the research approach that has been utilized. It then shifts its attention to the study's research design by identifying both the advantages and disadvantages of the chosen research tools. The researcher followed the tools' abilities to produce results based on the study's question, aim, and specific objectives. This was followed by the discussion of the sampling strategy and the sample size that the researcher applied, and a discussion of the data analysis used. A conclusion to the chapter was proceeded with discussions on ethical issues and constraints and problems from the study methodology.

3.1. DESCRIPTION OF THE STUDY AREA

The KoE, formerly known as Swaziland, is located in the Southern part of Africa. It is one of the smallest countries both in size and population within the SADC region as well as the entire African continent. The country covers approximately 17 364 square kilometres of land and has a total population of over 1.3 million people (BBC, 2019). The country is located at the geographic coordinates 26°30′S 31°30′E. The KoE is also a landlocked country bordered by Mozambique to its northeast and South Africa to its north, west, and south. The country is divided into four regions namely, Hhohho, Manzini, Shiselweni, and Lubombo. The data collection was conducted in rural communities within the above-mentioned regions. The majority of the households within these rural communities were female-headed households, which are mildly food insecure and poor because of high levels of unemployment, with agriculture being the main livelihood strategy.

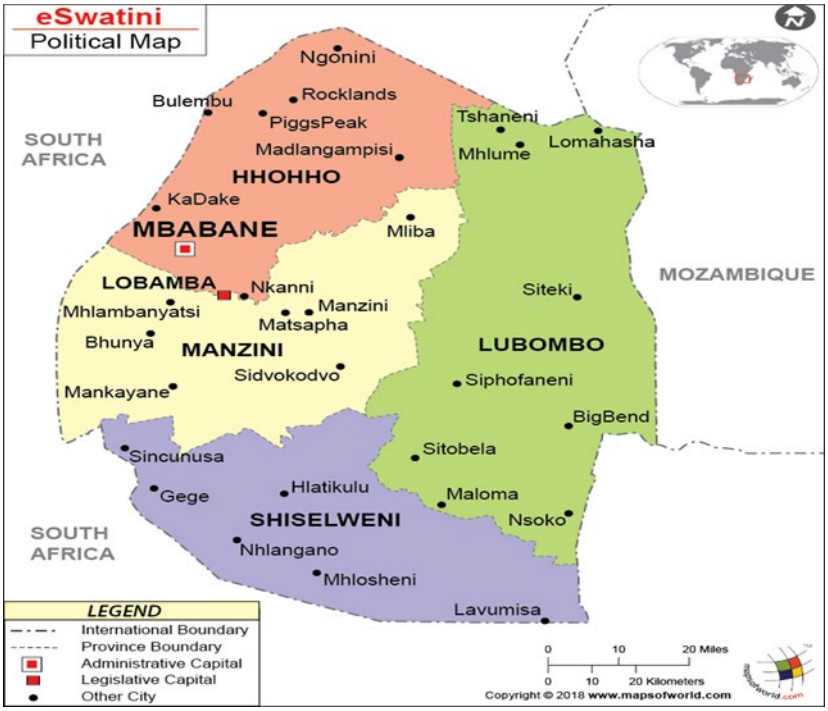


Figure 3.1: Depicting the map of The Kingdom of Ewatini(*Source:* Google maps)

3.2. RESEARCH DESIGN

According to Sileyew (2019), a research design provides an appropriate framework for a study. While Akhtar (2016) states that a research design is where elements of a research project are held up together. In essence this phenomenon has been understood differently by various scholars. However, the important aspect of a research design is to ensure that the study being conducted can be sail smoothly using various research procedures (Akhtar, 2016). This helps in gathering maximum data with minimal time, effort and money spent. In this study, the exploratory research design was adopted.

3.2.1 Exploratory Research Design

Exploratory research design is defined as research used to investigate a problem which is not clear. The key aspects of an exploratory research design are to offer a definition and an understanding of the problem being investigated. However, it does not provide conclusive results. Additionally, throughout its process, new ideas and insights are discovered by the researcher. In this study, exploratory research identifies possible nature of relationships that may exist between variables under consideration. It also assists in exploring the external factors and variables that might impact the research.

As any other research design, it is important to note that an exploratory design also has advantages and disadvantages. Some of the advantages presented by exploratory research is that the researcher becomes flexible and can easily adjust to forthcoming changes as the research progresses. This means that the researcher can make changes to things like the research topic, the research problem as well as its objectives. Exploratory research is believed to be low-cost, and this can be very advantageous to the

researcher. It also lays the foundation for further research be conducted which is a very key aspect for this design.

Several of the disadvantages associated with exploratory research is that although it leads the researcher to answering the research question, it is often inconclusive. This mainly brings in questions of how reliable and authentic the study is. The second disadvantage of this design is that smaller samples are often involved. This makes it challenging for results to accurately be interpreted for a generalised population. There are also aspects when collected qualitative data can be judgemental and biased making it less authentic and reliable.

An exploratory research design was adopted for this study because the problem has broadly been defined as noticed in this study's first chapter and there has been minimal research conducted that explores the role of Non-Governmental Organisations (NGOs) in facilitating market access for smallholder farmers. Hence exploratory research is essential for tackling new problems where little or no previous research has been conducted. It was, therefore, necessary to adopt this design as it explored the research topic with varying levels of depth and dimension. The other rationale in the use of this design was that it allowed the researcher to select respondents who had a particular experience with the problem and in this case, those were NGO representatives and smallholder farmer beneficiaries of these NGOs. As a result, an exploratory research design allowed the researcher to prepare interview schedules and conduct interviews as well as preparing questionnaires which were the primary research method. However, exploratory research was also flexible in making use of secondary research methods which included the collection of data from the internet using genuine and authentic website sources which in this aspect included NGO profiles and online publications.

3.3. RESEARCH APPROACH

The research approach discusses the complete set of procedures in which the research relied on when implementing the study, collecting, and analysing as well as interpreting the data. In essence, there were three main research approaches to pick from in this study, and these included the qualitative, quantitative, and mixed methods approaches. However, in this study, an integrated mixed methods approach was adopted.

3.3.1. An Integrated Mixed Methods Approach

This approach involved utilising both qualitative and quantitative research methodologies in collecting, analysing, and interpreting data (Zohrabi, 2013). The approach is mainly selected when neither qualitative nor quantitative approach alone is sufficient to answer research questions or tackle research objectives. Hence the adoption of this approach took place for this particular study.

The benefit of this strategy was that it allowed the researcher to balance off the inherent flaws of one research method with the inherent advantages of another. For instance, the strengths of the quantitative technique in this study were used to make up for the inadequacies of the qualitative method, and vice versa (Almalki, 2016). As a result, existing method biases were scratched out. However, the use of an integrated mixed methods approach also has its drawbacks and this includes the skills required for it to be used. In a more generalised sense, a researcher may not have the sufficient skills in utilising both qualitative and quantitative methods. As a result, expertise of another individual may be required which increases costs. However, despite such a notion, this study required an integrated mixed-methods approach.

The main rationale for an integrated mixed methods approach for study was that the approach provided a platform in tackling the different research objectives as identified in the first chapter. For instance, the first and third specific objectives in the first chapter required qualitative methods of data collection, analysis, and interpretation. While the second specific objective as identified in the first chapter required quantitative methods for data collection, analysis, and interpretation. Hence the rationale behind the adoption of an integrated mixed methods approach.

The second rationale in the adoption of an integrated mixed methods approach stemmed from the need to validate the study using the triangulation process which integrated both qualitative and quantitative data collection, analysis, and interpretation methods. Triangulation process was made possible using an integrated mixed methods approach which allowed the study to have a greater validity by seeking corroboration between qualitative and quantitative data. Furthermore, the use of this approach provided the study with a complete and more comprehensive picture of this study's phenomenon of smallholder farmers' market access.

3.4 RESEARCH METHODS

In this study, the researcher decided to use primary data sources, like conducting interviews and questionnaires to collect data. However, this was also supplemented by several secondary data sources such as the research articles and NGO reports from the internet websites. This was useful for having enough data which answered the research question and achieved the main and specific objectives of this study.

3.4.1. Population and Sample Selection

The general population for this study were smallholder farmers. However, the target population were smallholder farmers from the four regions of the KoE who beneficiaries of the identified NGOs were namely- Pelum Swaziland, Swaziland Farmers' Cooperative Unit (SWAFCU), Eastern and Southern Africa Small Scale Farmers (ESAFF), Women Farmer Foundation (WFF), Swaziland Conference of

Churches (SCC), and Africa Cooperative Action Trust (ACAT). The study sample were smallholder farmers that belonged to these NGOs, that participated in the market and smallholder farmers who were being trained to access markets in Eswatini.

3.4.2. Sampling Strategy

One of the approaches adopted for this study was the use of an exploratory qualitative research methodology. As a result, the researcher used purposive sampling to recruit various participants for this study. Given (2008) outlines that a researcher uses purposive sampling because their research study is based on the use of qualitative methodology. According to Etikan *et al.* (2016: 2) "purposive sampling is the deliberate choice of a participant due to the qualities the participant possesses". This allows the researcher to make participant selection based on the qualities they possess, which may be in line with the phenomenon of the study being conducted. For this study, purposive sampling selected representatives from five NGOs in Eswatini; Pelum Swaziland, SWAFCU, ESAFF, ACAT, SCC and WFF. Smallholder farmers working with these NGOs were chosen as participants for this study. The participants ranged from the age groups of 24-75 years.

3.4.3. Sampling Size

The study included representatives of Pelum Swaziland, SWAFCU, ESAFF, ACAT, SCC, and WFF. The representatives took part in interview participation conducted by the researcher. The representatives were seven in total number.

Smallholder farmers' sampling into an appropriate sample was decided purposively. The sample size of smallholder farmers who participated in responding to questionnaires was a total of 120 and these were beneficiaries of the five identified NGOs. Sampling had to be done randomly based on the availability of the NGOs due to the ongoing pro-democracy protests that had been occurring in the Kingdom, which led to the shutdown of most if not all socio-economic activities.

3.5. INSTRUMENTATION

Both primary and secondary data was collected in this study. A researcher usually collects primary data through different instruments like interview schedules, questionnaires, and surveys (Hox & Boejie, 2005). Primary data for research purposes became necessary because the data collected was original and relevant to the research phenomenon that was investigated (Bertram & Christiansen, 2014). The researcher associated primary data for this study with a high degree of accuracy, and therefore, the data was valid. Most importantly, the use of primary data for this study provided the researcher with a more realistic view of the study topic (Mertens, 2014). In this case, data reliability was very high as it was collected from reliable parties fitting the study's purposes.

Furthermore, the type of instruments used to assist in data collection for this study were based on the stated specific objectives identified in the study's first chapter. The first specific objective for the study aimed *to understand market access perceptions of smallholder farmers based on the work done by NGOs.* For this objective, the type of data required was based on smallholder farmers' market access challenges, knowledge, and skills. The data type required also aimed to find the way NGOs had assisted smallholder farmers get passed these issues. As a result, the data collection tools necessary for such data type required were questionnaires and focused group discussions. However, due to COVID-19 restrictions and mandates for social distancing, the researcher was only able to adopt questionnaires to conduct data collection for this study.

The second specific objective was seeking *to investigate the determinants that influence smallholder farmers to have and not to have access to markets after being trained by NGOs.* The type of primary data required for this specific objective was based on the number of smallholder farmers who had access to markets as well as the number of smallholder farmers who did not have access to markets. In gathering this type of data, closed question questionnaires were adopted for data collection purposes.

Moreover, the third specific objective aimed *to investigate the contribution of NGOs in facilitating market access for smallholder farmers.* For this objective the type of data required was based on NGOs' successes on facilitating smallholder farmers' market access. In collecting this data, interview schedules were the main tool used. These schedules assisted the researcher in conducting key informant interviews that generated the necessary data to answer the research question and achieve the above stated specific objectives.

3.5.1 Instrument Design

For this study, the researcher designed an interview schedule script and a questionnaire. The interview schedule script consisted of four sections. These sections were labelled *sections A, B, C and D* as shown in *Appendix 2*

The first interview section of the script uncovered the demographic data of participants. It looked at things like name of NGO, years of NGO operation, position of respondent, their age and qualification. Prior to the interview, the participants were alerted to withdraw from the interview session if they felt the need to during the interview. The researcher informed the participants of the need to have the interview recorded and transcribed. However, the participants had to fill in a consent form. Interview questions for NGO representatives commenced in the second section *(B)* of the interview schedule script. The questions were four in total and designed to discuss NGO representatives' knowledge of smallholder farmers. While the third section *(C)* contained questions of NGO representatives' knowledge of market access with a total of 5 questions to guide the interview. While the last section

(D) of the interview schedule contained questions that looked at NGO representatives' perceptions of the role played by their organisations regarding smallholder farmers' market access.

The use of a questionnaire as indicated in *Appendix 1* was another key tool that was adopted for data collection in this study. The researcher designed a questionnaire that was used by smallholder farmer participants. The questionnaire had five sections namely, introductory section which had the research topic, the main research objective, and the research question; socio-demographic section; markets and crop production (section B); institutional factors (section C); and food security (section D). The questionnaires were responded to by smallholder farmers sampled for this study.

3.6. VALIDITY

Whittemore et al. (2014) argue that study validity to be the representation of the true findings. Whereas Leung (2015) defines validity as 'appropriateness' of the study tools used, study processes as well as data collected. This means that the study tools and processes used must be fitting to the research being conducted (Thomas & Magivilvy, 2011). For this study, the collected data was in sequence with the overall research question and objectives of the study. Validity looks at the utilised methodology for the research being appropriate for reaching and acquiring the study's stated objectives. Overall, validity looks at the appropriateness of the research design, sampling methods and data analysis of the conducted research. Also, in pointing out validity, the data collected had to fit in together with the research topic. If it was not in accordance with the research topic, the data collected was not going to be considered valid. Most importantly, primary data sources were utilised to ensure validity of the study as it is associated with a high degree of accuracy.

3.7. RELIABLITY

According to both Whittemore and Knafl (2005), reliability looks at the stability of findings being presented. Reliability assists the researcher to ensure that the study can be replicated by other researchers. For this study, it was useful to make use of relevant case studies from multiple works performed by NGOs to increase the reliability of the study. In ensuring reliability, similar questions during the data collection process were asked during interview sessions and then compared the data from one interview session to another. It also became important to judge the reliability of the study by checking and studying the consistency of the data collected. For this study, the use of primary data sources like informant interviews was important. In this case, data reliability was very high as it was collected from reliable parties fitting this study's purposes.

3.8. DATA COLLECTION

The data was collected using primary data sources. According to Hox & Boejie (2005), a researcher usually collects primary data through different methods like interviews, questionnaires, and surveys. The use of primary data for research purposes becomes essential if the collected data is original and

relevant to the research phenomenon being investigated (Bertram & Christiansen, 2014). Most importantly, this study's use of primary data provided the researcher with a more realistic view of the study topic (Mertans, 2014).

Specifically, the process of collecting data in this study depended on each of the specific objectives outlined in this study's *chapter one*. For specific *objective one*, the data required was based on smallholder farmers' market access challenges, knowledge, and skills. The required data type also involved how NGOs had helped smallholder farmers get past some of the issues related to market access. Therefore, the specific tool for collecting this type of data were questionnaires that had both closed and open-ended questions. The use of questionnaires for data collection was also used to collect data in line with specific *objective two*. The required data for specific *objective two* was based on the number of smallholder farmers who had access and did not have access to markets. The questionnaires were handed to smallholder farmer beneficiaries of each of the identified NGOs. The researcher had to fill in responses from the participants onto the questionnaires as respondents were being asked questions as seen on *figure 2* below to achieve data collection procedures for specific objectives one and two.

Specific objective three gave the attention to NGO representatives. *Specific objective* three made use of both primary and secondary data sources to achieve its goal. For the third *specific objective* to be achieved, data collection made use of informant interviews (primary data source). Moreover, these focused on collecting data based on NGOs' successes in facilitating market access for smallholder farmers. The in-depth interviews also aimed to collect data based on the challenges and failures of NGOs in facilitating market access for smallholder farmers and their objectives and missions with market facilitation for smallholder farmers.

3.9. DATA ANALYSIS PROCEDURE

Thematic Analysis was the primary analysis technique employed in this study for the collected qualitative data. Thematic Analysis focused on identifying patterns and themes in the data collected from interviews (Maguire & Delahunt, 2017). Identifying patterns and themes that were interesting and important in responding to the research question and addressing the main and specific objectives was the goal of the thematic data analysis technique. The key importance of thematic analysis was to force the researcher to re-read the data collected. By doing so, the researcher identified common themes that the collected data spoke of (Alhojailan, 2012).

Based on the understanding of Ibrahim (2012), the relationships between concepts were determined by the researcher through thematic analysis. Thematic Analysis also allowed the researcher to link up different ideas and opinions of participants and compare these with the data that was gathered (Ibrahim,

2012; Alhojailan, 2012; Judger, 2016; Maguire & Delahunt, 2017). Thematic Analysis allowed the researcher to be more flexible with the data that was collected. It enabled the researcher to use the technological application NVIVO version 12 to analyse the data that was collected.

Steps in Analysing Data

The first step that was taken in analysing data was data logging. In this step, raw data was collected from interviews, questionnaires, NGO reports and documents. This raw data was then recorded in a recording sheet which became data documentation. Also, the researcher's feelings, description, views, and insights as well as assumptions about the subject matter was also recorded. The main feature of this step was to document responses from the study participants in forms of logs which will be helpful in preparing anecdotes.

The preparation of anecdotes was the second step in analysing data. Anecdotes involved the need to restructure data from logs to have a better understanding of the data that was collected. The collected data was narratively written and made use of the coding system where data was separated into categories or themes to be easily organised and compared. With the coding of significant themes, the researcher later examined and retrieved motivating sections and looked at them as distinct files.

The use of vignettes was the next step in data analysis. According to Akinyode & Khan (2018) a vignette represents a narrative on the interpretation of a person, knowledge or circumstance that a researcher describes. This step focused on describing themes in depth to establish the study's credibility. Vignettes is considered to be a step further from anecdotes and reorganises data in a brief representation which further provides more meaning of the research work in order to give a higher interpretation level. Overall vignettes were used for the capturing of themes.

The fourth step adopted in the data analysis procedure was data coding. According to Creswell (2014) coding is the procedure by which data is fragmented and classified to form explanations and comprehensive themes. In this step, the researcher gathered and tagged content that was related to a specific theme or idea. The data that was transcribed was sorted out into manageable and meaningful transcript segments with the assistance of a coding framework. Data coding made use of nodes and references to sort, arrange, manage, develop and modify the data. In coding, the researcher was allowed to check the transcription for accuracy and have the data read repeatedly to have a better understanding of the database. Data coding also helped the researcher to ignore other data that did not accurately provide evidence for themes that were then established after all these steps were taken.

Table 3.1: Summary of Methodology to Specific objectives

Study Objectives	**Data type collected**	**Data Collection tools and techniques**	**Data Analysis**
To identify market access perceptions of smallholder farmers based on the work done by NGOs	Smallholder farmers' market access challenges, knowledge and skills; the way NGOs have assisted smallholder farmers get passed these issues.	1. Questionnaires	1.Quantitative Descriptive Analysis
To investigate the determinants that influence smallholder farmers to have and not to have access to markets after being trained by NGOs.	1. The number of SHFs who have access to markets and do not have access to markets 2, Food security status of the farmers' households	Questionnaires	1.Regression Analysis
To investigate the role of NGOs in facilitating market access for smallholder farmers.	NGOs' successes on facilitating SHF market access NGOs' failures or challenges in facilitating SHF market access	1.Key Informant interviews	1.Thematic Analysis

3.10.ETHICAL CONSIDERATIONS

The failure to access markets for smallholder farmers and data collection during COVID-19 can be a sensitive issue and ethical clearance had to be applied for this study to be conducted. Therefore, there were ethical issues regarding this study. The researcher was working with human individuals at a time when COVID-19 was prevalent. Many of the participants were fearful about working with a stranger because of potential infection with the virus. To get past this issue, the researcher was able to present a

recent COVID-19 test results to the NGOs that showed a negative result and was willing to still take precautionary social distancing measures of at least 1.5 metres. The researcher also ensured that a facemask was being worn by himself and the participants of the study and continuously sanitized hands before, during, and after each interview. As for the questionnaires, they were handed to participating farmers to respond to the. Each participant had to sanitise their hands before and after receiving a questionnaire.

Other ethical issues were based on informed consent, anonymity, protecting participants' identity, protecting their environment, and community. A gatekeeper's letter was required for ethical clearance for the study to be conducted concerning informed consent. In protecting participants' identities, consent forms for participation were handed to all chosen participants, and pseudonyms were used for each participant.

The study targeted interviewing working-class individuals above 18 years of age. Minors under the age of 18 years did not take part in the study. Concerning consent forms, they have been attached in the Appendices section. All the data collected in this dissertation was used only for the research and was kept confidential between the participant, the researcher, and the supervisor of this study.

More importantly, to conform to the above ethical considerations, an ethical clearance letter was granted by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and was attached as *Appendix 3* in the Appendices section of this study. The identified ethical clearance number for this study was HSSREC/00003348/2021.

3.11. PROBLEMS AND LIMITATIONS

During the study, several problems and challenges were encountered while working on the study. Generally, language barrier was a major limitation during the study. The researcher was not a siSwati first language speaker. The majority of the participants (particularly smallholder farmers) expressed themselves in the siSwati language rather than the English language the researcher was quite attuned to. However, the solution was asking for the assistance of a first language speaker familiar with the siSwati language who assisted with interpretation. Also, trained siSwati enumerators assisted in the data collection. Moreover, travel costs were a challenge. However, the solution to this was to budget on travel costs before the data collection dates and ensured no unnecessary trips to The Kingdom of Eswatini was done. Therefore, budget planning was seen as a critical strength for this study.

Following the above stated limitations, the big limitation and challenge experienced during the data collection period was the ongoing political unrest that began in June of 2021. The violent protests which led to the burning of business infrastructure and killings of people, resulted in the closures of businesses, offices and shutting down of any other social-economic activities. As a resulted, data

collection was affected, and the researcher had to randomly select participants based on NGO availability at a time when most socio-economic activities were shutdown.

3.12. SUMMARY

The chapter has been able to outline and justify the chosen research methodology for this study and its validity. Based on the nature of the research that required the thoughts, perceptions, and inputs of participants, the researcher utilised an integrated mixed-method approach. Interviews with open-ended questions and questionnaires were the fundamental tools of this study. The participants were carefully targeted and recruited with the use of the purposive sampling technique. The researcher used data analysis guided by the thematic analysis, and descriptive analysis.

CHAPTER 4
ASSESSING SMALLHOLDER FARMERS' PERCEPTIONS AND THE ROLE OF NGOS IN FACILITATING MARKET ACCESS IN ESWATINI

Abstract

In the Kingdom of Eswatini (KoE), smallholder farmers have often found it difficult to produce crops in large quantities and with quality. On the other hand, good-quality crops are mostly associated with commercial farmers who already have access to markets in Eswatini. However, the Ministry of Agriculture in the KoE has managed to collaborate with key international organisations such as the Food and Agriculture Organization (FAO). As a result, initiatives such as the Swaziland Agricultural Development Programme (SADP) have been launched to collaborate with local non-governmental organisations (NGO's) in order to establish marketing platforms for smallholder farmers interested in engaging in agribusiness. This has resulted in the need to fully explore the role of NGO's in facilitating market access for smallholder farmers and what the smallholder farmers think about the work that the NGOs conduct in improving their agricultural livelihoods. This paper investigates the role of NGO's in enabling market access for smallholder farmers and seeks to comprehend the perceptions of smallholder farmers regarding market access in light of the work done by NGOs. The study uses a mixed-method approach, and the data collection is conducted through the distribution of survey questionnaires to smallholder farmers and the conducting of interviews with NGO representatives. A purposive sampling technique was used to sample the cases of smallholder farmers who were beneficiaries of the NGOs chosen for this study. The survey questionnaires were analysed using descriptive analysis via SPSS version 27, while the interviews were analysed thematically using Nvivo version 12. According to the study, NGOs play a limited role in assisting smallholder farmers in accessing formal markets because many of their farmer beneficiaries only have access to informal markets such as local schools, middlemen, and sales within neighbourhoods. Further, the study revealed that a lack of access to funding is a major constraint that smallholder farmers are faced with and that they are therefore unable to produce high-value crops that can enable them access to various formal markets. The study recommends that market identification, accessibility, and creation for smallholders should be the focus for policymakers and NGO's. Interventions aimed at enhancing market accessibility and participation among smallholder farmers in the KoE should be implemented.

Keywords: Agri-business, Market Access, NGOs, Smallholder Farmers

4.1. Introduction and Contextualisation

The smallholder farming sector is known to have potential for earning income and improving food security in the households of rural communities. Hence, the sector has, for several years, received much attention from governments and NGOs for its development, particularly within developing and less developed countries. In less developed countries like the Kingdom of Eswatini (KoE), NGOs have seen the need to help smallholder farmers (SHFs) and make the changes that are needed to improve household food security.

In the KoE, NGOs have played a crucial role in supporting smallholder farmers to cultivate their crops and sell the surplus to neighbouring or distant markets. When their smallholder farmer beneficiaries are unable to access already-existing marketplaces, NGOs also collaborate to build new markets for SHFs. Despite the efforts of NGOs, smallholder farmers continue to face market access challenges in the KoE. As a result of these challenges, smallholder farmers face the difficult nature of participating in markets, especially high-value markets, because of institutional and socio-economic constraints (Senyolo *et al.*, 2018). In the KoE, informal markets are popular for smallholder farmers, with the majority of them selling their surplus produce through street vending and selling from the back of a light-duty pickup truck since formal market participation remains a challenge (Senyolo *et al.*, 2018). However, NGOs in the KoE play the role of ensuring that smallholder farmers have secure and remunerative market access for the crops that they produce.

The objectives of this study are (i) to investigate the role of NGOs in facilitating market access for smallholder farmers as well as (ii) to understand market access perceptions of smallholder farmers based on the work done by NGOs in the KoE. To investigate the role of NGOs in market access facilitation and understand the market access perceptions of smallholder farmers, it helps to recommend interventions aimed at improving market accessibility, participation, and market creation for smallholder farmers in the KoE. The findings of the study will be of interest to stakeholders and market participants themselves. The results of the study can be essential in improving crop production among smallholder farmers, and market accessibility interventions for smallholder farmers are being implemented by both the government and NGOs in the KoE. The findings of this study will contribute to existing literature by identifying the essential roles performed by NGOs in facilitating market access for smallholder farmers. The results of the study also assist in identifying the challenges that NGOs face in attempting to fulfil their mandate and the objectives of smallholder farmers.

4.2. Materials and Methods

4.2.1. Study Area Description

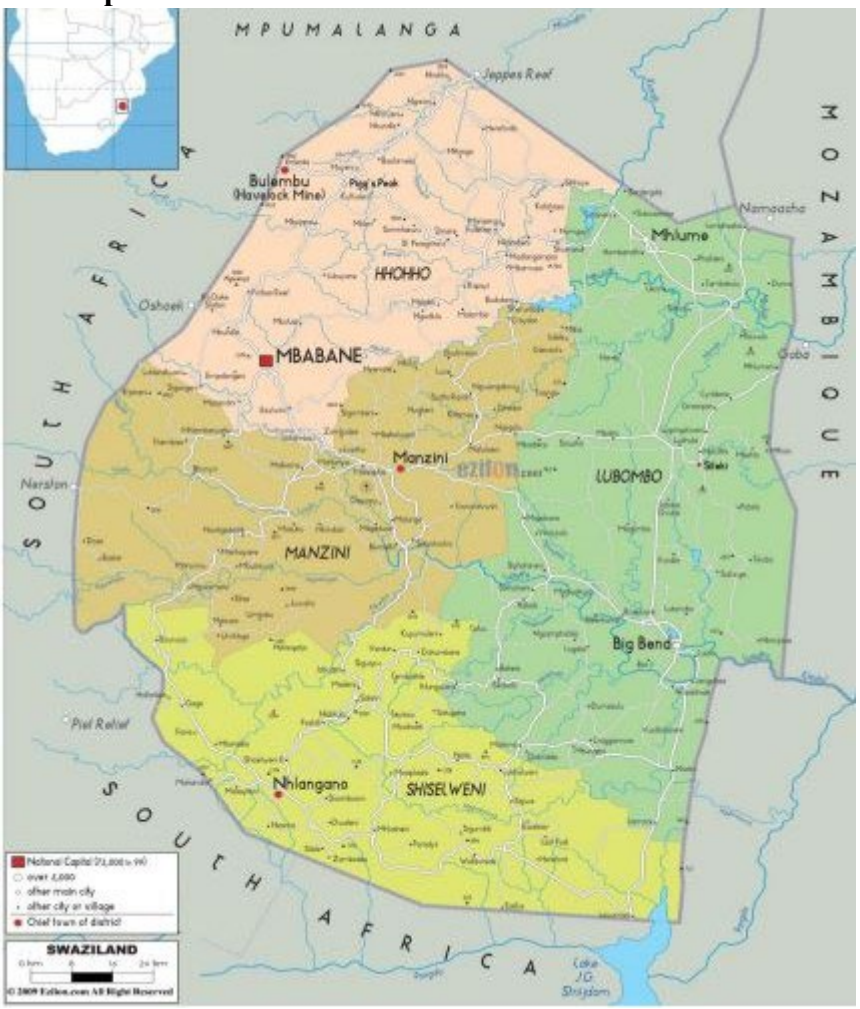


Figure 4.1: The four administrative regions being displayed on the Map of Eswatini. The study took place in each of the four regions shown on the map. *Source:* Shabalala (2017)

The study was conducted in the KoE, within the country's four major regions: Manzini, HhoHho, Shiselweni, and Lubombo (2021). The Manzini, HhoHho, Shiselweni, and Lubombo regions are found in the central, northern, south-western, and eastern parts of the country, respectively, as seen in figure 4.1 above. The country is landlocked, with South Africa and Mozambique surrounding it, as shown in the above figure 4.1. Many households within these rural communities were female-headed households, which are food insecure and poor because of high levels of unemployment. Selepe et al. (2015) have depicted unemployment as one of the indicators, which is a contributing factor to a lack of access to food in rural communities. Hence, a certain degree of lack of access to food does contribute to some

form of food insecurity. Moreover, rural communities in the KoE are seen to be food insecure due to instances of political instability in the form of pro-democracy protests within the country (Dlamini, 2021). Political instability affects the food stability pillar of food security. When the country faces issues of instability, it impacts the economy and the vulnerable, particularly those who are already not working. Apart from employment, the political instability puts rural communities in a much more vulnerable state, affecting their ability to be food secure.

Furthermore, as elsewhere on the African continent, many rural areas in the country are populated by impoverished people. For instance, the political systems across the country, as elsewhere on the African continent, are set up systematically to ensure that poor people remain poor for the rest of their lives, with African leaders living lavish lives while the continent's citizens continue to live in poverty (Anyanwu & Anyanwu, 2017). As a result, one is able to witness the existing inequality within African societies and economies. This is where one is able to witness funds being taken up for corruption and not for the development of African people, which the KoE is not exempt from when looking at the state in which rural communities are in.

Overall, the communities within which data collection was conducted were rural areas. The roads were gravel and poor. The access to sources of water was a challenge, with most homesteads having to walk quite a distance to collect water and reach the closest possible tap. In some cases, mud was used to build the houses, while in others, thatched grass was used. Lastly, households within the communities had a minimal number of six members per household, with the elderly being household heads. Farming is the only source of income for rural people in their communities. However, children are able to go to government schools to obtain an education, although they have to walk long distances.

4.2.2. Research Approach

The study employed an integrated mixed-methods research approach where both quantitative and qualitative approaches were used to gather data that helped answer the research question. According to Ivankova (2017), the integrated mixed-methods approach is essential for providing a strong foundation for community-based participatory research. The community-based participatory research and the integrated mixed methods approach were designed to involve smallholder farmers and NGO officials (7 NGO officials for this study) in the different stages of the research process. Hence, community-based research involves community members (smallholder farmers), researchers, and other stakeholders such as extension officers in the research process (Collins *et al.*, 2018).

The purposive sampling technique was used to sample 120 cases of smallholder farmers. The sampled farmers commonly produced leafy vegetables like spinach, lettuce, and cabbage. Other common crops produced by the smallholder farmers were carrots, onions, tomatoes, green peppers, and sweet potatoes.

Many of the farmers were market participants, as they sold their crops at certain levels after harvesting. Most of the farmers sold their produce through informal markets such as selling to community members at farm gates, schools, university gates, bakkie traders, and street vendors.

4.2.3. Data Collection and Analysis

The study's data collection took place in two forms: through questionnaire surveys and interview schedules. Firstly, the data was collected using a questionnaire through one-on-one interviews with smallholder farmers. The collected data was then coded and captured on the Statistical Package for the Social Sciences (SPSS) version 27. Thereafter, descriptive statistical and frequency analyses were used to analyse demographic data and respond to the study's research question and objectives. Secondly, the data collected through interview schedules with NGO officials or representatives was also coded but captured on the NVivo version 12 tool. This tool was also used to create themes from the data collected from NGOs via interview schedules.

4.3. Results and Discussion

This section of the study focuses on presenting and discussing the study's findings. It is also essential to note that the results and findings are strictly based on the data that was obtained during data collection and then later analysed. Furthermore, the results and discussion are guided by the research question, research aim, and specific objectives as shown below and presented in Chapter 1 of this study, respectively.

Research question: How do smallholder farmers perceive market access, and what role do NGOs play in that regard?

Main objective: To explore smallholder farmers' perceptions of market access and the primary role of NGOs.

Specific objective 1: To understand market access perceptions of Smallholder farmers based on the work done by NGOs.

Specific objective 3: To investigate the role of NGOs in facilitating market access for smallholder farmers.

4.3.1. Demographic Profile of Smallholder Farmers

This section presents a detailed understanding of the statistical data collected on the characteristics of the population involved in this paper. As shown in Table 4.1 below, the statistical data collected on the population for this study includes the gender distribution of respondents, age group distribution of respondents, educational levels of respondents, smallholder farmers' income sources, and sources of respondents' income.

Table 4.1: Smallholder Farmers Demographic data

Variables	Responses	
	Frequency, f	Percent (%)
Age Distribution of Smallholder Farmers		
20-29 years	18	15,0
30-39 years	15	12,5
40-49 years	28	23,3
50-59 years	31	25,8
60-69 years	27	22,5
70-79 years	1	0,8
Total	120	100
Average age	47,74	
Gender Distribution of Smallholder Farmers		
Male	44	36,7
Female	76	63,3
Total	120	100.00
Educational Level of Smallholder Farmers		
No Formal Education	9	7,5
Primary	21	17,5
Secondary	46	38,3
Diploma	17	14,2
University Degree	27	22,5
Total	120	100

(Source: field data, 2021)

4.3.1.1 Age Group Distribution of Respondents

When selecting a study's sample, it is important to make sure that the age groups are evenly distributed (Pickering, 2017). This is significant because a balanced sample size depending on age ensures that the data collected is reflective of the phenomenon under investigation's extended factors. The average age of the surveyed population for the study was 47.74. This indicates that the majority of the surveyed population was middle-aged, and therefore, they were active in an economic age. We also see that, since the average age of the farmers is 47.74, this group of smallholder farmers is therefore relatively young. It shows that this group is full of individuals who are upwardly mobile, active, and can contribute much more in terms of the economic development of a country. However, we see that many of the farmers in the table above are in the age range of 47–48 years old. The reason behind such a finding is the high unemployment rate that exists in the KoE, as well as elsewhere on the African continent, as agreed upon by Brixiová Schwidrowski et al. (2021), and a lack of job opportunities. Hence, we see that a large majority of this age group (40–49) is involved in agriculture. However, from another point of view, we see that the face of agriculture is also changing, and there is a paradigm shift. The Table above shows that younger people are beginning to engage in agriculture, as elaborated by

Wittman *et al.* (2021). As a result, this is significant for the KoE. This is because agriculture can be seen as a vehicle out of poverty, a vehicle for development, and a vehicle for sustainable livelihood as agreed in the study conducted in Southwest Ethiopia by Manlosa (2022). Overall, young people may begin to engage in agriculture, possibly because there are more funding opportunities and more drive from the government for younger people to engage in agriculture.

4.3.1.2 Gender Distribution of Respondents

Gender balance is important in research because it increases the findings' validity, rigor, and relevance (Rich-Edwards *et al.*, 2018). A study's gender distribution balance is crucial for increasing its accountability in terms of data from male and female participants, thoughtfulness, and any discrepancies owing to gender imbalances. However, due to the phenomenon being researched, there is no equitable distribution of male and female participants in this study, as seen in the table above. The table depicts the gender distribution of this study's smallholder farmer respondents.

The table above illustrates that there were a total of 76 female smallholder farmer participants, while 44 were male. This demonstrates that the majority of respondents were female, with a minority being male. This means that females are more into the smallholder farming business than males. Women are more involved in smallholder farming activities than men because they are responsible for looking after their families and providing nutritious meals. According to smallholder farmers' gender distribution data, more women than men participate in or require market access (Hlatshwayo et al., 2021). Njobe and Kaaria (2015) agree, stating that having access to the market can help women gain confidence in their ability to engage in farming activities and improve their skills so that they can farm on a large scale. Moreover, studies like those conducted by Njobe and Kaaria (2015) and Ugwu (2019) indicate that in Africa, women are the face of agriculture because patriarchy in our African countries and the KoE is still a systemic issue that exists in our societies. Women are frequently relegated to household responsibilities and are viewed as second-class citizens who are subservient to the males as a result of systemic patriarchy. Moreover, in the KoE, we also see that because of employment opportunities, men leave home in search of work and migrate to other parts of the country, which will help contribute to the well-being of the household. In doing so, women are left alone at home with access to the land, and women will ultimately engage in agricultural activities. Agriculture is seen as the bedrock upon which most societies in Africa and the KoE are dependent for their livelihood, as agreed upon by Njobe and Kaaria (2015). Hence, agriculture forms an important part of one's livelihood strategy, and that is why when agriculture is revered or negatively impacted, it puts people in a much more vulnerable position. It is the most known livelihood strategy that most people in Africa would engage in. It is from the above-stated perspective that the true reflection of what has been mentioned before in this study is seen. The above gender distribution of smallholder farmers for this study is a true reflection of what persists

and still continues within our societies, even though African countries like the KoE have come a long way in terms of development issues and gender parity. We still see that even in today's day and age, though to some extent we have developed, women continue to be the face of agriculture in Africa and certainly in the KoE.

4.3.1.3 Educational Levels of Smallholder Farmers

The educational status of study participants must be taken into account because it may have an impact on the study's outcomes (Kalaiselvan *et al.*, 2017). A participant's educational experience does not directly correlate with intelligence levels, those with high levels of education are more likely to provide complete, unambiguous, legitimate, and acceptable responses to study questions. Furthermore, a participant's educational status may represent their level of familiarity with the subject under research. This could be since those with higher levels of education have been exposed to far more than those with lower levels of education. Table 4.1 above depicts the participants' educational status.

The table above illustrates that 9 of the respondents had no formal education and this constituted 7.5% of the sample size of the study; 21 of the respondents had a primary certificate as their highest level of study and this constituted 17.5% of the sample size of the study; 46 of the respondents had a secondary certificate as their highest level of study and this constituted 38.3% of the sample size of the study; 17 of the respondents had a Diploma as their highest level of study and this constituted 14.2% of the sample size of the study; 27 of the respondents had a form of a University Degree as their highest level of study and this constituted 22.5% of the sample size of the study. *Table 4.1* indicates that there was an uneven spread in the respondents' educational levels. Furthermore, according to Misselhorn *et al.,* (2012), any probable lack of proper education has a detrimental impact on career chances, lowering the individual's quality of life. Most of the farmers had at least completed secondary school. However, they were unable to find work, resulting in a decrease in household income and forcing them to engage in smallholder farming as a means of subsistence to support their families.

Moreover, in terms of the unemployment figures, the study also assumes that the farmers, based on their educational backgrounds, may not be employable because most of them have a secondary level of education, as depicted in the above figure. Due to the lack of access to knowledge, information, and higher educational levels, many individuals resort to participating in farming, particularly smallholder farming, as mentioned by FAO (2014). Furthermore, according to the findings, the average age of the farmers is 47.74, and the majority of them only have a secondary education, which is not enough to get them access to employment. Farmers with a secondary level of education are, therefore, not as competitive on the job market since most employment agencies look for individuals with at least a

bachelor's degree. Hence, they become unemployable, and as a result, the secondary option for this group of individuals would be to engage in something that would maybe generate some income, which is agriculture. On a positive note, based on the data presented, we can see that more young people want to work in agriculture because they probably see the benefits and can earn money that will help them get out of poverty.

4.3.1.4 Sources of Income of Respondents

This was done to determine whether the respondent's primary source of income was from the smallholder farming business. This shows the number of participants that earn income from their farm businesses that can be used to finance the business and support their daily livelihoods. This is important because the source of finance can be one of the main reasons why participants remain smallholder farmers. Respondents' main sources of income are essential for this study because they complement the study towards its objectives being reached. The sources of income for financing the farm business can be classified as farm income and off-farm income. Tables 4.2a and 4.2b illustrate the distribution among the different sources of income acquired by smallholder farmers.

Smallholder Farmers' Sources of Income

Did you receive some kind of farm income (primary income source)?

Table 4.2a: Farm income distribution

	Frequency	**Percent**	**Valid Percent**	**Cumulative percent**
No	5	4.2	4.2	4.2
Yes	115	95.8	95.8	100.0
Total	120	100.0	100.0	

What type of off-farm income (secondary income source) do you get?

Table 4.2b: Types of off-farm income

	Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Government grant/pension	16	13.3	13.3	13.3

Employed (Employment)	35	29.2	29.2	42.5
Family remittances	15	12.5	12.5	55.0
Businesses (Outside farm produce)	54	45.0	45.0	100
Total	120	100.0	100.0	

(Source: field data, 2021)

Tables 4.2a and 4.2b depict income sources of smallholder farmers. Table 4.2a shows that only 5 farmers did not have farm income as their primary source of income While the majority (115 farmers) had farm income as their primary source of income. This shows that owning a farm, producing crops and selling crops from the farm was their primary source of income. Many of the smallholder farmers rely on their farming businesses to survive. On the other hand, table 4.2b depicts off-farm incomes which were secondary sources of income for many of the farmers. 45% of the farmers relied on businesses outside the farm produce as a secondary income source for their livelihoods. While only 12.5% of the farmers had a reliance on family remittances (financial gifts) as a secondary income source.

The data in the above tables (4.2a and 4.2b) indicate the significance of agriculture to the respondents in this survey. For the above farmers, farming is depicted as the main source of income, and therefore, they depend solely and more importantly on agriculture. As a result, that is why it is so important for most of these farmers to gain access to the market, which also improves their livelihood, as mentioned by Gaffney *et al.* (2019). This is so that they could enhance their current income. However, there are some challenges as to why these smallholder farmers are not accessing the same markets as commercial farmers are. Firstly, because of scale, smallholder farmers in the KoE are unable to compete with the commercial farmers. Therefore, they cannot meet the demand in terms of the market chains and what is required in order to access the available markets. Secondly, there are issues around quality—the quality of the crops. One has to remember that smallholder farmers are already socio-economically challenged; therefore, they do not have access to income. It therefore means that smallholder farmers lack the resources and inputs that one would use to enhance yields from a fertiliser perspective, dealing with insects and pesticides, mechanisation, and irrigation. All of these factors are essential for enhancing crop yields. The above-mentioned challenges experienced by smallholder farmers are supported by the study conducted by Khapayi and Celliers (2016), who looked at the factors that limit

and prevent emerging farmers from progressing to commercial farming. Unlike commercial farmers, who have the necessary inputs, mechanisation, and manpower. As a result, their produce standards and quality have a much higher market acceptance rate. Lastly, there are so many requirements for one to be accepted into the market. Smallholder farmers need to adhere to certain standards to ensure that the food that is coming onto the shelves that people are consuming is healthy, both from a food nutrition perspective and in terms of post-harvest issues and food hygiene. We also know that sometimes it is very difficult for smallholder farmers to penetrate these markets because the regulations and standards that exist are way beyond their expectations. Therefore, access to markets to sell their farm produce is very important to the farmers. However, there was an unequal distribution between smallholder farmers who did not earn farm income and those who did.

4.4.1 Socio-demographic Characteristics of NGOs and their Representatives

This section focused on the demographic characteristics of respondents from non-governmental organisations (NGOs) in the KoE. There were seven (7) respondents in total, one from each NGO. Interviews were conducted using interview guides. This is because the researcher needed the view of employees from the NGOs. The researcher ensured that all questions contained in the interview guide were answered.

Table 4.3: Socio-demographic characteristics of NGO representatives

Variables	Responses	
	Frequency, f	Percent (%)
Number of years the NGO has been in operation		
1 – 5 years	0	0.0
5 – 10 years	2	28.6
10 – 15 years	3	42.8
15 – 20 years	1	14.3
More than 20 years	1	14.3
Total	07	100
Age of NGO Representatives		
Less than 20 years	0	0
Between 20– 29 years	2	28.6
Between 30 – 39 years	3	42.8
Between 40 – 49 years	1	14.3
50 years and above	1	14.3
Total	07	100.00
Highest qualification of NGO representative		
Matric	1	14.3
Diploma	2	28.6
Bachelor's Degree	2	28.6
Honours Degree	0	0
Master's degree	2	28.6
Doctorate Degree	0	0
Total	07	100

(Source: field data, 2021)

The table above is a summary of the data obtained collectively from the NGOs that participated in the study. This demographic data is based on the characteristics of NGOs and their representatives. The first column of the table looks at the number of years that NGOs have been operating. And the responses were offered by NGO representatives, as seen under the frequency section. The second and third columns look at the ages of representatives and their highest qualification, respectively.

4.4.1.1 Years of operation

Respondents were asked to indicate the number of years the NGO has been in operation. The majority (34.8%) of the 7 respondents indicated that the NGO has been in operation for 10-15 years. NGOs that have been in operation for 5 to 10 years accounted for 28.5% of the total. Only a few (14.3%) mentioned that the NGO has only been operating for 1–5 years. The other one (14.3%) said the organisation has been operating for more than 20 years. This means that the majority of the NGOs are mature in the sector and have much experience dealing with smallholder farmers within their catchment area. Only

a few respondents were new organizations. This also shows that most of the NGOs had much experience in the sector and, therefore, were able to give the researcher accurate information and data about the relationship between the NGOs and the smallholder farmers they operate with.

4.4.1.2 Age Description of NGO Representatives

A good sample size must have an even or balanced spread of the ages of its participants (Pickering, 2017). This is an important aspect because the opinions, perspectives, behaviours, and experiences of the participants may vary pertaining to their ages. As seen in table 4.2, the respondents ranged from the age of 20 to 59 years. The mean age of the interviewed population for the study was 36. This indicates that the majority of the interviewed population was active in an economic age. As a result, the NGO representatives interviewed were also employed by their respective NGOs. In addition, the average age of the NGO representatives questioned (36 years) is indicative of the broader population. Moreover, the average age also shows that the NGO representatives are mature enough to give reliable information for this research. This was a good sample size for the purpose of achieving the objectives of the study.

4.4.1.3 Highest Qualifications and Positions of Respondents

The educational qualification of the participants in research may be considered since it can influence the realisation of its objectives in some instances (Kalaiselvan, Maheswari, and Narayanamoorthy, 2017). However, it is important to emphasise that the educational qualifications of the respondents do not indicate their levels of intelligence. It must also be pointed out that people with a good educational background may provide clear and unambiguous responses that are appropriate and complete. As seen in Table 4.2, the data shows that the interviewed participants for this study had educational qualifications ranging from a secondary certificate to a postgraduate certificate of a master's degree. For this study, 14.3% of the participants had a secondary certificate. There were 28.6% of participants who had diploma qualifications. There were also 28.6% of the participants who had bachelor's degree (Bachelor of Science and Bachelor of Social Sciences) qualifications. Master's degrees (Master of Agriculture and Master of Business Administration) were held by 28.6% of the participants. The educational distribution in this study was suitable for the purposes of achieving its objectives. This was because the respondents had an educational background that was adequate to fully provide the responses to the questions being posed in the study.

Based on the data in the table above, we know that with these levels of qualifications, the NGO representatives are adequately trained to provide mentorship, training, support, and empowerment to smallholder farmers. This helps them to receive proper training on how to access and enhance their access to markets based on their current activities. Furthermore, some of the respondents have master's degrees (Master of Agriculture and Master of Business Administration) as their qualifications. These are some of the characteristics that are needed in order for smallholder farmers to also engage in and

compete in markets. It is not enough for smallholder farmers to be in the field and produce; they must also understand the entire value chain as a farmer, from production to the plate of consumers. Smallholder farmers need to understand certain aspects of the value chain to equally participate in the available formal markets with the KoE. This understanding can only come with sufficient knowledge and education, which have been identified by von Loeper et al. (2018) as the basis for a farmer's productivity. Hence, the above NGO representatives are equipped, judging by their degrees and levels of qualification. Individuals can be important vehicles for education transformation. This therefore enables smallholder farmers to know that they have the necessary skills and knowledge to fully be involved in markets. It is through these NGO representatives' levels of education that the role of NGOs can certainly be a huge contributing factor in terms of knowledge transfer and the empowerment of smallholder farmers. The study's respondents' job positions were also another important variable that was considered. The employees interviewed were project officers, lead agronomists, programme officers, country coordinators, business development managers, project analysts, and business development officers. This is an indication that respondents were experts when it comes to the role and management of NGOs. The positions of the representatives show that NGOs are providing a holistic type of training that is required for smallholder farmers. Based on the different positions of NGO representatives, the data further depicts that NGOs are looking at all aspects of the value chain in terms of production, from the farm to the produce, to marketing, to distribution, to value addition until the produce ends up on the plates of consumers. This is something that is believed by Avea et al. (2016), who state that NGOs have the capacity to build smallholder farmers and provide them with access to production resources and markets. Hence, this can well be achieved if NGO representatives have the knowledge and skills that enable them to do the above for their beneficiaries.

4.5. MARKET ACCESS PERCEPTIONS OF SMALLHOLDER FARMERS BASED ON THE WORK DONE BY NGOS

In the same manner that NGO representatives have perceptions about the work done by their organisations, smallholder farmers also have their own unique perceptions and opinions of the work done by NGOs in assisting them gain access to the market. Hence, this section aims to present and discuss smallholder farmers' perceptions of the work done by NGOs. Below in Table 4.3 is a tabular presentation of the perceptions of smallholder farmers based on the work done by NGOs. In this presentation, the analysis was conducted using the Likert scale.

Table 4.4: Perceptions of Smallholder farmers about the work done by NGOs.

Values / Variables	SA		A		N		D		SD		Mean scores, x
	2		1		0		-1		-2		
	F	%	F	%	F	%	F	%	F	%	
Perceptions of smallholder farmers about the work done by NGOs.											***0.21***
Overall, the NGO has assisted in producing a higher quantity of crops	30	25.0	64	53.3	17	14.2	7	5.8	2	1.7	0.94
I have gained substantial knowledge on how markets operate through programmes and project initiated by the NGOs	29	24.2	38	31.7	24	20.0	21	17.5	08	6.7	0.49
I have been able to gain access to local markets	34	28.3	53	44.2	17	14.2	12	10.0	04	3.3	0.84
I have been able to gain access to international markets	03	2.5	05	4.2	13	10.8	29	24.2	70	58.3	-1.55
I have been able to sell and make profit	15	12.5	40	33.3	51	42.5	09	7.5	05	4.2	0.35
I have gained knowledge about fresh produce market at Eswatini	15	12.5	44	36.7	36	30.0	21	17.5	04	3.3	0.20

4.5.1 Overall, NGOs have assisted in producing a higher quantity of crops

This section is based on the perceptions of smallholder farmers about NGOs' work in assisting them to produce a higher quantity of crops. The need to understand the perceptions of smallholder farmers regarding the work performed by NGOs in assisting their farmer beneficiaries to produce higher crop quantities enables NGOs to make informed decisions that will help them better work with their beneficiaries. This will also allow NGOs to come up with solutions to any challenges experienced by smallholder farmers in terms of crop production. According to Table 4.3, the majority of smallholder farmers (53.3%) agree, while a smaller number (25.0%) strongly agree, that the NGOs from which they benefit have assisted them in producing more crops. It is important for smallholder farmers to be able to make this judgment, as this allows NGOs to continue working in a positive manner with their farmers. The reason could be that the NGOs were able to provide smallholder farmers with farm inputs like seeds, seedlings, and fertilisers for their production. Also, this is because smallholder farmers

attended workshops, programs, and trainings on soil rehabilitation, water harvesting, and agricultural production skill improvement organised by NGOs, and they then applied everything they learned from these workshops to their farming activities. Furthermore, the farmers' produce increased in quantity because their production was consistently monitored by NGO extension workers, and smallholder farmers always had to report to their NGOs on the rate of production. Furthermore, according to the results in *Table 4.3,* 14.2% of the farmers had a neutral standpoint about NGOs assisting them to produce higher quantities of crops, 5.8% did not agree, while 1,7% of the farmers strongly disagreed to the perception that NGOs assist them to produce crops in higher quantities. Understanding these negative perceptions from smallholder farmers, provides NGOs with an opportunity to make more informed decisions about how to solve the challenge of low crop production levels for these farmers. This then allows NGOs to come up with solutions for adopting agricultural development measures that will assist this small number of farmers to produce higher crop quantities. However, for the farmers that did not agree and strongly disagree to the above perception, also need to understand that NGOs also have challenges such as lack of transport to visit the large number of farmers and assist them to address their needs, and them being understaffed to effectively assist all farmers in time (Simelane, Terblanche, Masariramba, 2019). However, overall, the statement *NGOs have assisted in producing a higher quantity of crops* shows a mean value of 0.94 which is an indication that NGOs have assisted smallholder farmers in producing higher quantity of crops. This, therefore, presents positive feedback from the smallholder farmers about the work performed by NGOs in assisting them produce higher crop quantities.

4.5.2 Extent which smallholder farmers have gained substantial knowledge on how markets operate through programmes and projects initiated by the NGOs.

The data presented in Table 4.3 suggests that 24.2% of the farmers strongly agreed to gaining substantial knowledge about market operations from NGOs. Therefore, they had adequate knowledge about how markets in the KoE operate. While 31.7% of the farmers agreed to the above assumption, 20.0% had neutral responses, 17.5% disagreed, and 6.7% strongly disagreed on gaining substantial knowledge from NGOs on market operations through programmes and projects. The statement "I have gained substantial knowledge on how markets operate through programmes and projects initiated by the NGOs" shows a mean value of 0.49, which implies that smallholder farmers in the KoE have somehow gained substantial knowledge on how markets operate through programmes and projects initiated by the NGOs.

4.5.3 The extent at which smallholder farmers have been able to gain access to local markets

Market accessibility is especially important for smallholder farmers who are passionate about agribusiness and profit-making. *Table 4.3* above indicates that 44.2% of the respondents to this study agreed to having local markets accessible, and a value of 28.3% of the farmers indicated that they strongly agreed to having access to local markets. The above farmers were able to gain access to local markets because they had been able to receive assistance from their NGOs for market accessibility. The interest in market accessibility enables NGOs to do something about it so that their beneficiaries' livelihoods are improved, which is the sole aim of NGOS: to improve the livelihoods of their beneficiaries. However, in most cases, smallholder farmers often have low market access as compared to their larger and better capitalised colleagues (Sikwela, 2013). Although this study only indicates that 10.0% and 3.3% of the smallholder farmers disagree and strongly disagree, respectively, with being able to gain access to local markets, the lack of access to markets for these farmers may largely be attributed to a lack of information on markets and the generally non-market-led farming strategies as identified by Ripley (2017). Perhaps, as depicted in this, education does play a role in assisting smallholder farmers to learn and research more about market operation. As Sikwela (2013) observed, a lack of education frequently leads to a lack of information on market access. Nonetheless, the mean (mean:0.84) shows overall that the farmers provided a positive response in that they have been able to gain access to local markets.

4.5.4 Smallholder farmers have been able to sell and make profit.

Engaging in agribusiness is motivated by a desire to make profit. Although smallholder farmers do not participate in agribusiness on the same level as their larger counterparts, they still have the aim of making a profit with the surplus meant to be sold. According to the statement "I have been able to sell and make profit" in Table 4.3, the majority of smallholder farmers, 42.5%, indicated that they occasionally make a profit from the sale of their farm produce. 33.3% agree that they always make a profit from their farm produce. 4.2% of the smallholder farmers strongly agreed that they make a profit from their farm business. Despite such positive feedback on profit-making amongst this study's smallholder farmers, it was noted that the farmers do not make much from selling their produce. This finding is supported by the study conducted by FAO (2015), which states that after deducting the cost of inputs from the sales' revenue, the contribution of commercial sales to smallholder farmers should be very small. This is because smallholder farmers are only able to access informal markets which have a limited number of customers purchasing produce in small quantities. Also, the farmers are only able to produce in small quantities due to limited land sizes. They are unable to denote actual profits made due to a lack of bookkeeping skills which NGOs should pursue as a capacity building opportunity. As

a result, selling in the market generates little money and does not add much to the household's liquidity, which is crucial to lifting smallholder farmers out of subsistence (FAO, 2015). Despite this, the positive mean value in Table 4.3 (mean: 0.35) indicates that smallholder farmers occasionally profit from their farm produce. However, this study sees the need to improve the farming business for smallholder farmers so that they can always make a profit. This can be done with the help of the NGOs by tracking the businesses of the farmers and seeing where they can improve in terms of profit-making.

4.5.5 Smallholder farmers have gained knowledge about fresh produce markets in the Kingdom of Eswatini

Smallholder farm productions are mainly in the form of fresh fruits and vegetables. Based on their production, smallholder farmers in the KoE ought to have knowledge about fresh produce markets. This agrees with the perceptions of NGO representatives, who say that after training, mentoring, and empowering smallholder farmers, they can gain knowledge about fresh produce markets in Eswatini. The knowledge should revolve around fresh produce market operations, allocation, and establishments (Dlamini-Mazibuko, 2020). This will assist farmers in knowing and deciding the appropriate markets for them to operate in. As shown in Table 4.3 above, 36.7% strongly agree that they have gained knowledge about fresh produce markets in Eswatini. 30% of the farmers believe that they do not always gain knowledge about fresh produce markets in Eswatini. 17.5% of respondents disagreed that they knew nothing about fresh produce markets in the KoE, while 3.3% strongly disagreed. On the other hand, 30.0% believe that they sometimes obtain knowledge about fresh produce markets in Eswatini. The statement shows a mean value of 0.20, which is an indication that smallholder farmers are sometimes aware of the fresh produce markets in Eswatini. This means that smallholder farmers do not know all the fresh produce markets, especially when it comes to market allocation, relocation, and new market establishments in Eswatini. Nonetheless, the overall mean regarding the perceptions of smallholder farmers based on the work done by NGOs is 0.21. This implies that smallholder farmers have a moderate level of perception when it comes to the performance of NGOs. They sometimes do not have knowledge about the existence of local markets for their fresh produce, and they do not all have access to international markets.

4.5.6 Challenges Experienced by Smallholder Farmers in Accessing Markets

The table below shows the key challenging factors that prevent smallholder farmers in the KoE to get access to markets. The responses obtained from the farmers have been grouped under the following themes:

Table 4.5: Market Access Challenges

Market Access Challenges	Respondents' Frequency	Percentages (%)
Poor road infrastructure	15	12.5
Unreliable rainfall	09	7.50
Lack of vehicle for the transportation of crops	38	31.6
Lack of market knowledge on information and operation	30	25.0
Low quantity of crops	05	4.20
Increase import of fresh produce from South Africa	23	19.20
	120	100

Ngqangweni (2016) defines market access as farmers' ability to take advantage of accessible market opportunities. It is important to note that market access opportunities are not just for commercial farmers; smallholder farmers can also tap into the same opportunities. However, elsewhere in the world, smallholder farmers in the KoE experience market access challenges. The challenges primarily prevent them from accessing markets, which slows their ability to profit. The above Table 4.4 shows the market access challenges faced by smallholder farmers in Eswatini. The greatest challenge faced by smallholder farmers is the lack of vehicles to transport farm produce to markets. This was stated by the majority (31.6%) of the respondents. This is followed by a lack of knowledge on market information and operation, which, as mentioned by Simelane, Terblanche, and Masariramba (2019), contributes to farmers being unable to meet standards, scale, low farm investments, and low bargaining power. The lack of market information from Table 4.4 above is followed by an increasing number of importations of fresh produce from South Africa (19.20%). It is noted that 12.5% of the respondents stated that poor road infrastructure is a major challenge for them to get access to the existing markets. 7.5% stated that unreliable rainfall affects their farm business, which does not even make it possible to produce crops fit enough for the markets. Only 4.2% stated that low-quality crops are really a challenge for them. Similar studies (Stringer et al., 2008; Fan et al., 2013; Kangethe & Serima, 2014; Ogutu et al., 2014; Ngqangweni et al., 2016) pointed out some of the challenges that smallholder farmers across the globe experience, and these include high transportation costs, a lack of sufficient agricultural inputs such as seeds and farming tools, a lack of market access information, and a lack of proper agricultural skills for quality produce. There is a need for the KoE government and NGOs to focus on the improvement of road infrastructure and low transportation costs for smallholder farmers to improve access to markets.

4.5.7 Some of the challenges regarding market accessibility has been resolved by the NGO

Resolving market access challenges is key for smallholder farmers to have access to markets. However, it remains a challenge for NGOs to resolve some of the market access challenges for smallholder farmers. As reported in Table 4.4, most of the respondents (77.5%) believe that some of the challenges regarding accessibility to markets have not been resolved. This is because they still experienced most of the challenges reported in Table 4.4. Fewer than 22.5% of the respondents believe that some of the challenges regarding accessibility to the market have been resolved. The basis of their perceptions was the fact that they had access to markets mainly through contracts organised by NGOs with government parastatals. Nonetheless, the mean value (mean: 23) shows that there has not been market accessibility improvement through training and programmes that have been initiated by the NGOs.

4.5.8 Smallholder Farmers' Satisfaction with the Role of NGOs

This section of the study presents findings from smallholder farmers' satisfaction with the role of NGOs. The table below shows the smallholder farmers' level of satisfaction with role of NGOs to get access to markets. The responses obtained from the farmers were grouped as follows:

Table 4.6: Smallholder Farmers' Satisfaction with the Role of NGOs

Variable	**YES**		**NO**		**Mean scores, x = 55**
	1		**0**		
Respondent satisfaction level with the work of NGO	**F**	**%**	**F**	**%**	
The happiness of smallholder farmers with the work of NGOs in assisting access to markets.	89	74.2	31	25.8	74
I am happy about the training and programmes conducted by NGOs for smallholder farmers.	90	75.0	30	25.0	75
Access to fresh farm produce in The Kingdom of Eswatini become easier for smallholder farmers.	44	36.7	76	63.3	37
My farm businesses have positively been impacted by the NGO.	76	65.8	41	44.2	66

4.5.9 The level of happiness of smallholder farmers with the work of NGOs in assisting access to markets

This section depicts the number of happy and unhappy farmers based on the work of NGOs in facilitating market access. This is depicted by three key points. Firstly, the table above shows 90 farmers who were happy and 30 who were unhappy with the trainings and programmes conducted by NGOs for them. Most of the farmers have perceived themselves as happy with the work of NGOs in facilitating market access for them. Secondly, not only have the farmers been trained, mentored, and empowered, but several have also been able to have easy access to fresh produce markets. However, only 44 farmers

were happy with access to markets being made easier for them, while 76 farmers were not happy as they believed that access to markets was still a challenge for them. Lastly, the farmers believed they were happy, as indicated by 76 farmers in the table above, because their farm businesses had been positively impacted by the NGOs. This means that with access to more formal and informal markets, farmers were then able to produce more and sell their produce in markets that enabled them to make more profit.

Based on the data presented in Table 4.5, the majority (74.2%) of the smallholder farmers, who are the beneficiaries of the NGOs identified for this study, indicated that they were happy with the work of NGOs regarding access to markets. This group of smallholder farmers viewed NGOs as helpful when it came to facilitating market access for them. Through contracts with government parastatals such as NAMBoard and NMC, it was discovered that NGOs took on the responsibility of finding markets for their beneficiaries (Simelane, Terblanche, & Masarirambi, 2019). The farmers were also happy because they could produce for the NGOs themselves, who became markets for the farmers. Few of the respondents (25.8%) were unhappy about the work of NGOs when it comes to market accessibility. They felt that there could be more that NGOs could do to assist them in gaining access to markets. It was found that NGOs mostly assisted farmers with production through farm input provision. Nevertheless, on average, Table 4.5 above (mean: 74) indicates that smallholder farmers are happy with the work of NGOs in Eswatini. This is a positive finding for this study, as it helps the study achieve its objective.

Within a large group of smallholder farmers, different farmers have different perceptions and feelings about the work performed by NGOs. Hence, for this study, a large number (75.0%) of the smallholder farmers in the KoE indicated that they were happy with the work of NGOs regarding hosting training and programmes that ensure access to markets for smallholder farmer beneficiaries. Farmers were pleased because they participated in these programmes and applied the knowledge gained from the training sessions in their market research. The fact that such a large number of farmers expressed satisfaction with NGOs' programmes and training matches the findings reported in 4.6.1, where programmes or projects such as the Tunnel Project were implemented to help smallholder farmers get market access. However, only 25.8% of the farmers were happy with the work of the NGO when it came to market accessibility. These few farmers were found to be lacking the skills to implement the knowledge given to them by their organisations, and at times, these few rarely attended the training sessions and programmes hosted by NGOs. Despite such a notion, the above statement reported in 4.8.2 shows a mean value of 75, which is an indication that Eswatini's smallholder farmers were happy about the training and programmes conducted by NGOs for market access facilitation for smallholder

farmers. This inspires NGOs to continue with the programmes and training sessions that they hold to assist smallholder farmers in producing quality crops for market access.

Smallholder farmers' perceptions of happiness were also influenced by their ability to access fresh produce markets in Eswatini. Not only has access to fresh produce markets in the KoE been possible, but it has also become easier for the farmers. The majority of the smallholder farmers in this study produce with fresh produce markets in mind so that they can sell and profit. However, it was found that only 36.7% of the smallholder farmers in the KoE indicated that access to fresh farm produce markets in the KoE has become easier for smallholder farmers. This finding is in correlation with the findings reported in 4.7.6, where a similar percentage of farmers strongly agreed to have gained knowledge about fresh produce markets in Eswatini. As a result, farmers who had learned about fresh produce markets found it easier to gain access to those markets. These farmers, therefore, put the knowledge they had gained into practice. However, the majority, 63.3% of the smallholder farmers, were unhappy about the access to fresh produce markets in Eswatini. These farmers were faced with the market access challenges discussed in 4.7.7. The market access challenges like lack of transportation means and distance to fresh produce markets make it difficult for farmers to access the markets, as identified by Simelane, Terblanche, and Masariramba (2019). This is an indication that smallholder farmers in the KoE struggle to find access to fresh farm produce markets. This is because the majority of the farmers in the KoE target the spot market and avoid collective action, which would alleviate some of the challenges that make it difficult for them to access fresh produce markets (Simelane, Terblanche, & Masariramba, 2019). However, there is still a need for NGOs to improve the farmers' market's accessibility and to further encourage farmers to work more in collectives than individually, as this will boost fresh produce market accessibility.

Table 4.5 also shows that a large number, 65.8%, of the smallholder farmers in the KoE indicated that their farm businesses have been positively impacted by the NGOs. Firstly, this positive impact has taken place through NGO training sessions, workshops, and projects where farmers had to produce better and higher-quality crops, as identified in 4.6.1. Secondly, NGOs have been instrumental in accessing contracts for smallholder farmers with some supermarkets in Eswatini, government parastatals, and with the NGOs themselves. Lastly, some of the NGOs were instrumental in ensuring that there is a record-tracking procedure that investigates the performance of farmers' businesses and whether they are making a profit. However, only 44.2% of the respondents believe that their farm businesses have been positively improved by the NGOs. This statement shows a positive mean value of (mean: 74). This implies that, though access to markets has not been improved by the NGOs, smallholder farmers' businesses have been positively impacted by the NGOs. The improvement could

be in areas such as farming, education, and agricultural production techniques. However, the overall satisfaction level is very moderate (mean = 55). In other words, there was a moderate level of satisfaction with the role of NGOs. Smallholder farmers were not fully satisfied with the performance of NGOs when it came to the development of smallholder farmers in Eswatini.

4.6. Key themes and findings from the Interviews with NGO representatives

This section analysed data from interviews conducted with NGO representatives using thematic analysis and presented the findings from the primary study. The section used thematic analysis in the process of discussing the primary data that was acquired using interviews. The following themes have been generated from the entire interview responses obtained from the respondents. *Table 4.2* below indicates the themes that have emerged when the participants responded to the interview questions based on the above research objectives mentioned in *4.3*:

Table 4.7: NGO Representatives' Knowledge of Smallholder Farmers

Themes	**YES**		**NO**		**Mean**
	1		**0**		**90.5**
Knowledge of Smallholder Farmers	**F**	**%**	**F**	**%**	
Understanding the component of smallholder farmers and working with them	07	100	0	0.0	100
Distribution of smallholder farmers across the identified communities that you work in	05	71.4	0	28.6	71.4

From the above *table 4.6* F=frequency of responses obtained and not obtained and %= percentages of the participants that responded and did not respond

4.6.1 Knowledge of Smallholder Farmers

To work with smallholder farmers, one must be able to understand them in terms of who they are, how they normally operate, and their overall distribution within a specific setting. This is important, especially for NGOs, because it allows them to make prompt plans and decisions on how they can exercise their role in facilitating market access for their farmer beneficiaries. In this study, having knowledge of smallholder farmers begins with NGOs first understanding what constitutes a smallholder farmer, how they are distributed within the KoE, and how best they can work with them.

Under this theme, all interview participants gave responses to the component of understanding what constitutes a smallholder farmer. Hence, in Table 4.6, there is 100% on the theme "understanding the component of smallholder farmers," which shows that all participants gave their views on this component. The data represented in Table 4.6 suggests that all the interviewed NGO representatives

understand the meaning of smallholder farmers and what their operations constitute. One respondent understood a smallholder farmer as "someone who grows crops or rears livestock in small quantities." The notion of understanding the component of smallholder farmers is supported by the study conducted by Mugube et al. (2019), who understand smallholder farmers as farmers that are involved in crop production and the raising of livestock on small pieces of land. However, this study focused on smallholder farmers who, agriculturally, worked primarily on producing crops on small pieces of land. This component of understanding smallholder farmers is important because it plays an important role in facilitating market access. One needs to understand their smallholder farmers, which then ensures that an intervention from an NGO's perspective is really to try to ensure that the farmers at the end of the day have been understood and their needs met. This notion has been elaborated by Sikwela (2013), who mentions that intervention measures have to be put in place to assist smallholders to move out of poverty through agricultural production. It, therefore, excluded smallholder farmers that have a focus on livestock production on a small scale. This study therefore achieved its mandate of focusing mainly on crop-producing smallholder farmers. Hence, it is so important for NGOs to understand the kind of smallholder farmers they work with so that they can facilitate market access for them accordingly. This also ensures that they identify the right markets in which their farmer beneficiaries can operate. As a result, the role of non-governmental organisations (NGOs) in facilitating market access for smallholder farmers is critical because they learn about their needs and desires in terms of market access.

Moreover, the findings in Table 4.6 show that more than half (71.4%) of the representatives interviewed in this study have knowledge about the distribution of smallholder farmers across the KoE communities that the NGOs operate in. Several of the NGO representatives went on to mention that the distribution of smallholder farmers in the kingdom is one where they are scattered all over the country. This can be supported by the thoughts of another NGO representative, who mentions that his NGO works with smallholder farmers found in 59 constituencies (communities) across the four administration regions of Eswatini, namely, HhoHho, Manzini, Shiselweni, and Lubombo. These are the regions where the NGO representatives and their organisations conduct their work with smallholder farmers who are beneficiaries of their efforts. The overall mean regarding the NGO representatives' knowledge about smallholder farmers is 90.5. This shows that the representatives at the NGOs have adequate knowledge about smallholder farmers and their operations. This is because these NGO representatives, together with their NGOs, work daily with the smallholder farmers in terms of input assistance, production assistance, and market access assistance, which is the next theme discussed for this study. The data in Table 4.6 shows that all the NGO representatives picked for this study worked with smallholder farmers. Hence, the data indicates that 100% of the participants acknowledged that they worked with

smallholder farmers. Therefore, the data suggests that all respondents have been assisting and working with smallholder farmers with their various NGOs in the KoE. Working with smallholder farmers allows NGOs to play a role in facilitating their market access. The data from the interview revealed that, on average, NGOs in the KoE work with approximately 5000 smallholder farmers, with one respondent stating that, "as an NGO, we work with approximately 2000 smallholder farmers in 89 communities across Eswatini," while another respondent from a different NGO stated that "we have over 90 cooperatives (groups) and at least one of the cooperatives has at least 100 smallholder farmers." The need to understand these large numbers of smallholder farmers that NGOs work with enables one to know the magnitude and scale of work that NGOs have in facilitating market access for all these farmers. This is important because it shows how vast and massive the role of NGOs is—their role in facilitating smallholder farmers' access to markets is one that no one should underestimate. As a result, the NGOs and their representatives see themselves as helpful to smallholder farmers, and this is agreed upon by Simelane, Terblanche, and Masariramba (2019), who hold a common understanding. NGO representatives are largely active in supporting smallholder farmers with extension services. The findings of this study corroborate those of Simelane, Terblanche, and Masariramba (2019), who assert that extension agents from NGOs such as the African Cooperative Action Trust (ACAT) provide agricultural extension services to smallholder farmers in rural areas. Therefore, by working with such large groups of smallholder farmers, NGOs are able to understand their smallholder farmers, and therefore, they are able to facilitate market access for them since that is their role.

4.6.2 NGO representatives' knowledge about market access for smallholder farmers

This section of the research sought to find the NGO representatives' knowledge about market access. The themes that were uncovered based on this objective will be discussed below:

Table 4.8: NGO Representatives' Knowledge of Market Access

Themes	**YES**		**NO**		**Mean**
	1		**0**		**X= 53.75**
Knowledge of Market Access	**F**	**%**	**F**	**%**	
Knowledge about different existing markets within Eswatini	07	100	0	0.00	100
The existing fresh produce markets that your farmer-beneficiaries currently operate in.	03	42.9	4	57.1	43
Tracking record of farmer's performance	02	28.6	5	71.4	29
Percentage of smallholder farmers who have access to the existing fresh produce markets like Spar and Pick n Pay	03	42.9	4	57.1	43

4.6.2.1 Knowledge about different existing markets within Eswatini

The KoE contains different existing markets in which smallholder farmers can operate. All the NGO representatives interviewed for this study had knowledge about different existing markets for smallholder farmers within the KoE. This is supported by the data above in Table 4.7 with a mean value of 100, which suggests that the NGO representatives have knowledge about different existing markets within Eswatini. Based on the understanding offered by Dlamini-Mazibuko (2020), the different existing markets within the KoE are grouped into formal and informal markets. The smallholder farmers' produce can be channelled through formal marketing channels such as selling directly to supermarkets, the hospitality industry like hotels and fast-food restaurants, exports, or selling via market intermediaries like private packhouses and government parastatals like NAMBoard (Dlamini-Mazibuko, 2020). Therefore, the study by Dlamini (2020) supports the findings of this study, which, through an NGO representative, mentions that "in Eswatini, there are different existing markets like supermarkets, informal markets, and government parastatals like the National Agricultural Marketing Board (NAMBoard), which is used by the Women Farmer Foundation." However, apart from these markets, the study identified the Manzini Market, the Mahlanya Market, and the Mbabane Market as existing local vegetable and crop markets in Eswatini. NGO representatives identified these three markets as existing different markets in the KoE in terms of geographical market centres. These are markets that also support smallholder farmers by allowing them to operate in them if they meet the market requirements. When smallholder farmers participate in such markets, they are also able to make profits. The profit made is then able to improve their livelihood by providing better access to household energy, clean water because they can pay for water service delivery, access to a diverse range of foods other than what they produce, and, as well, access to better education for their school-going household members (Simelane, Terblance, & Masarirambi, 2019). Therefore, NGOs can play the role of facilitating market access for smallholder farmers by identifying vegetable markets where their beneficiaries can participate.

4.6.2.2 The existing fresh produce markets that NGOs' smallholder farmer beneficiaries currently operate in.

As the majority of commercial farmers operate in fresh produce markets, so can smallholder farmers. However, it is once they have been well trained, mentored, and empowered that smallholder farmers can gain the ability to also operate in formal markets, as elaborated in the study "Linking Farmers with Markets" by Mkhabela (2013). It is through the training, the mentorship, and the empowerment that NGOs begin to play the role of facilitating market access for their smallholder farmer beneficiaries. Most of the NGO respondents (51%) do not have adequate knowledge about the existing fresh produce

markets that smallholder farmer-beneficiaries currently operate in. The lack of knowledge from the respondents could be because their farmer beneficiaries do not operate in fresh produce markets but rather in informal markets, like selling their produce to their closest neighbours. This is supported by the findings offered by Enochian (1990), who mentions that the failure of smallholder farmers to operate in fresh produce markets is because most of them are widely scattered and located in areas that are far from significant markets. However, there were 42.9% of the respondents who knew about the different existing fresh produce markets that their farmer beneficiaries operate in. One respondent stated that as an NGO, they collect smallholder farmers' produce and get it sold to Ewatini Kitchen, a business entity that processes fresh produce. While another respondent stated that, as an NGO, they established a farmer's market that allows its beneficiaries to have access to and operate in. This is a good venture that allows some of its farmer beneficiaries to sell their fresh produce and make a profit.

4.6.3 Tracking record of smallholder farmers' performance

This section looks at the tracking record of smallholder farmer market performance for those with access to markets. NGOs were unable to track whether their farmer beneficiaries made a profit. However, the study found this not to be a good standard for the NGOs to have. This is because, normally, every organisation should be able to ensure that they reach their organisational objectives and milestones in terms of the projects they are running. The study therefore assumes that there should be some type of reporting system that any NGO can use for any programme that they are doing to see the kind of impact they are having on their beneficiaries. A lack of impact tracking, therefore, shows that NGOs are not doing certain things right, which then calls for concern. This is because NGOs should be adept at tracking the performance and results of their beneficiaries, as mentioned by Evans and Wydick (2016). However, the focus here was that NGOs were unable to track the farmers' progress in terms of the profits that they were making and in terms of bookkeeping. Although the challenge may not be due to NGOs, it is possible that farmers have not yet realised the importance of bookkeeping. Perhaps there needs to be further training. However, capacity building in bookkeeping was not offered to the farmers. NGOs had a shortage of human and financial resources to organise bookkeeping training programmes for their farmer beneficiaries. This is because if farmers are unable to keep a simple bookkeeping system to see levels of profits and losses, then they are unable to see if they are making gains or losses in their agribusiness operations. However, very few NGOs—28.6% of them—have tracking records of smallholder farmers' performance in the markets that they operate in. A representative of one NGO that hosts smallholder farmer produce competitions states that "there is a way of tracking." This is because having good financial and production records is one of the criteria for making it to the top 10 or top 5 in the farming competition. So we can track their progress and profitability in their businesses, and that is where we teach them about record keeping. While other

representatives of different NGOs discussed that as NGOs, a plan was in motion to develop a tracking tool to capture how their smallholder farmers are operating in both informal and formal markets. Furthermore, this study found that smallholder farmers generally do well in informal vendor markets where there are no high requirements for producing quality crops for market accessibility.

4.7 Perceptions of NGO representatives and their role in smallholder farmers' market access

This section of the research sought to find the perceptions of NGO representatives about the role played by their organisations regarding smallholder farmers' market access. The themes that were uncovered based on this objective are discussed below:

The data shows that, NGOs have played a significant role regarding smallholder farmers in the KoE

Table 4.9: Perceptions of NGOs' Representatives about the role played by NGOs.

Themes	**YES**		**NO**		**Mean =82**
	1		**2**		
Perceptions of the role played by NGO's regarding smallholder farmers' market access	**F**	**%**	**F**	**%**	
Programs or projects that NGO has put in place to assist smallholder farmers to produce quality crops for markets	07	100	0	0	100
Challenges experienced by NGOs regarding offering market access assistance to farmers	07	100	0	0	100
The impact of COVID-19 pandemic on NGO operations with Smallholder farmers	05	71.4	2	28.6	71
The successes that NGOs have experienced pertaining to market access facilitation for Smallholder farmers	04	57.1	3	42.9	57

4.7.1 Programs or projects that NGOs have put in place to assist smallholder farmers to produce quality crops for markets.

It was observed that NGOs conducted programmes and initiatives with smallholder farmers to aid their beneficiaries in growing market-ready crops of high quality. The majority of the KoE's fresh produce markets require the production of quality crops and crops of high standards. NGO representatives perceived that their specific NGOs have put in place programmes or projects to assist smallholder farmers to produce quality crops for markets (mean: 100), as shown in Table 4.8. This has mainly been done by educating smallholder farmers on farming skills, and through those programmes and projects, NGOs have been able to offer smallholder farmers quality farm inputs such as seedlings for their

productions, as one NGO representative stated*, "We have also done some pilot projects like distributing seeds and seedlings to encourage farmers to start growing food even within their homesteads."*

One of the identified projects conducted by an NGO was known as the Tunnel Project. According to an NGO representative, the Tunnel Project encourages smallholder farmers to produce quality crops. The NGO representative stated as follows: "The tunnel project, which started recently and encourages farmers to produce quality produce, we were recently impacted by cyclone Elis, and most farmers lost produce as a result of the cyclone. So, farmers are encouraged to farm under cover, which will make them produce quality crops in the sense that crops will not be damaged by these weather conditions. Furthermore, as an addition to the Tunnel Project, NGOs in the KoE also hold mentorship programmes with their smallholder farmer beneficiaries. In these mentorship programs, NGOs are not just simply required to educate farmers on quality crop production, but they also become responsible for teaching farmers about value addition to the crops they produce. This is because partaking in value-added activities such as crop washing, packaging, sorting, and grading improves the quality of the crops for marketability (Baloyi, 2010). Moreover, NGO representatives perceived their organisations as being responsible for further holding workshops and trainings where farmers are educated on agri-ecology, soil rehabilitation, and improvement, as well as the importance of preserving indigenous seeds through proper selection, multiplication, and storage as identified by Grain (2020). This is essential for farmers to have quality inputs and resources for quality crop production. It was also stated that the programmes and workshops would help farmers with water harvesting and efficiency. This is especially important for those farmers in drought-prone areas where the availability of water can be scarce.

Moreover, the work of non-governmental organisations (NGOs) has become crucial through radio programmes in which experts on the topic of the week share their knowledge and experiences and, at the end of the month, farmer-to-farmer sharing in which farmers share their experiences, community challenges, and coping mechanisms when producing crops for relevant markets. Overall, the perceptions of NGO representatives about their organisations were that the programs, projects, and workshops assisted NGOs in working with their smallholder farmer beneficiaries in the production chain, marketing chain, and distribution chain. It is through this process that farmers get to learn how to produce, penetrate the markets, and distribute the produce. During the above stated processes, farmers are visited monthly by NGO representatives who educate the farmers, mentor them, manage their produce, observe their produce value chain, and most importantly, help those farmers that want to sell for profit find markets.

4.7.2 Challenges experienced by NGOs regarding offering market access assistance to farmers

Despite all the work that NGOs do in conducting programs, workshops, and starting projects to assist smallholder farmers with market access, there are challenges that they experience in their pursuit of improving the livelihoods of smallholder farmers. The data obtained from the NGO employees shows that all the organisations have been facing several challenges regarding offering market access assistance to farmers (mean: 100), as shown in Table 4.8. The challenges experienced by NGOs included inconsistency from farmers when it comes to them being present for market access workshops and trainings offered by NGOs, as one NGO representative stated, "You find that today the farmers are present and tomorrow they are absent." However, this inconsistency is not visible among all the farmers. The inconsistency of farmer availability is mainly visible among the young farmers. This is because farming is not the only activity that young smallholder farmers engage in, as they have other commitments to attend to. However, there is consistency among the older farmers, although there is a lack of energy from them when it comes to workshop and training participation as compared to the energy one will receive from young people. Hence, there is a need for the workshops to be streamlined for the specific needs of the participants, but they should also be streamlined to the levels of understanding, skills, and knowledge that the farmers understand based on their age group. This is because if one is trying to educate someone who is old in a paper format or with computers, one is likely to have people switch off. Therefore, the energy to participate is different as compared to someone who is younger and more technologically oriented. NGOs have to look for better ways to deliver programmes and workshops that are streamlined to both the needs and the levels of their participants. However, this may be a lot of work from the NGO side, but it is very important for them to consider this.

Another key challenge faced by NGOs in the KoE is political. This is due to the presence of government parastatals within Eswatini's market space. For instance, within the fruit and vegetable markets, there is a high presence of a government parastatal known as NAMBoard, while in the grains market space, there is the National Maize Corporation (NMC) (Phungwayo *et al.*, 2021). These institutions are meant to help smallholder farmers gain access to markets. However, they only end up being middlemen who buy produce from smallholder farmers at very low prices. Hence, several policies that allow smallholder farmers to gain access to markets are recommended. Furthermore, NGO representatives perceived the issue of human resources as a challenge. NGO representatives noted that their organisations experience a shortage of personnel and, therefore, a lack of extension workers to reach their smallholder farmer beneficiaries, which is a finding supported by Makapela (2015). Accompanying this challenge is the lack of transportation (insufficient vehicle availability) within their

organisations to reach out to smallholder farmers, most of whom are located within rural areas of the KoE.

4.7.3 The Impact of COVID-19 pandemic on NGO operations with Smallholder farmers

This theme is an expansion of the preceding theme, "Challenges experienced by NGOs regarding offering market access assistance to farmers." The impact of the COVID-19 pandemic on NGO operations with smallholder farmers mainly acts as a challenge that affects NGO operations. However, this has been excluded as a challenge in the above theme because the COVID-19 pandemic is a recent phenomenon on its own. The findings from Table 4.8 show that more than half (71.4%) of the NGO representatives indicated that the COVID-19 pandemic impacted negatively on their organisations and business operations. As a negative impact, the COVID-19 pandemic was perceived as a challenge as it affected NGO operations with smallholder farmers and affected the business performance of smallholder farmers. This notion is confirmed by one NGO representative, who mentions that due to COVID-19, their operations were affected, as they were not able to travel to all farmers as compared to previous years. As a result, both farmers' and representatives' movements were restricted, as outlined by Hammond *et al.* (2022). This is due to lockdown regulations adopted by the KoE government. Furthermore, due to some identified positive cases among NGO members, NGOs have had to halt operations within their organisations as well as operations with smallholder farmer beneficiaries on several occasions. Due to the effects of COVID-19, NGOs also have difficulty gaining access to agricultural supplies and inputs for their beneficiaries. It was mentioned that manufacturing companies for farm inputs shut down, leading to a scarcity of fertiliser, seeds, and seedlings that NGOs purchase and hand over to their smallholder farmer beneficiaries for production. One NGO confirms this by mentioning that "the pandemic brought a huge negative impact on the farmers." "Inputs were not readily available." Due to the unavailability of inputs, farmers were not able to farm and produce crops, which means that they were not able to access markets, which would enable them to make profit and decrease their level of vulnerability.

4.7.4 The successes that NGOs have experienced pertaining to market access facilitation for Smallholder farmers.

Despite experiencing the challenges above, NGOs have had several successes pertaining to market access facilitation for smallholder farmers in Eswatini. The data in Table 4.8 suggests that more than half (57.1%) of the respondents indicated that they have experienced some success pertaining to market access facilitation for smallholder farmers. NGOs in the KoE have become successful in establishing farming competitions amongst their farmer beneficiaries. Consequently, NGOs are able to open market access for the winners of the agricultural contests by contracting them with marketplaces such as NAMBoard and other markets where NGOs may have written contracts for smallholder farmers and

for them to deliver goods to markets. NGOs are, therefore, able to identify market opportunities for smallholder farmers, which organisations like them should do, as stated by Sanginga et al. (2004). Therefore, in the KoE, one of the successes of NGOs is that they can link their farmer beneficiaries to markets, and this becomes a success through the farming competition that smallholder farmers participate in to produce quality crops for markets. Linking smallholder farmers to markets is the responsibility of NGOs in Eswatini. The farming competition acts as a social safety net that is provided by NGOs and helps smallholder farmers pair up productivity-enhancing tools that ensure that smallholder farmers remain engrossed in an agriculture economy, as mentioned by Barrett (2008). Furthermore, NGOs have had success in having their farmer beneficiaries' contract with organisations like the UNDP and WFP, and as a result, smallholder farmers are able to supply vegetables and grains to the organisations because of the good partnerships that the NGOs have with the above-mentioned institutions.

In some other instances, NGOs themselves become a market opportunity for their farmer beneficiaries. This is backed up by the opinion offered by one of the NGO representatives, who mentions that their NGO processes the produce supplied to them by their farmer beneficiaries. The NGO representative further elaborates by saying, "We take their produce all the time for processing, and we give them a much better price as compared to what they receive from the local markets." As a result, NGOs assist smallholder farmers to make higher profits than they normally do in local KoE markets. Moreover, based on the overall objective of the role played by NGOs regarding smallholder farmers' access to markets, the overall mean of NGO representatives' perceptions of the role played by their organisations regarding smallholder farmers' market access is 82 (mean: 82). This shows that the employees at the NGOs have a strong perception that the organisation has played a significant role and have fair knowledge about access to the market for smallholder farmers in Eswatini.

Access to formal markets such as contract farming, large retailers, and wholesalers remains a challenge for the sampled farmers. It is because of institutional constraints that access to formal markets remains a challenge for smallholder farmers (Meemken & Bellemare, 2020). However, below are some marginal successes where NGOs' smallholder farmer beneficiaries have been able to access some formal markets. This is significant because several percentages of the smallholder farmer beneficiaries with whom NGOs work have access to existing fresh produce markets such as Spar and Pick n Pay. This indicates that they do play a role in facilitating market access for their smallholder farmer beneficiaries.

Smallholder farmers in the KoE mostly have access to informal markets as compared to formal markets. This is why, according to the findings in Table 4.3, a few of the NGO representatives (57.1%)

interviewed for this study stated that smallholder farmers have access to markets, especially access to the existing fresh produce markets like Spar and Pick n Pay. It was found that some of the fresh produce markets in the form of supermarkets like Spar, Pick n Pay, and Shoprite have an "open door" policy (smallholder farmers can approach retailers directly) that also allows smallholder farmers to bring their produce to sell to them (Reva, 2019). Furthermore, an NGO representative stated that approximately 50% of the smallholder farmer beneficiaries have contracts with the government parastatal NAMBoard to sell produce to them. Also, according to some of the NGO representatives, less than 50%, with other NGOs having less than 5% of their smallholder farmers, had access to supermarkets like Spar and Pick n Pay. The reason behind this was that most of the smallholder farmers only produced crops for subsistence purposes.

4.8 Conclusions and Recommendations

The study aimed at investigating the role of NGOs in facilitating market access for smallholder farmers and understanding market access perceptions of smallholder farmers based on the work done by NGOs in the KoE. The responses from the interviews showed that the NGOs had a strong knowledge of smallholder farmers, however, they had a fair knowledge of market access especially when it comes to access to markets for fresh farm produce. The NGOs had a perception that they had played a major role in the development of smallholder farmers' access to markets. Nonetheless, there were some challenges that affected them from fully achieving their goals for their beneficiaries.

Furthermore, access to markets for smallholder farmers to sell their farm produce was very important to the farmers. The farmers had a moderate level of perception when it came to the performance of the NGOs that they were beneficiaries of. The most challenging factor faced by smallholder farmers was a lack of vehicles to transport farm produce to markets, followed by a lack of knowledge on market information and operation, followed by an increasing number of importations of fresh produce from neighbouring South Africa as well as unreliable rainfall patterns. Only a few (5, or 4.2%) stated that low-quality crops were really a challenge for them. The farmers had an average level of satisfaction with the role of the NGOs. It can be noted that smallholder farmers were not fully satisfied with the performance of NGOs. Therefore, this study recommends that market identification, accessibility, and creation for smallholders should be the focus for policymakers and NGOs. Interventions aimed at enhancing market accessibility and participation among smallholder farmers in the KoE should be implemented. Smallholder farmers do not necessarily have to engage in the formal markets, where it is difficult for them to penetrate. As a suggestion, smallholder farmers could start by creating alternative markets, such as a community hub where all of these smallholder farmers could bring their produce and sell it. However, these community hubs must be formalised to some extent so that they are able to

make some profit. The community hub for the farmers can also be in competition with other markets, but at the same time, the hub can also be able to support communities that, by nature, may not be able to afford the same produce at a much higher price within the supermarkets. As an alternative to having access to affordable foods, the communities can have the "informal community hub." Hence, creating new markets for the farmers stops the narrative of trying to push them into these formal markets with tough regulations that the smallholder farmers cannot afford to meet. Also, the constraints that hinder market accessibility and operations among smallholder farmers should be fully explored and solutions provided. NGOs ought to also ensure that their smallholder farmer beneficiaries do not simply receive education on the production of crops but are also educated through further trainings and workshops on fresh produce market operations. There is also a need for NGOs to ensure that their farmer beneficiaries begin to focus on producing high-value crops, which can be advantageous in terms of accessibility and operations. NGOs must also take the initiative of electronically marketing produce for their smallholder farmers, the majority of whom have no access to smart digital devices to market for themselves.

4.9. References

Anyanwu, J.C. and Anyanwu, J.C., 2017. The key drivers of poverty in Sub-Saharan Africa and what can be done about it to achieve the poverty sustainable development goal. *Asian Journal of Economic Modelling*, *5*(3), pp.297-317.

Avea, A.D., Zhu, J., Tian, X., Baležentis, T., Li, T., Rickaille, M. and Funsani, W., 2016. Do NGOs and development agencies contribute to sustainability of smallholder soybean farmers in Northern Ghana—a stochastic production frontier approach. *Sustainability*, *8*(5), p.465.

Baloyi, J.K., 2010. *An analysis of constraints facing smallholder farmers in the Agribusiness value chain: A case study of farmers in the Limpopo Province* (Doctoral dissertation, University of Pretoria).

Barrett, C.B., 2008. Smallholder market participation: Concepts and evidence from eastern and southern Africa. Food policy, 33(4), pp.299-317.

Brixiová Schwidrowski, Z., Imai, S., Kangoye, T. and Yameogo, N.D., 2021. Assessing gender gaps in employment and earnings in Africa: The case of Eswatini. *Development Southern Africa*, *38*(4), pp.643-663.

Collins, S.E., Clifasefi, S.L., Stanton, J., Straits, K.J., Gil-Kashiwabara, E., Rodriguez Espinosa, P., Nicasio, A.V., Andrasik, M.P., Hawes, S.M., Miller, K.A. and Nelson, L.A., 2018. Community-based participatory research (CBPR): Towards equitable involvement of community in psychology research. American Psychologist, 73(7), p.884.

Dlamini-Mazibuko, B.P., 2020. *Economic analysis of supermarkets as a marketing channel choice for fresh produce smallholder farmers in The Kingdom of Ewatini*(Doctoral dissertation).

Enochian, I.R.V., 1990. Agency For International Development Ppc/Cdie/Di Report Processing Form.

Evans, D. and Wydick, B., 2016. Is my NGO having a positive impact?. *World Bank blogs, Available: http://blogs. worldbank. org/impactevaluations/my-ngo-having-positive-impact (Accessed 20 December 2019)*.

Fan, S., Brzeska, J., Keyzer, M. and Halsema, A., 2013. *From subsistence to profit: Transforming smallholder farms* (Vol. 26). Intl Food Policy Res Inst.

Gaffney, J., Challender, M., Califf, K. and Harden, K., 2019. Building bridges between agribusiness innovation and smallholder farmers: A review. *Global food security*, *20*, pp.60-65.

GRAIN, A., 2020. The real seeds producers: small-scale farmers save, use, share and enhance the seed diversity of the crops that feed africa.

Hammond, J., Siegal, K., Milner, D., Elimu, E., Vail, T., Cathala, P., Gatera, A., Karim, A., Lee, J.E., Douxchamps, S. and Tu, M.T., 2022. Perceived effects of COVID-19 restrictions on smallholder farmers: Evidence from seven lower-and middle-income countries. *Agricultural Systems*, *198*, p.103367.

Hlatshwayo, S.I., Ngidi, M., Ojo, T., Modi, A.T., Mabhaudhi, T. and Slotow, R., 2021. A typology of the level of market participation among smallholder farmers in South Africa: Limpopo and Mpumalanga Provinces. *Sustainability*, *13*(14), p.7699.

Ivankova, N.V., 2017. Applying mixed methods in community-based participatory action research: a framework for engaging stakeholders with research as a means for promoting patientcentredness. Journal of Research in Nursing, 22(4), pp.282

Kalaiselvan, S., Maheswari, K. & Narayanamoorthy, S. (2017). Distribution of Respondents by their Socio Demographic Characteristics - Post Graduate Social Work Students in Trichy, Tamilnadu. International Journal of Statistics and Systems, 12(2), pp. 225-234.

Kang'ethe, S.M. and Serima, J., 2014. Exploring challenges and opportunities embedded in small-scale farming in Zimbabwe. *Journal of Human Ecology*, *46*(2), pp.177-185.

Khapayi, M. and Celliers, P.R., 2016. Factors limiting and preventing emerging farmers to progress to commercial agricultural farming in the King William's Town area of the Eastern Cape Province, South Africa. *South African Journal of Agricultural Extension*, *44*(1), pp.25-41.

Makapela, M., 2015. *Effectiveness of agricultural extension organisation in rural areas: the case of Amathole District Municipality (Eastern Cape)* (Doctoral dissertation, University of South Africa).

Meemken, E.M. and Bellemare, M.F., 2020. Smallholder farmers and contract farming in developing countries. *Proceedings of the National Academy of Sciences*, *117*(1), pp.259-264.

Misselhorn, A., Aggarwal, P., Ericksen, P., Gregory, P., Horn-Phathanothai, L., Ingram, J. and Wiebe, K., 2012. A vision for attaining food security. *Current opinion in environmental sustainability*, *4*(1), pp.7-17.

Mkhabela, T., 2013. Linking farmers with markets in Rural South Africa: Rural Development and poverty alleviation through supply chain management. *Pretoria: National Agricultural Marketing Council (NAMC), Market and Economic Research Centre (MERC)*.

Manlosa, A.O., 2022. Operationalizing agency in livelihoods research: smallholder farming livelihoods in southwest Ethiopia. *Ecology and Society*, *27*(1).

Njobe, B. and Kaaria, S., 2015. Women and agriculture: the untapped opportunity in the wave of transformation. *Background Paper*.

Ogutu, S.O., Okello, J.J. and Otieno, D.J., 2014. Impact of information and communication technology-based market information services on smallholder farm input use and productivity: The case of Kenya. World Development, 64, pp.311-321.

Pickering, R.M., 2017. Describing the participants in a study. *Age and Ageing*, *46*(4), pp.576-581.

Prato, B., 2014. Agriculture, rural livelihoods and poverty eradication: some policy lessons from the food price crises.

Reva, A., 2019. *Linking Smallholders to Markets: A Supplier Development Program for Vegetable Farmers in Lesotho*. World Bank.

Rich-Edwards, J.W., Kaiser, U.B., Chen, G.L., Manson, J.E. and Goldstein, J.M., 2018. Sex and gender differences research design for basic, clinical, and population studies: essentials for investigators. *Endocrine reviews*, *39*(4), pp.424-439.

Selepe, B.M., Mtyingizane, S.S. and Masuku, M.M., 2015. Factors contributing to household food insecurity in Mhlontlo area, Eastern Cape, South Africa. *J. Hosp. Manage. Tourism*, *4*(1), pp.2223-814X.

Senyolo, G.M., Wale, E. and Ortmann, G.F., 2018. Analysing the value chain for African leafy vegetables in Limpopo Province, South Africa. Cogent Social Sciences, 4(1), p.1509417.

Shabalala, F.S., 2017. *Longing for belonging: adolescents' experiences of living with HIV in different types of families in Swaziland* (Doctoral dissertation, Universiteit van Amsterdam [Host]).

Sikwela, M.M., 2013. *The impact of farmer support programmes on market access of smallholder farmers in the Eastern Cape and KwaZulu-Natal provinces, South Africa* (Doctoral dissertation, University of Fort Hare).

Simelane, S.M., Terblanche, S.E. and Masarirambi, M.T., 2019. Perceptions of extension officers regarding public extension services: a case study of horticultural extension officers in the Hhohho region, Eswatini. *South African Journal of Agricultural Extension*, *47*(1), pp.1-19.

Stringer, L.C., Twyman, C. and Gibbs, L.M., 2008. Learning from the South: common challenges and solutions for small-scale farming. *Geographical journal*, *174*(3), pp.235-250.

Ugwu, P., 2019. Women in agriculture: Challenges facing women in African farming. *Project report of African Women in Agriculture*.

von Loeper, W.J., Drimie, S. and Blignaut, J., 2018. The struggles of smallholder farmers: A cause of modern agricultural value chains in South Africa. In *Agricultural value chain*. IntechOpen.

Wittman, H., Arulingam, I., Cano, J.L., Mungai, C., Huambachano, M., Korzenszky, A., Termine, P. and White, B., 2021. Promoting Youth Engagement and Employment in Agriculture and Food Systems.

CHAPTER 5
DETERMINANTS THAT INFLUENCE SMALLHOLDER FARMERS TO HAVE AND NOT TO HAVE ACCESS TO MARKETS AFTER BEING TRAINED BY NGOS IN ESWATINI

Abstract

NGOs in developing and less developed nations have highlighted the need to help smallholder farmers, take action to alleviate poverty, and contribute constructively to improving their livelihoods. In In Eswatini, an increasing emphasis has been placed on smallholder farmer agribusiness development to enable smallholder farmers to profit from market activities. Smallholder farmers are, however, still faced with constraints that negatively influence their participation in various markets, especially formal markets. This study, therefore, investigated the determinants that influence smallholder farmers' decisions about having or not having access to markets after being trained by NGOs in Eswatini. Primary data was collected from smallholder farmers through a purposive sampling technique. The data were analysed using regression analysis in SPSS version 27. The results from regression analysis showed that access to credit from financial institutions was the key determinant factor influencing smallholder farmers' decisions about having or not having access to markets after being trained by NGOs. This is followed by funds from an NGO, access to funds from the government, and being a member of an agricultural group. Access to extension officers has the least influence on farm production and market accessibility. On the other hand, lack of vehicles to transport farm produce to markets was the highest factor among the determinants related to market access challenges. According to the study, the determinant with the least influence on market accessibility was low crop quantity. However, it is recommended that a market-led approach to smallholder farmer development be adopted to improve the commercial prospects of farmers while bolstering their livelihoods.

Keywords: Market Access, Smallholder farmers, Household Food Insecurity Access Scale, Market-led approach

5.1 Introduction and Contextualisation

Globally, smallholder farmers play an important role in increasing food production that caters to the demand for food across the globe. In various countries and regions across the world, smallholder farmers ensure that there is at least a 70% supply of food produced. However, the majority of these continue to experience challenges related to food and nutrition security. Although, for this study, it is important to note that smallholder farmers have ways of engaging themselves in interrelated markets. However, in attempting to support healthy livelihoods, smallholder farmers come across challenges that hinder them from securing market access.

Smallholder farmers experience challenges concerning market access. These challenges are exacerbated by the lack of market information (Evans *et al.*, 2012). Smallholder farmers, particularly those in rural areas, have no idea how food markets operate. A lack of market operation understanding leaves them to sell their surplus produce to nearby households within the communities of Kang'ethe and Serima (2014). As a result, they do not earn much income because almost everybody within the community practises at least some form of subsistence farming. Access to markets for small-scale farmers also becomes a challenge because of transportation issues. The appropriate farmer's markets for fresh vegetables or crop products are in towns and cities. Finding transportation means in rural areas with poor road infrastructure becomes a challenge for a farmer who cannot access transportation to markets (Stringer *et al.*, 2008). As a result, the produced surplus ends up being destroyed, and inevitably, the smallholder farmer begins to produce only for subsistence, forsaking income generation. As a result, Kang'ethe and Serima (2014:184) mention that "the issue of the market needs to be re-examined because it can be frustrating if these farmers increase their production and yet the market is not adequate." These then propose the need for NGOs to facilitate the production of crops among smallholder farmers and initiate market access for them. This would lead to an improvement in the livelihoods of rural communities, particularly among smallholder farmers, while also creating agribusiness opportunities for them (Nyambo *et al.*, 2009).

5.2 Conceptual Framework

The conceptual framework of this study looks at the determinants or factors that affect smallholder farmers to have and not to have access to markets in the KoE. Previous studies like that by Kyaw, Ahn, & Lee (2018) focused on socioeconomic characteristics, institutional factors and market factors that influenced market participation for rice production, and how they were interrelated to each other. However, this study mainly focuses on distinct institutional factors influencing smallholder farmers to have and not to have access to markets in the KoE. The identified institutional factors are (i) access to

credit from financial institutions, (ii) being a member of an agricultural group (iii) access to extension officers, (iv) funds from government and NGOs (v) government support on farm input.

5.3 Analytical Framework

The study used two types of SPSS statistical methods to analyse collected data. Firstly, descriptive analysis methods were employed to analyse demographic data on smallholder market participation as indicated in table 5,1 below. The analysis enabled the study to make the different variations among farmers regarding their participations in different markets across KoE.

Secondly, the Pearson's Correlation and regression analysis were used to test the various hypothesis in this study. Also, to analyse the impact of the independent variable on the dependent variable stepwise regression was used.

$$ACMit = \beta0 + \beta1\ ACFINSTit + \beta2AGit + \beta3EXOFit + \beta4FGit + \beta5FNGOit + \beta5\ FGOVit + \varepsilon it \ldots\ldots\ldots\ldots\ldots\ldots(1)$$

Where: $\beta0$ = slope intercept of dependent variable, β= Regression coefficient and ε= Error term. **ACFINST**= Access to credit from financial institutions. **AG** = Being a member of an agricultural group, **EXOF**= Access to extension officers, **FG** = Funds from government, **FNGO**= Funds from NGO, FGOV=Government support of farm inputs. These have been presented in the table 5.1 below

Table 5.1: Factors influencing smallholder farmers to have and not to have access to markets in the KoE

Variables	Variable
Dependent Variable	
ACM	Access to Markets
Independent Variables	
ACFINST	Access to Credit from Financial Institutions
AG	Being a member of an agricultural group
EXOF	Access to extension officers
FG	Funds from government
FNGOs	Funds from Non-governmental Organisations
FGOV	Government support on farm inputs

5.4 Materials and Methods

5.4.1 Study Area and Description of Sampled Farmers

The study was conducted within the communities of the Kingdom of Eswatini (KoE) Ngudzeni (Shiselweni region), Nsubane under Lubulini inkhundla (Lubombo), Mhlangeni (Manzini) and Mkhuzweni (HhoHho) regions. The KoE is located within the southern part of Africa. It is one of the smallest countries within this region, covering over a total area of 17 364 square kilometres (BBC News, 2019). The country is located at the geographic coordinates 26° 30 30′ S, 31° 30′ E. According to BBC News (2019), the country's population stands at about 1.3 million. The KoE undertakes a dualistic approach to agriculture, practising both commercial and subsistence farming. The commercial agricultural sector is established under Title Deed Land (TDL), which occupies approximately 26% of the land in the country and holds over 90% of the irrigation infrastructure while using modern technologies in the production of cash crops such as sugar (Shabangu, 2016). However, over 70% of the country's population are smallholder farmers based in the country's rural areas. These mainly practise mixed farming, which involves livestock rearing as well as the growing of crops (Mugube et al., 2019). Hence, the main form of livelihood activity is agriculture.

The study focused on smallholder farmers who grew crops and attempted to participate in various markets for income generation. Most of the farmers produced fresh vegetables such as spinach, lettuce, cabbage, green peppers, and chillies. They also produced field crops such as maize, sweet potatoes, and beans. Smallholder farmers participate in the value chain, but they lack access to formal lucrative markets.

5.4.2 Research Approach and Sampling Technique

The study employed a mixed-methods approach to collect the data that was used to investigate the research question. During the research process, 120 smallholder farmers were sampled using purposive sampling, and this type of sampling procedure was used to sample farmers who were beneficiaries of an NGO in the KoE and were participants in market operations or planned to participate. A survey questionnaire was used to interview respondents to collect data on farmer profiles, market participation, and the food insecurity status of the sampled farmers.

5.4.3 Data Analysis

For data analysis, version 27 of the Statistical Package for the Social Sciences (SPSS) was used. In addition, regression analysis was applied in the study's research to determine the primary variables preventing agricultural households from gaining access to markets.

5.5 Results and Discussion

This section of the study focuses on presenting the findings and discussions related to the study. It is also essential to note that the results and findings are strictly based on the data that was obtained during data collection and then later analysed using regression analysis to test the below hypothesis. Furthermore, the results and discussion are guided by specific objectives and hypotheses, as shown below.

Specific Objective 2: To investigate the determinants that influence smallholder farmers to have and not to have access to markets after being trained by NGOs.

Hypothesis Statements

Hypothesis 1 (H0): Access to credit from financial institutions does not improve access to market after being trained by NGO's.

Hypothesis 1 (H1): Access to credit from financial institutions improves access to market after being trained by NGO's.

Table 5.2: Correlation Matrix on factors that influence smallholder farmers to have and not to have access to markets after being trained by NGOs.

	ACFINST	AG	EXOF	FG	FNGO	FGOV
ACFINST	1	0.684*	0.614	0.692*	0.712*	0.684*
AG	0.692*	1				
EXOF	0.706*	0.572**	1			
FG	0.462**	0.648**	0.693**	1		
FNGO	0.684*	0.514	0.692*	0.712*	1	
FGOV	0.531**	0.886*	0.608**	0.619*		1

*= Significant at 1%; ** = Significant at 5% *** = Significant at 10%

The study tested for the existence of multicollinearity among the independent and control variables. This was performed by using a correlation matrix. The results above show that there is a positive relationship among all the variables. The results of the correlation coefficient show that there is no problem of multicollinearity among all the variables. Therefore, we can conclude that no potential correlation problem exists.

According to Bryman and Cramer (1997) and Ho and Wong (2001), multicollinearity occurs when a correlation coefficient between each independent variable exceeds 0.80.

Regression results

The regression results show the factors that influence smallholder farmers' access to markets after being trained by NGOs. The regression coefficients are presented together with the t-values, which are presented in parenthesis. In addition, the level of significance of the coefficients is presented in asterisks. Data normality has been checked for variables prior to the regression analysis.

5.5.1 The determinants that influence smallholder farmers to have and not to have access to markets after being trained by NGOs.

The results in Table 5.3 highlight the factors that influenced the KoE's smallholder farmers to have access to markets after being trained by the NGO's. The regression result showed that access to credit from financial institutions, smallholder farmers being a member of agricultural group, funds from government and NGOs were all significant at a 5% level.

Table 5.3: Regression Results of factors that influence smallholder farmers to have and not to have access to markets after being trained by NGOs.

Variables	Coefficient	Std. Error	T -Values
Access to credit from financial institutions (ACFINST)	0.843**	0.154	(1.934)
Being a member of an agricultural group (AG)	0.525**	.109	(4.417)
Access to extension officers (EXOF)	0.504***	0.114	(5.502)
Funds from government (FG)	0.642**	0.125	(1.791)
Funds from NGO (FNGO)	0.506**	0.110	(1.817)
Government support on farm input (FGOV)	0.471***	0.103	(1.480)
Constant	0.582	0.121	(4.594)

***= Significant at 1%; ** = Significant at 5%; * = Significant at 10%

5.5.1.1 Access to credit from financial institutions

Access to credit from financial institutions showed a significant positive relationship with small holder farmer's access to markets after being trained by the NGO's. This was significant at a 5% level. The positive relationship implies that an increase in finance and credits opportunities can enable farmers to afford transportation to new and existing markets for their farm produce. Access to finance can also

help the small holder farmers at Eswatini to have access to more information and new opportunities in various markets for their product. This means that Access to credit from financial institutions is very important in enhancing market participation rate as it enables to acquire the new ideas and advance techniques of agricultural production and therefore increase the market surplus.

As stated above, the key determinant factor that influences smallholder farmers to have or not have access to markets after being trained by NGOs is access to credit from financial institutions. It was noted that NGOs were able to provide smallholder farmers with training for crop production for free. However, upon the completion of the training, the ability for smallholder farmers to produce high-quality crops for formal markets was hampered due to a lack of funds. Smallholder farmers often lack access to financial services, such as credit and insurance, which can affect their ability to invest in their farms and expand their operations. This can limit their market access and reduce their ability to compete with larger farmers. Hence Varangis *et al.*, (2014) also support the notion that even if it is not a means to a goal, having access to financial services is essential to funding agricultural investments in productivity, enhancing post-harvest procedures, facilitating household cash flow, enabling greater access to markets, and fostering better risk management. Although, Langyintuo (2020) believes that financial institutions frequently cite a variety of factors as the reason they do not lend to small businesses, including a lack of usable collateral, high transaction costs due to clients' remote locations, dispersed demand for financial services, a delay between investment needs and anticipated revenues, a lack of irrigation, pests and diseases, small farms and individual transactions, a lack of developed communication and transportation infrastructure, high covariate risks due to unpredictable weather, and price risks. However, it is without access to these services, it can be difficult for farmers to invest in their farms and expand their operations.

As a result, based on this key determinant of smallholder farmers being unable to have access to credit, there is a need to design programmes that will allow smallholders to have access to credit. The programmes could be in the form of self-help groups (SHGs), where farmers can have savings accounts and then be able to access funds from those accounts and work together to have enough finances for high-quality produce to be accessible on the market. Programs like these would encourage farmers to seek larger markets (formal for income generation) rather than just selling to neighbours.

Furthermore, access to credit significantly influences access to market participation among smallholder farmers. It can, however, have a negative impact on smallholder farmers by preventing them from accessing markets. This could be attributed to the fact that smallholder farmers may acquire credit but use it for non-agricultural purposes such as purchasing food, seeking healthcare, paying school fees, and for gatherings such as traditional ceremonies, marriages, and funerals, as discussed by Ndlovu

(2020). Moreover, this result conforms to the study of Elahi *et al.* (2018), who found that smallholder farmers with larger households tend to use agricultural credit for non-farm purposes to ensure that the livelihoods of entire households are sustainable. However, this result is contrary to the work of Sinyolo et al. (2016), who acknowledge that access to credit enhances agricultural productivity, which increases farm revenues through market accessibility and provides incentives for farmers to increase agricultural practices.

In the KoE, the result therefore shows that smallholder farmers believed that they did not have adequate funds to produce quality crops, plan production and marketing, or transfer harvested produce from the farm to the markets. According to studies, smallholder farmers have significant challenges obtaining loans. As a result, according to Dlamini and Mohamed (2018), access to finance is the biggest problem for SMEs, particularly start-up enterprises that involve smallholder farmers. Furthermore, smallholder farmers' access to loans from financial institutions became a barrier due to their lack of education in drawing bankable business plans, keeping correct business records, and having market contracts and collateral that financial institutions like banks required (Simelane, Terblanche, & Masariramba, 2019).

This implies that NGOs help farmers obtain access to sustainable markets by assisting them in connecting formally with respected product marketplaces. Smallholder farmers may be able to obtain finance to invest in value-added crops as a result of this. To meet these market demands, NGOs ought to support farmers in producing commodities that match the required grades and standards in markets, as Simelane, Terblanche, and Masariramba (2019) have suggested. Therefore, access to credit from financial institutions becomes the key determinant factor that determines whether smallholder farmers have access to markets or not after being trained by NGOs. Smallholder farmers who cannot access credit from financial institutions are unable to have the financial capital to invest in quality and well-quantified farm produce for long enough to meet the required grades and standards set by markets in Eswatini. Hence, providing smallholder farmers with access to financial services, such as credit, to help them invest in their farms and improve their production can enable them to have access to markets.

5.5.1.2 Being a member of an agricultural group.

Smallholder farmers being a member of an agricultural group showed a significant positive relation with market accessibility by small holder farmers at Eswatini. It was significant at a 5% level. This result reveals that smooth movement of goods from the farm site to urban market is due to better support and influences from the agricultural group association. The agricultural group provides knowledge and facilitate the transport of agricultural products from farm to market. When farmers work together in an agricultural group, they become part of what is known as a "collective."

In this study, it was seen that being a member of an agricultural group really determines if you will get access to the market or not. This is because farmers collaborate to identify markets in which they can operate. Agricultural groups provide their members with access to information on market trends and best practices, as well as training on how to improve the productivity and profitability of their farms. Respondents believe that it is easier to get access to the market if one is a member of an agricultural group. This is because members easily get financial support for their business expansion and marketing. By being a member of an agricultural group, members can have access to financial services. Agricultural groups can provide their members with access to financial services, such as credit, insurance, and savings. This can help farmers to invest in their farms and expand their operations, increasing their market access.

Moreover, farmers could produce crops in large quantities and of high quality, which would be efficient to meet the grades and standards set by markets. Farmers who were members of credit and savings cooperative societies, for example, had an average maize output that was roughly 2.6 times that of non-members, according to a study done by Mavimbela, Masuku, and Belete (2010). Similarly, average potato yields for members were 2.7 times higher than non-members', and average bean yields were around 2.2 times higher than non-members' (Mavimbela, Masuku, & Belete, 2010). As a result, cooperatives enabled farmers to produce more than they could individually and to assist one another in the profitable marketing of the crops produced. By producing collectively, it means that farmers can therefore, can access markets and sell their produce collectively.

Furthermore, by being a member of an agricultural group like farm cooperatives, smallholder farmers tend to experience lower transaction costs, improved access to market information, and increased bargaining power among themselves, as described by Makhura (2002). As a result, they can have collective bargaining power. Agricultural groups can provide their members with collective bargaining power, allowing them to negotiate better prices and terms with buyers. For example, a group of farmers can negotiate with a buyer as a single entity, rather than as individual farmers. The literature on cooperatives and collectives in the KoE supports this, indicating that cooperatives face similar challenges in gaining access to markets and financing. Furthermore, cooperatives in the KoE have constraints that limit their commercial effectiveness and, as a result, the socio-economic growth of their members, who are typically poor rural people. Hence it is important to be a part of an agricultural group because membership of agricultural groups can influence market access for smallholder farmers in several ways. Agricultural groups can provide other benefits to their members, which can include: (i) Networking and connections: Agricultural groups can provide their members with networking opportunities, allowing them to connect with other farmers and potential buyers. This can help farmers

to access new markets and negotiate better prices for their produce, (ii) Representation and advocacy: Agricultural groups can provide their members with representation and advocacy on issues related to market access and other challenges facing smallholder farmers. For example, an agricultural group can lobby the government to support policies that promote the participation of smallholder farmers in markets.

5.5.1.3 Access to extension officers

These results indicate that the coefficient of access to extension services was statistically significant and positively related with a small holder farmers market accessibility after being trained by the NGO. This was significant at 10% level. The positive impact implies that extension workers usually support new farm input and techniques as well as market information that enhances farmer knowledge and provides a variety of market opportunities and therefore extension services encourage farmer participation in the rice market.

Access to extension officers was discussed as the third significant determinant that influenced smallholder farmers' decision to have or not have access to markets after being trained by NGOs. Access to extension officers for smallholder farmers refers to the availability of trained agricultural professionals who can provide advice and support to smallholder farmers on a range of issues, including best practices for crop production, soil management, pest control, and marketing (Danso-Abbeam, Ehiakpor, & Aidoo, 2018). Extension officers are an important resource for smallholder farmers, as they can provide valuable information and support that can help farmers to improve the productivity and profitability of their operations. However, many smallholder farmers face barriers to accessing extension officers, including a lack of awareness of the services available, geographic isolation, and a lack of funding for extension programs.

Smallholder farmers in the KoE rely heavily on having access to extension officers. However, as mentioned by Simelane, Terblanche, and Masariramba (2019), one finds that an extension officer has been assigned approximately 500 smallholder farmers. Access to an extension officer becomes difficult for the majority of farmers. This is a reason enough to improve access to extension officers for smallholder farmers, where NGOs, governments and other stakeholders can take several steps, which include:

(i) **Investing in extension programs and services:** Governments and development organizations can invest in extension programs and services, providing funding for training and support for extension officers.

(ii) **Building networks and partnerships:** Governments and development organizations can work with NGOs, private sector organizations, and other stakeholders to build networks and partnerships that can provide extension services to smallholder farmers in remote and isolated areas.

(iii) **Providing extension services in local languages:** Extension officers can provide more effective support if they are able to communicate with farmers in their local languages. Governments and development organizations can invest in training and support for extension officers to enable them to provide services in local languages.

Moreover, the farmers believed that extension officers, particularly those from the NGOs, were more knowledgeable about the existing formal markets in Eswatini, their locations, their operations, and their requirements. According to Simelane, Terblance, and Masariramba (2019), extension officers do not meet farmers weekly but rather at least three times a month, while some only meet farmers once a month, as also noticed in this study as NGO representatives usually meet their farmers once a month. Hence as mentioned above, it would be essential for extension officers to make use of technology and innovation to provide services to smallholder farmers in remote and isolated areas as to avoid meeting them occasionally. For example, extension officers can use mobile phones and other digital technologies to provide advice and support to farmers as also supported by UNDP (2021) As a result, smallholder farmers will have more access to extension officers which will enable them to produce quality crops and gain access to markets.

5.5.1.4 Funds from government and NGOs

Funds from government and NGOs indicated a positive influence on the market accessibility by smallholder farmers of the KoE. This was statistically significant at 5% level. This positive coefficient illustrates that as the funds from Government and NGO increases, the market accessibility can increase. Access to market can increase because famers will have adequate funds to transport their farm produce to the markets, especially markets that a very far from the farm.

Funds from the government and NGOs were discussed as four significant determinants that influenced smallholder farmers' decisions about having access to markets after being trained by NGOs. The government, through the Regional Development Fund (RDF), provides a grant facility through the annual government budget to allow local communities to access grant funds for the development of community infrastructures, such as rural electrification, irrigation, and potable water supply, to improve the communities' long-term livelihoods (Dlamini-Mazibuko, 2020). It is believed that if smallholder farmers gained farming grants, they would use them to supplement their other incomes and invest in the kind of farm production necessary for market accessibility.

In this study as well as the study by Dlamini-Mazibuko (2020), it is stated that farmers who are likely to gain funds from government institutions are likely to be motivated efficiently allocate their resources for optimum production. As a result, smallholder farmers would be motivated to invest in high yield stability technology like irrigation facilities, fertiliser or improved varieties which have the potential to increase productivity. Moreover, available funds are likely to allow farmers to purchase affordable smartphones that can be used for e-marketing strategies for their productions which can pave a way for them to gain access to market opportunities within Eswatini. Respondents believe that they do not have adequate funds to buy farm inputs, produce quality crops and quantity crops as well as to transport harvested produce to the market.

To a certain extent, NGOs have been able to assist smallholders in terms of the need to improve crop production, production planning, and market access. Although NGOs' funds go to their overall operations in working with smallholder farmers, it is believed by their beneficiaries that a certain proportion of the funds given to them would help them transport large quantities of crops to markets. Farmers cannot access markets in most cases due to a lack of funds for transportation costs from rural areas to semi-urban and urban areas where well-functioning fresh produce markets, such as the Malkerns fresh produce market, can be found.

The reason is that they are able to gain finances from off-farm activities such as other businesses, family remittances, and employment, which enable the farmers to cover costs related to market access. Therefore, in this study, it is seen that regardless of the state funding and NGO funding, it seems not to have any impact on whether the farmer has access to markets or not.

5.5.1.6 Government support on farm input

Government support on farm produce showed a significant positive relationship with the market accessibility by KoE's smallholder farmers after being trained by NGOs. This was statistically significant at 10% level. This means that if the government directly continuously provides smallholder farmers with farm input, the farmers will not have to worry about using the little money that they have to purchase seeds, seedlings, and fertilisers. The money would be used for other things like transportation to markets, marketing of the produce grown, and value-added activities.

Moreover, smallholder farmers are motivated to farm, and they become more active in the markets if the government supports them with farming inputs such as seeds, seedlings, fertiliser, and farming equipment. For the farmers, it was, however, discovered that government supply of farm input has no effect on their farm business, despite this, farm input support from the government would play a major

role in assisting smallholder farmers in rural areas improve their farm production enough to meet market standards in Eswatini.

Government support for farm inputs is the most difficult factor influencing whether smallholder farmers have access to markets after receiving training from NGOs. This is followed by funds from NGOs, access to funds from the government, being a member of an agricultural group, and access to credit from financial institutions. Access to extension officers has the least influence on farm production and market accessibility. The overall mean regarding the factors that influence smallholder farmers to have or not have access to markets after being trained by NGOs is 70.6. This implies that the above factors have a strong impact on small farming businesses. The government and non-governmental organisations must consider this in order for smallholder farmers to produce in large quantities and have full access to existing markets. This will boost the performance of small farming businesses in Eswatini.

5.6 Conclusions and Recommendations

The study investigated the determinants that influence smallholder farmers' decisions about having or not having access to markets after being trained by NGOs in the KoE. The results from the regression analysis showed that there were financial factors at the institution such as lack of access to credit, lack of funding from NGOs, and lack of access to extension officers that strongly influenced opportunities to participate in various markets within Eswatini. The smallholder farmers are more active as producers and traders in the value chain, in which most of their produce is sold through informal market systems. Access to formal, lucrative markets remains a challenge for the farmers, and this can be attributed to a lack of updated market information, high transaction costs, and major financial constraints. Market access for smallholder farmers refers to the ability of smallholder farmers to participate in and benefit from market opportunities. This includes having access to markets for their produce, being able to sell their products at competitive prices, and being able to access financial services and support that can help them improve their farming practices and increase their income.

Improving market access for smallholder farmers can be achieved through a number of interventions, including: developing infrastructure and transportation networks to connect smallholder farmers with markets, providing support for smallholder farmers to improve their production and post-harvest handling practices, establishing market linkages and partnerships with buyers and intermediaries who can provide smallholder farmers with access to markets and fair prices, providing smallholder farmers with access to financial services, such as credit, to help them invest in their farms and improve their production, and supporting smallholder farmers to develop their marketing and business skills to help them better negotiate and participate in markets. Overall, improving market access for smallholder

farmers is essential to help them increase their income, reduce their vulnerability to market shocks, and improve their livelihoods.

For recommendations, it is mentioned that future studies in the KoE should investigate other several factors that determine market access for smallholder farmers which include: (i) Infrastructure: Smallholder farmers often face challenges in reaching markets due to inadequate infrastructure, such as poor roads, limited transportation options, and lack of storage facilities. This can affect their ability to transport and store their produce and ultimately hinder their access to markets, (ii) Policies and regulations: Governments play a key role in shaping the market access of smallholder farmers through the development of policies and regulations. These can either facilitate or hinder the participation of smallholder farmers in markets, depending on their design and implementation. For example, policies that support fair trade and organic certification can help smallholder farmers access premium markets and receive higher prices for their produce, and (iii) Market demand and supply: The demand and supply of different crops and products in local, national, and international markets can also impact market access for smallholder farmers. For example, if there is a surplus of a particular crop, smallholder farmers may face challenges in finding buyers for their produce.

A market-led approach to farmer development be adopted to improve the commercial prospects of smallholder farmers while bolstering their key livelihoods. Furthermore, it is recommended that the factors that influence the market participation decisions of smallholder farmers attract policy attention to enhance market participation levels among smallholder farmers. It is noted that a lack of funding opportunities from both government entities and non-governmental organisations (NGOs) is a significant impediment to allowing smallholder farmers to participate in market access, as this does not motivate farmers in their productions and farming businesses. It is therefore recommended that funds for smallholder farmers be made available through government and particularly NGO budgets to assist them with crop production and access to various markets within Eswatini.

5.5. References

Coates, J., Swindale, A. and Bilinsky, P., 2007. Household Food Insecurity Access Scale (HFIAS) for measurement of food access: indicator guide: version 3.

Danso-Abbeam, G., Ehiakpor, D.S. and Aidoo, R., 2018. Agricultural extension and its effects on farm productivity and income: insight from Northern Ghana. *Agriculture & Food Security*, *7*(1), pp.1-10.

De Cock, N., D'Haese, M., Vink, N., Van Rooyen, C.J., Staelens, L., Schönfeldt, H.C. and D'Haese, L., 2013. Food security in rural areas of Limpopo province, South Africa. *Food security*, *5*(2), pp.269-282.

Dlamini, T. and Mohammed, M., 2018. Determinants of choice of credit sources by The Kingdom of EwatiniSMEs: A focus on the Agriculture Sector.

Elahi, E., Abid, M., Zhang, L., ul Haq, S. and Sahito, J.G.M., 2018. Agricultural advisory and financial services; farm level access, outreach and impact in a mixed cropping district of Punjab, Pakistan. Land Use Policy, 71, pp.249-260.

Evans, A.E., Giordano, M. and Clayton, T., 2012. *Investing in agricultural water management to benefit smallholder farmers in Ethiopia. AgWater Solutions Project country synthesis report* (Vol. 152). IWMI.

Kang'ethe, S.M. and Serima, J., 2014. Exploring challenges and opportunities embedded in small-scale farming in Zimbabwe. *Journal of Human Ecology*, *46*(2), pp.177-185.

Kirkland, T.M., Kemp, R.J., Hunter, L.M. and Twine, W.M., 2013. Toward improved understanding of food security: a methodological examination based in rural South Africa. *Food, Culture & Society*, *16*(1), pp.65-84.

Langyintuo, A., 2020. Smallholder farmers' access to inputs and finance in Africa. In *The Role of Smallholder Farms in Food and Nutrition Security* (pp. 133-152). Springer, Cham.

Makhura, M.T., 2002. *Overcoming transaction costs barriers to market participation of smallholder farmers in the Northern Province of South Africa* (Doctoral dissertation, University of Pretoria).

Maziya, M., Mudhara, M. and Chitja, J., 2017. What factors determine household food security among smallholder farmers? Insights from Msinga, KwaZulu-Natal, South Africa. *Agrekon*, *56*(1), pp.40-52.

Mavimbela, P., Masuku, M.B. and Belete, A., 2010. Contribution of savings and credit cooperatives to food crop production in Swaziland: A case study of smallholder farmers. *African Journal of Agricultural Research*, *5*(21), pp.2868-2874.

Nyambo, B., Sief, A., Varela, A.M., Löhr, B., Cooper, J. and Dobson, H., 2009. Private extension-service provision for smallholder horticultural producers in Kenya: an approach. Development in Practice, 19(1), pp.94-102.

Shabangu, P., 2016. *Challenges faced by small scale farmers in Swaziland: A case of Hhohho Region* (Doctoral dissertation, University of the Free State).

Sinyolo, S., Mudhara, M. and Wale, E., 2016. To what extent does dependence on social grants affect smallholder farmers' incentives to farm? Evidence from KwaZulu-Natal, South Africa. African Journal of Agricultural and Resource Economics, 11(311-2016-5656), pp.154-165.

Stringer, L.C., Twyman, C. and Gibbs, L.M., 2008. Learning from the South: common challenges and solutions for small-scale farming. *Geographical journal*, *174*(3), pp.235-250.

Taylor, T.M., Kidman, R. and Thurman, T.R., 2011. Household resources and access to social grants among orphans and vulnerable children in KwaZulu-Natal, South Africa. *New Orleans, Louisiana: Tulane University School of Public Health and Tropical Medicine. available online at ovcteam@ tulane. edu*.

Ugwu, P., 2019. Women in agriculture: Challenges facing women in African farming. *Project report of African Women in Agriculture*.

UNDP., 2021. *Precision agricultures for smallholder farmers*. Available at: https://www.undp.org/sites/g/files/zskgke326/files/2022-01/UNDP-Precision-Agriculture-for-Smallholder-Farmers-V2.pdf (Accessed: 16 December 2022).

Varangis, P., Kioko, M., Spahr, M., Hishigsuren, G. and Miller, H., 2014. *Access to finance for smallholder farmers: learning from the experiences of microfinance institutions in Latin America* (No. 94905, pp. 1-84). The World Bank.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 Overview

Smallholder agriculture is a crucial method for rural communities in the KoE to sustain their livelihoods. The KoE's smallholder farmers are still unable to capitalize on the promise of agricultural income due to limited market access, notwithstanding the considerable contributions smallholder agriculture has made to sustainable livelihoods (Mdluli *et al.*, 2014). With less entry requirements than official markets, such supermarkets, smallholder farmers find it simpler to reach informal markets (spot mechanisms) than formal markets (contracts signed) (Sikwela, 2013). Access to formal markets is hampered by a lack of institutional support. Market imperfections originate from a lack of market institutions, which leads to asymmetric information between producers and buyers (Obi *et al.*, 2012). To collect data for this study, a mixed-methods strategy was employed, which comprised both qualitative and quantitative approaches, with the goal of answering the following research question and achieving the following research objectives:

Research Question:

- How do smallholder framers perceive market access, and what role do NGOs play in that regard?

Research Objectives:

- To understand market access perceptions of Smallholder farmers based on the work done by NGOs (Manuscript 1: Chapter 4)
- To investigate the determinants that influence smallholder farmers to have and not to have access to markets after being trained by NGOs (Manuscript 2: Chapter 5).
- To investigate the role of NGOs in facilitating market access for smallholder farmers (Manuscript 1: Chapter 4).

6.2 Conclusions

The sampled smallholder farmers were mainly involved as producers in the vegetable value chain, in which they were producing vegetables to sell and for household consumption. The smallholder farmers were mainly producing for informal markets because there were fewer barriers to entry and because there was not enough market information being disseminated to farmers in the study area on how they could access, enter, and participate in lucrative formal markets. Access to formal markets remained a challenge for the farmers, mainly because of high transaction costs and financial constraints. In this study, NGOs had the perception that they had played a major role in the development of smallholder farmers' access to markets. However, there were some challenges that prevented them from fully

achieving their goals for their beneficiaries. Furthermore, access to markets for smallholder farmers to sell their farm produce was very important to the farmers. When it came to the performance of the NGOs from which they benefited, the farmers had a moderate level of perception.

Moreover, NGOs play a crucial role in promoting market access for smallholder farmers. These organizations often work to provide smallholder farmers with the resources and support they need to access markets and sell their products at fair prices. This can include providing training on good agricultural practices, helping farmers to form cooperatives or associations to negotiate better prices, and connecting farmers with buyers and other market opportunities. Additionally, NGOs can advocate on behalf of smallholder farmers to promote policies and regulations that support their ability to access markets and earn a fair income from their farming activities. NGOs can play a critical role in improving market access for smallholder farmers. Many smallholder farmers, particularly in developing countries, face significant barriers to accessing markets for their products. These barriers can include a lack of infrastructure, such as roads and storage facilities, as well as a lack of information about market prices and demand. NGOs can help smallholder farmers overcome these barriers in several ways. For example, they can provide farmers with information about market prices and demand, as well as help them connect with buyers. They can also help farmers improve the quality and safety of their products to meet the standards of buyers in local and international markets. In addition, NGOs can help smallholder farmers access financing to invest in their farms and improve their production. This can include providing loans and other forms of financial support, as well as training farmers on financial management and record-keeping.

6.3 Recommendations on Policies

This study concluded that market participation for those who had it had a positive impact on enhancing food security among smallholder farmers. There are factors that influence the level of value chain participation among men and women farmers, respectively. Therefore, NGOs, government entities, and key policymakers must take these factors into consideration and understand their influence before drawing policies for market operation developments for smallholder farmers in Eswatini. NGOs, government entities, and key policymakers should also consider gender dynamics and the impact of gender roles on market participation before making and implementing market access interventions for smallholder farmers. It can be concluded that the farmers' level of success and improved outcomes are influenced by their access to markets. It is recommended that a market-led approach to farmer development be adopted to improve the commercial prospects of farmers while also enhancing food security. Policy should consider empowering farmers for market access through effective market-based farmer training and the creation of market and business linkages. Linking smallholder farmers to

markets is influenced by the farmers' connectivity to the external and enabling environment, and therefore policies should also focus on associations that provide smallholder farmers with opportunities to access credit, formal education, agricultural inputs, and other essential institutions and agencies. More importantly, NGOs can advocate for policies and regulations that support smallholder farmers and improve their market access. This can include pushing for investments in rural infrastructure and for policies that support fair and equitable trade. Overall, the role of NGOs in improving market access for smallholder farmers is essential in helping these farmers overcome the many challenges they face and increase their income and livelihoods.

7. REFERENCES

Akhtar, D.M.I., 2016. Research design. *Research Design (February 1, 2016)*.

Akinyode, B.F. and Khan, T.H., 2018. Step by step approach for qualitative data analysis. *International Journal of Built Environment and Sustainability*, *5*(3).

Alhojailan, M.I., 2012. Thematic analysis: A critical review of its process and evaluation. *West East Journal of Social Sciences*, *1*(1), pp.39-47.

Almalki, S., 2016. Integrating Quantitative and Qualitative Data in Mixed Methods Research--Challenges and Benefits. *Journal of education and learning*, *5*(3),288-296.

Anyanwu, J.C. and Anyanwu, J.C., 2017. The key drivers of poverty in Sub-Saharan Africa and what can be done about it to achieve the poverty sustainable development goal. *Asian Journal of Economic Modelling*, *5*(3), pp.297-317.

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

Banks, N., Hulme, D. and Edwards, M., 2015. NGOs, states, and donors revisited: Still too close for comfort?. *World development*, *66*, pp.707-718.

Barrett, C.B., 2008. Smallholder market participation: Concepts and evidence from eastern and southern Africa. Food policy, 33(4), pp.299-317.

Bertram, C. and Christiansen, I., 2014. Understanding research. *An introduction to reading research. Pretoria: Van Schaik Publishers*.

Belay, A., Recha, J.W., Woldeamanuel, T. and Morton, J.F., 2017. Smallholder farmers' adaptation to climate change and determinants of their adaptation decisions in the Central Rift Valley of Ethiopia. *Agriculture & Food Security*, *6*(1), pp.1-13.

Brown, A., 2016. An exploratory study investigating the impact of a university module that aims to challenge students' perspectives on ageing and older adults. *Practitioner Research in Higher Education*, *10*(2), pp.25-39.

Boyce, C. and Neale, P., 2006. Conducting in-depth interviews: A guide for designing and conducting in-depth interviews for evaluation input.

Chitiga-Mabugu, M., Nhemachena, C., Karuaihe, S., Motala, S., Tsoanamatsie, N., Mashile, L., Ngwenya, T. and Magongo, B., 2016. Civil society organisations' participation in food security activities in South Africa.

Coates, J., Swindale, A. and Bilinsky, P., 2007. Household Food Insecurity Access Scale (HFIAS) for measurement of food access: indicator guide: version 3.

Collins, S.E., Clifasefi, S.L., Stanton, J., Straits, K.J., Gil-Kashiwabara, E., Rodriguez Espinosa, P., Nicasio, A.V., Andrasik, M.P., Hawes, S.M., Miller, K.A. and Nelson, L.A., 2018. Community-based participatory research (CBPR): Towards equitable involvement of community in psychology research. American Psychologist, 73(7), p.884.

Cook, R., 2014. Trends in the marketing of fresh produce and fresh-cut/value-added produce. Articles and presentations, Roberta Cook, Faculty, UC Davis Agriculture and Resource Economics. Available online at: http://agecon. ucdavis. edu/(Website accessed: October 2020).

Creswell, J.W., 2014. *A concise introduction to mixed methods research*. SAGE publications.

De Cock, N., D'Haese, M., Vink, N., Van Rooyen, C.J., Staelens, L., Schönfeldt, H.C. and D'Haese, L., 2013. Food security in rural areas of Limpopo province, South Africa. *Food security*, *5*(2), pp.269-282.

Dilshad, R. M., & Latif, M. I., 2013. Focus Group Interview as a Tool for Qualitative Research: An Analysis. *Pakistan Journal of Social Sciences* (PJSS), 33(1).

Dlamini, T. and Mohammed, M., 2018. Determinants of choice of credit sources by The Kingdom of EwatiniSMEs: A focus on the Agriculture Sector.

Dlamini-Mazibuko, B.P., 2020. *Economic analysis of supermarkets as a marketing channel choice for fresh produce smallholder farmers in The Kingdom of Ewatini*(Doctoral dissertation).

Enochian, I.R.V., 1990. Agency For International Development Ppc/Cdie/Di Report Processing Form.

Eidt, C.M., Pant, L.P. and Hickey, G.M., 2020. Platform, participation, and power: how dominant and minority stakeholders shape agricultural innovation. Sustainability, 12(2), p.461.

Etikan, I., Musa, S. A., & Alkassim, R. S., 2016. Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.

Elahi, E., Abid, M., Zhang, L., ul Haq, S. and Sahito, J.G.M., 2018. Agricultural advisory and financial services; farm level access, outreach and impact in a mixed cropping district of Punjab, Pakistan. Land Use Policy, 71, pp.249-260.

Evans, A.E., Giordano, M. and Clayton, T., 2012. *Investing in agricultural water management to benefit smallholder farmers in Ethiopia. AgWater Solutions Project country synthesis report* (Vol. 152). IWMI.

Fan, S., Brzeska, J., Keyzer, M. and Halsema, A., 2013. *From subsistence to profit: Transforming smallholder farms* (Vol. 26). Intl Food Policy Res Inst.

FAO, 2016. The State of Food and Agriculture 2016: Climate Change, Agriculture, and Food Security.

Given, L. M. (Ed.)., 2008. The Sage encyclopedia of qualitative research methods. Sage publications.

Glover, D., 2007. Monsanto and smallholder farmers: A case study in CSR. Third World Quarterly, 28(4), pp.851-867.

Gooding, K., 2017. The role of NGOs' service delivery experience in developing relevant research agendas: experience and challenges among NGOs in Malawi. *Health research policy and systems*, *15*(1), pp.1-14.

Hlatshwayo, S.I., Ngidi, M., Ojo, T., Modi, A.T., Mabhaudhi, T. and Slotow, R., 2021. A typology of the level of market participation among smallholder farmers in South Africa: Limpopo and Mpumalanga Provinces. *Sustainability*, *13*(14), p.7699.

Hox, J. J., & Boeije, H. R., 2005. Data collection, primary versus secondary

Ivankova, N.V., 2017. Applying mixed methods in community-based participatory action research: a framework for engaging stakeholders with research as a means for promoting patientcentredness. Journal of Research in Nursing, 22(4), pp.282

Jilcha Sileyew, K., 2019. Research Design and Methodology. *Text Mining-Analysis, Programming and Application [Working Title][Internet]*. *IntechOpen*.

Judger, N., 2016. The thematic analysis of interview data: An approach used to examine the influence of the market on curricular provision in Mongolian higher education institutions. *Hillary Place Papers, 3rd edition, University of Leeds*.

Kalaiselvan, S., Maheswari, K. & Narayanamoorthy, S. (2017). Distribution of Respondents by their Socio Demographic Characteristics - Post Graduate Social Work Students in Trichy, Tamilnadu. International Journal of Statistics and Systems, 12(2), pp. 225-234.

Kamara, A., Conteh, A., Rhodes, E.R. and Cooke, R.A., 2019. The relevance of smallholder farming to African agricultural growth and development. *African Journal of Food, Agriculture, Nutrition and Development*, *19*(1), pp.14043-14065.

Kang'ethe, S.M. and Serima, J., 2014. Exploring challenges and opportunities embedded in small-scale farming in Zimbabwe. *Journal of Human Ecology*, *46*(2), pp.177-185.

Kim, H., 2007. Discuss the impact of non-governmental organizations (NGOs) and their limits and opportunities in relation to social development and civil society, making particular reference to examples from a selected country or countries. *Social Policy Analysis, SLSP*, *5112*, pp.16-22.

King, N., Horrocks, C., & Brooks, J., 2018. Interviews in qualitative research. *SAGE Publications Limited.*

Kirkland, T.M., Kemp, R.J., Hunter, L.M. and Twine, W.M., 2013. Toward improved understanding of food security: a methodological examination based in rural South Africa. *Food, Culture & Society*, *16*(1), pp.65-84.

Klugman, B., 2000. The role of NGOs as agents for change. *Development Dialogue*, (1/2), pp.95-120.

Kom, Z., Nethengwe, N.S., Mpandeli, N.S. and Chikoore, H., 2020. Determinants of small-scale farmers' choice and adaptive strategies in response to climatic shocks in Vhembe District, South Africa. *GeoJournal*, pp.1-24.

Langyintuo, A., 2020. Smallholder farmers' access to inputs and finance in Africa. In *The Role of Smallholder Farms in Food and Nutrition Security* (pp. 133-152). Springer, Cham.

Lewis, D., 2010. Nongovernmental organizations, definition and history. *International encyclopedia of civil society*, pp.1056-1062.

Lowder, S., Raney, T. and Skoet, J., 2014. The Global Distribution of Smallholder and Family Farms.

Maguire, M. and Delahunt, B., 2017. Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *All Ireland Journal of Higher Education*, *9*(3).

Makhura, M.T., 2002. *Overcoming transaction costs barriers to market participation of smallholder farmers in the Northern Province of South Africa* (Doctoral dissertation, University of Pretoria).

Manyatsi, A.M. and Mhazo, N., 2014. A comprehensive scoping and assessment study of climate smart agriculture policies in Swaziland. Pretoria. Food, Agriculture and Natural Resources Policy Analysis Network, p.38.

Martínez-Mesa, J., González-Chica, D. A., Duquia, R. P., Bonamigo, R. R., & Bastos, J. L., 2016. Sampling: how to select participants in my research study?. *Anais brasileiros de dermatologia,* 91(3), 326-330.

Masuku, T.A., Masuku, M.B. and Mutangira, J.P.B., 2016. Performance of multi-purpose cooperatives in the Shiselweni Region of Swaziland. International Journal of Sustainable Agricultural Research, 3(4), pp.58-71.

Matthews, S.M. ed., 2017. *NGOs and social justice in South Africa and beyond*. University of KwaZulu-Natal Press.

Mavimbela, P., Masuku, M.B. and Belete, A., 2010. Contribution of savings and credit cooperatives to food crop production in Swaziland: A case study of smallholder farmers. *African Journal of Agricultural Research*, *5*(21), pp.2868-2874.

Mazibuko, D.M., 2000. The role of Non-Governmental Organisations (NGO's) in educational advancement in developing countries: The South African Experience. *Journal of International Cooperation in Education*, *3*(1), pp.1-8.

Maziya, M., Mudhara, M. and Chitja, J., 2017. What factors determine household food security among smallholder farmers? Insights from Msinga, KwaZulu-Natal, South Africa. *Agrekon*, *56*(1), pp.40-52.

Mdluli, F., Thamaga-Chitja, J., Schmidt, S. and Shimelis, H., 2014. Production hygiene and training influences on rural small-scale organic farmer practices: South Africa. *Journal of Consumer Sciences*, *42*.

Mertens, D. M., 2014. Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods. Sage publications.

Mostashari, A., 2005. An Introduction to Non-Governmental Organizations Management" Iranian Study Group MIT.

Ngaka, M.J. and Zwane, E.M., 2018. The role of partnerships in agricultural extension service delivery: a study conducted in provincial departments of agriculture in South Africa. South African Journal of Agricultural Extension, 46(1), pp.14-25.

Ngidi, N. D., & Moletsane, R., 2018. Using Drawings to Explore Sexual Violence with Orphaned Youth in and Around a Township Secondary School in South Africa. In Disrupting Shameful Legacies 101-118. Brill Sense.

Njobe, B. and Kaaria, S., 2015. Women and agriculture: the untapped opportunity in the wave of transformation. *Background Paper*.

Njuki, J., Kaaria, S., Sanginga, P., Kaganzi, E. and Magombo, T., 2007. Empowering communities through market led development: Community agro-enterprise experiences from Uganda and Malawi. In Farmer First Revisited Conference.

Ntwenya, J., Kinabo, J., Msuya, J., Mamiro, P., Mamiro, D. and Katalambula, L., 2015. Household food insecurity and associated factors in rural communities: A case of Kilosa District, Tanzania. *African Journal of Agricultural Research*, *10*(52), pp.4783-4794.

Nyambo, B., Sief, A., Varela, A.M., Löhr, B., Cooper, J. and Dobson, H., 2009. Private extension-service provision for smallholder horticultural producers in Kenya: an approach. Development in Practice, 19(1), pp.94-102.

Obi, A., Schalkwyk, H.D.V. and Tilburg, A.V., 2012. Market access, poverty alleviation and socio-economic sustainability in South Africa. In *Unlocking markets to smallholders* (pp. 13-33). Wageningen Academic Publishers, Wageningen.

Ogutu, S.O., Okello, J.J. and Otieno, D.J., 2014. Impact of information and communication technology-based market information services on smallholder farm input use and productivity: The case of Kenya. World Development, 64, pp.311-321.

Pickering, R.M., 2017. Describing the participants in a study. *Age and Ageing*, *46*(4), pp.576-581.

Poole, N., 2017. *Smallholder agriculture and market participation*. Food and Agriculture Organization of the United Nations (FAO).

Raidimi, E.N. and Kabiti, H.M., 2017. Agricultural extension, research, and development for increased food security: the need for public-private sector partnerships in South Africa. South African Journal of Agricultural Extension, 45(1), pp.49-63.

Reiter, B., 2017. Theory and methodology of exploratory social science research. *International Journal of Science and Research Methodology,* 5(4), 129.

Rich-Edwards, J.W., Kaiser, U.B., Chen, G.L., Manson, J.E. and Goldstein, J.M., 2018. Sex and gender differences research design for basic, clinical, and population studies: essentials for investigators. *Endocrine reviews*, *39*(4), pp.424-439.

Rugube, L.M., Nsibande, S.P., Masarirambi, M.T. and Musi, P.J., 2019. Factors Affecting Profitability of Smallholder Vegetable Farmers in the Shiselweni Region, Kingdom of The Kingdom of Ewatini(Swaziland). *Sustainable Agriculture Research*, *8*(526-2020-512), pp.104-115.

Sanginga, P.C., Best, R., Chitsike, C., Delve, R., Kaaria, S. and Kirkby, R., 2004. Linking smallholder farmers to markets in East Africa. *Mountain Research and Development*, *24*(4), pp.288-291.

Selepe, B.M., Mtyingizane, S.S. and Masuku, M.M., 2015. Factors contributing to household food insecurity in Mhlontlo area, Eastern Cape, South Africa. *J. Hosp. Manage. Tourism*, *4*(1), pp.2223-814X.

Senyolo, G.M., Wale, E. and Ortmann, G.F., 2018. Analysing the value chain for African leafy vegetables in Limpopo Province, South Africa. *Cogent Social Sciences*, *4*(1), p.1509417.

Shabalala, F.S., 2017. *Longing for belonging: adolescents' experiences of living with HIV in different types of families in Swaziland* (Doctoral dissertation, Universiteit van Amsterdam [Host]).

Shabangu, P., 2016. *Challenges faced by small scale farmers in Swaziland: A case of Hhohho Region* (Doctoral dissertation, University of the Free State).

Siebrecht, N., 2020. Sustainable Agriculture and Its Implementation Gap—Overcoming Obstacles to Implementation. Sustainability, 12(9), p.3853.

Sikwela, M.M. and Mushunje, A., 2013. The impact of farmer support programmes on household income and sustainability in smallholder production: A case study of the Eastern Cape and KwaZulu Natal farmers, South Africa. *African Journal of Agricultural Research*, *8*(21), pp.2502-2511.

Simelane, N., 2011. *An assessment of the role of co-operatives in smallholder dairy production and marketing in Swaziland* (Doctoral dissertation, University of Pretoria).

Simelane, S.M., Terblanche, S.E. and Masarirambi, M.T., 2019. Perceptions of extension officers regarding public extension services: a case study of horticultural extension officers in the Hhohho region, Eswatini. *South African Journal of Agricultural Extension*, *47*(1), pp.1-19.

Sims, B. and Kienzle, J., 2016. Making mechanization accessible to smallholder farmers in sub-Saharan Africa. *Environments*, *3*(2), p.11.

Sinyolo, S., Mudhara, M. and Wale, E., 2016. To what extent does dependence on social grants affect smallholder farmers' incentives to farm? Evidence from KwaZulu-Natal, South Africa. African Journal of Agricultural and Resource Economics, 11(311-2016-5656), pp.154-165

Smith, D.M., 1974. Who gets what where, and how: a welfare focus for human geography. *Geography*, pp.289-297.

Stevens, J.B., 2017. Is agricultural extension positioned to promote agripreneurship in South Africa?. South African Journal of Agricultural Extension, 45(2), pp.86-94.

Stringer, L.C., Twyman, C. and Gibbs, L.M., 2008. Learning from the South: common challenges and solutions for small-scale farming. *Geographical journal*, *174*(3), pp.235-250.

Stuart, L., 2013. The South African nonprofit sector: Struggling to survive, needing to thrive. *Sangonet Pulse*.

Ugwu, P., 2019. Women in agriculture: Challenges facing women in African farming. *Project report of African Women in Agriculture*.

UNDP., 2021. *Precision agricultures for smallholder farmers*. Available at: https://www.undp.org/sites/g/files/zskgke326/files/2022-01/UNDP-Precision-Agriculture-for-Smallholder-Farmers-V2.pdf (Accessed: 16 December 2022).

Taylor, T.M., Kidman, R. and Thurman, T.R., 2011. Household resources and access to social grants among orphans and vulnerable children in KwaZulu-Natal, South Africa. *New Orleans, Louisiana: Tulane University School of Public Health and Tropical Medicine. available online at ovcteam@ tulane. edu*.

Thamaga-Chitja, J.M. and Morojele, P., 2014. The context of smallholder farming in South Africa: Towards a livelihood asset building framework. *Journal of Human Ecology*, *45*(2), pp.147-155.

van Wyk, B., 2012. Research design and methods Part I. University of Western Cape.

Varangis, P., Kioko, M., Spahr, M., Hishigsuren, G. and Miller, H., 2014. *Access to finance for smallholder farmers: learning from the experiences of microfinance institutions in Latin America* (No. 94905, pp. 1-84). The World Bank.

Whittemore, R. and Knafl, K., 2005. The integrative review: updated methodology. *Journal of advanced nursing*, *52*(5), pp.546-553.

Zohrabi, M., 2013. Mixed Method Research: Instruments, Validity, Reliability and Reporting Findings. *Theory & practice in language studies*, *3*(2).

Žukauskas, P., Vveinhardt, J., & Andriukaitienė, R. (2018). Exploratory Research. Management Culture and Corporate Social Responsibility, 189.

8. APPENDICES

Appendix 1: Questionnaire

Researcher: Emmanuel Stambuli

Supervisor: Denver Naidoo

RESEARCH TOPIC: The Role of Non-Governmental Organizations in Facilitating Smallholder Farmers' Access to Markets in Eswatini

RESEARCH OBJECTIVE: To identify perceptions of smallholder farmers who have and do not have market access based on the role of NGOs.

RESEARCH QUESTION: The main research question of this study is, what are the market access perceptions of smallholder farmers and the key role of NGO's in facilitating market access?

QUESTIONNAIRE

Section A: Personal Information

1. Name: ___

2. Race: ____

3. Sex of respondent

1. Male	0. Female

4. Age of Respondent: ____

5. Marital Status of Respondent. Mark with a tick (□)

[ ] Married

[ ] Single

[ ] Divorced

[ ] Widow/Widower

6. Education Level

What is the highest degree or level of school you have completed? Mark with a tick (□)

[ ] No Formal Education

[ ] Primary

[ ] Secondary

[ ] Middle Level College Certificate or Diploma [ ] University Degree

Highest Number of years of formal education _____

7. Main Source of income Mark with a tick (□)

1. Farm Income?

[ ] Yes

[ ] No

2. Off Farm Income Mark with a tick (□)

[ ] Government grant/ Pension

[ ] Employed

[ ] Family remittances

[ ] Business

3. What is the total monthly income level in your household? _____

8. Are you the household head?

0. Yes	1. No

9. Name of NGO belonging to: ___

10. Region Coming From Mark with a tick (□)

[ ] Manzini

[ ] HhoHho

[ ] Shiselweni

[ ] Lubombo

Section B: Markets and Crop Production

1. Which market/s do you supply your produce?

Type of Market	Mark with a tick (□)
0. Retailers e.g Spar, Shoprite, Pick n' Pay	
1. Fresh Produce Markets	
2. Street hawkers	
3. Schools/universities	

4. Middlemen (Bakkie)	

Other (specify)

_____

2. What is the distance to the nearest input market (Km)?

_____

3. What is the distance to the nearest output market (Km)?

_____

4. How is the state of the road to the nearest market?

0. Poor	1. Good

Describe:____

_____

5. Do you have enough information about the quality requirements of the produce required by different markets?

0. No	1. Yes

If no, Why?

_____

_____

If yes, What information is provided?

_____

_____

6. Do you receive any help from extension officers to identify markets?

0. No	1. Yes

If yes/no, Please Explain

_____

_____

7. Do you receive any NGO support for production?

0. No	1. Yes

If yes, specify

_____

_____

8. Where do you receive inputs such as seeds, seedlings, and fertilisers?

_____

_____

9. How much land do you own (Ha)?

_____

10. Do you hire labour to work on your farm?

0. No	1. Yes

If yes/no, explain why? when? how many?

_____

_____

_____

11. Do you keep records of inputs used for crop production?

0. No	1. Yes

12. Do you keep records of crops sold and profits made in markets?

0. No	1. Yes

13. Do you have enough water for production when you need it?

0. No	1. Yes

If no, Why?

_____

_____

14. What type of crops do you produce?

Leafy Vegetables	**Please (✓)**	**Cruciferous Vegetables**	**Please (✓)**
Lettuce		Cabbage	
Spinach		Cauliflower	
Kale		Broccoli	
Pumpkin leaves		Tomatoes	
Marrow Vegetables	**Please (✓)**	**Root Vegetables**	**Please (✓)**
Pumpkin		Potato	
Cucumber		Sweet potato	
		Yam	
		Carrots	

Alium Vegetables	**Please (✓)**	**Legumes**	**Please tick (□)**
Onion		Beans	
Garlic		Lentils	
Ginger		Groundnuts	

Other fruits	Please (✓)
Avocado	
Apples	
Pears	

15. What skills do you have that set you aside from other farmers?

_____

_____

16. Do you participate in crop value addition?

0. No	1. Yes

17. What type of value addition do you practice on your produce?

Type of Value Addition	Mark with a tick (□)
0. Washing	
1. Sorting and Grading	
2. Processing	
3. Packaging	
4. None	

18. Who assists you in the harvesting and grading of your produce for the market?

Please mark with a tick (□)

0. Family Members	
1. Hired Labour	
2. Government workers	
3. NGO extension workers	
4. Community Members	

Other (Specify)

_____

19. Do you harvest all at once or on-demand?

_____

_____

_____

20 Do you have a storage facility of where you can store your produce?

0. No	1. Yes

If yes, where

_____

21. How do you transport your produce to the markets?

Type of Transportation	Please mark with a tick (□)
Family Vehicle	
Neighbours' Vehicle	
Hired Vehicle	
Middlemen Vehicle	
Public Transport	

Other (Specify)

22. Do you own a mobile phone?

0. No	1, Yes

23. Do you know about prices of your produce before going to the market?

0. No	1. Yes

If yes, how do you get the market price information of the crop produced?

24. Who determines the price of your produce?

_____

_____

25. Do men and women participate equally in the crop value chain?

0. No	1. Yes

If no, why? and if yes, how?

_____

_____

_____

26. At which levels of the value chain are women more present and active?

_____

_____

27. At which levels of the value chain are men more present and active?

_____

_____

28. What activities are performed by men and women crop value chain?

Please tick (□) the appropriate box

Type of Activities	Men	Women	Both
Seed establishment			
Land preparation			
Fertiliser Application			
Pesticide application			
Harvesting			
Cleaning, Grading and Packaging			
Marketing			
Income control			

29. What are the key constraints for women's participation in the crop value chains?

_____

_____

_____

_____

30. Do men and women have equal access to resources like land, fertilisers and other inputs?

0. No	1. Yes

If no, why?

_____

_____

31. Do men and women have equal access to markets?

0. No	1. Yes

32. Are there any cultural beliefs and laws that have an influence in women accessing resources and participating in value chains?

0. No	1. Yes

If yes, explain

_____

_____

_____

33. Are there any cultural beliefs and laws that have an influence in women and men having access to markets?

0. No	1. Yes

If yes, explain

_____

_____

_____

34. Do you think that access to markets can improve household income and household food security?

0. No	1. Yes

If yes/no, why?

_____

_____

35. What are some of the challenges that you experience in terms of accessing markets?

Market Access Challenges	**Please mark with a tick (□)**
0. Poor agricultural skills	
1. Low quantity of crops	
2. Poor quality of crop production	
3. Lack of access to production inputs	
4. Unreliable rainfall patterns	
5. Poor road infrastructure for crop movement	
6. Lack of vehicles for the transportation of Crops	
7. Lack of market knowledge on information and operation	
8. Increased imports of fresh produce from South Africa by retailers	

Other (Specify)

_____

_____

_____

36. Please tick (□) the appropriate box

	Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
1. Overall the NGO has assisted in producing a higher quantity of Crop					
2. Overall the quality of crops produced has increased					
3. Crop production inputs have been made available by the NGO					
4. I have received agricultural training to produce more quality crops					
5. I have gained substantial knowledge on how markets operate though programmes and projects					
6. I have been able to gain access to local markets.					
7. I have been able to gain access to international markets.					
8. I have been able to produce, sell and make profits.					
9. I am able to keep records of what I produce and sell to markets.					
10. I have gained knowledge the several fresh produce markets in Eswatini.					
11. I am likely to recommend the NGO to other Smallholder Farmers to be a part of.					

Other improvements that you feel the NGO could make to improve your understanding of fresh produce markets and how better you can get your crops sold?

37. Please tick (□) the appropriate box

QUESTIONS	YES	NO
1. Are you happy with the work that your NGO is doing in helping smallholder farmers in The Kingdom of Ewatinihave access to markets?		
2, Do you feel that you now produce crops with better quality?		
3. Are you happy with how the NGO conducts its training programmes for smallholder farmers?		
4. Has having access to fresh produce markets in The Kingdom of Ewatinibecome easier for you to do?		
5. Have some of the challenges regarding market accessibility been resolved		

by the NGO?		
6 Have you been a part of market access training or projects started by the NGO?		
7. Do you receive some form of funding from your NGO for some quality agricultural inputs for the crops that you produce for markets?		
8. Have you been positively impacted by the work done by your NGO?		

Section C: Institutional Factors

1. Do you have access to credit?

[ ] Yes

[ ] No

2. Are you a member of an agricultural group other than the NGO?

[ ] Yes

[ ] No

3. Do you have access to extension officers?

[ ] Yes

[ ] No

If yes, how many extension officers?

_____

4. Do you have any funds from the government?

[ ] Yes

[ ] No

5. Do you have any funds from the NGO?

[ ] Yes

[ ] No

6. Do you have support from the government on farm inputs?

[ ] Yes

[ ] No

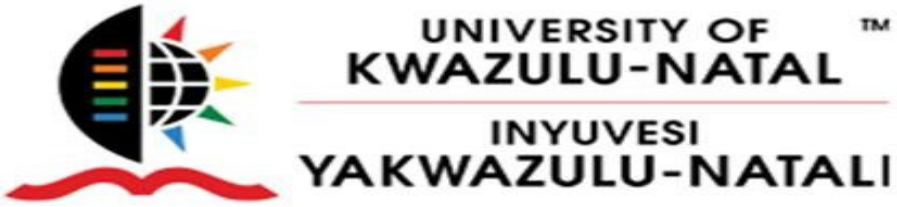
Section D: Food Security

No	Question	Response Options	Code
1.	In the past 4 weeks, did you worry that your household would not have enough food?	0 = No (Skip to Q2) 1= Yes	
1.a	How often did this happen?	1= Rarely 2= Sometimes 3= Often	
2.	In the past 4 weeks, were you or any household member not able to eat the kinds of foods you preferred because of lack of resources?	0 = No (Skip to Q3) 1= Yes	
2.a	How often did this happen?	1= Rarely 2= Sometimes 3= Often	
3.	In the past 4 weeks, did you or any household member have to eat a limited variety of foods due to a lack of resources?	0 = No (Skip to Q4) 1= Yes	
3.a	How often did this happen?	1= Rarely 2= Sometimes 3= Often	
4.	In the past 4 weeks, did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources to obtain other types of food?	0 = No (Skip to Q5) 1= Yes	
4.a	How often did this happen?	1= Rarely 2= Sometimes 3= Often	
5.	In the past 4 weeks, did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?	0 = No (Skip to Q6) 1= Yes	
5.a	How often did this happen?	1= Rarely	

		2= Sometimes 3= Often	
6.	In the past 4 weeks, did you or any household member have to eat fewer meals in a day because of lack of resources to get food?	0 = No (Skip to Q7) 1= Yes	
6.a	How often did this happen?	1= Rarely 2= Sometimes 3= Often	
7	In the past 4 weeks, was there ever no food to eat of any kind in your household because of a lack of resources to get food?	0 = No (Skip to Q8) 1= Yes	
7.a	How often did this happen?	1= Rarely 2= Sometimes 3= Often	
8.	In the past 4 weeks, did you or any household member go to sleep at night hungry because there was not enough food?	0 = No (Skip to Q9) 1= Yes	
8.a	How often did this happen?	1= Rarely 2= Sometimes 3= Often	
9.	In the past 4 weeks, did you or any household member go a whole day and night without eating anything because there was not enough food?	0 = No 1= Yes	
9.a	How often did this happen?	1= Rarely 2= Sometimes 3= Often	

In the last 24 hours, which foods did you eat?

Appendix 2: Interview Guide



INTERVIEW SCHEDULE

SECTION A

DEMOGRAPHIC DATA

1. Name of company

   _____

2. Years of operation

   _____

3. Position of respondent

   _____

4. Age

   _____

5. Gender

   _____

5 Highest Qualification

   _____

SECTION B
NGO REPRESENTATIVES' KNOWLEDGE OF SMALLHOLDER FARMERS

1. In your opinion, what constitutes a smallholder farmer?

2. What gender has the highest number of smallholder farmers and why?

3. How many Smallholder farmers does your NGO work with?

4. Approximately, in how many communities does your NGO work in across Eswatini?

5. How is the distribution of smallholder farmers across the identified communities that you work in?

   - How many of them are youths and how many are a bit elderly?

SECTION C
NGO REPRESENTAIVES' KNOWLEDGE OF MARKET ACCESS

1. What is your understanding of a market? What is a fresh produce market?

2. What are the different existing markets within Eswatini?
3. What are some of the existing fresh produce markets that your farmer-beneficiaries currently operate in?

- Is there a tracking record that shows how well these farmers are doing in those markets?

4. What percentage of smallholder farmers have access to the existing fresh produce markets? What percentage of them have access to retail markets like Spar and Pick n Pay?

5. In your own organisational view, how do you define market access for Smallholder farmers?

SECTION D
NGO REPRESENTAIVES' PERCEPTIONS OF THE ROLE PLAYED BY THEIR ORGANISATIONS REGARDING SMALLHOLDER FARMERS' MARKET ACCESS

1. What are some of the programs or projects that your NGO has put in place to assist smallholder farmers to produce quality crops for markets?

- How have these programs helped them in their level of production?

2. What are some of the barriers experienced by Smallholder farmers in terms of market access?

- How have these farmers tried to break these?
- How has your NGO assisted these farmers?

3. What are some of the challenges or failures experienced by your NGO regarding offering market access assistance to your farmer-beneficiaries?

- In what way has the COVID-19 pandemic impacted your operations with Smallholder farmers?

4. What would you describe as some of the successes that you as an NGO have experienced pertaining to market access facilitation for Smallholder farmers?

- In the past five years have all your goals been reached?
- What did you have to do differently in the different years to curb out any experienced challenges?

5. What are some of the crops that you as an NGO try to get Smallholder farmers to produce for the market?

- Are Smallholder farmers making any profits from these crops and what percentage of profit is being made by these Smallholder farmers?

6. Please describe the role of your NGO as a market access facilitator for Smallholder farmers.

- How has this role changed over time? What have been the causes of this change?

7. Does your organisation in any way try to open doors for Smallholder farmers into international markets?

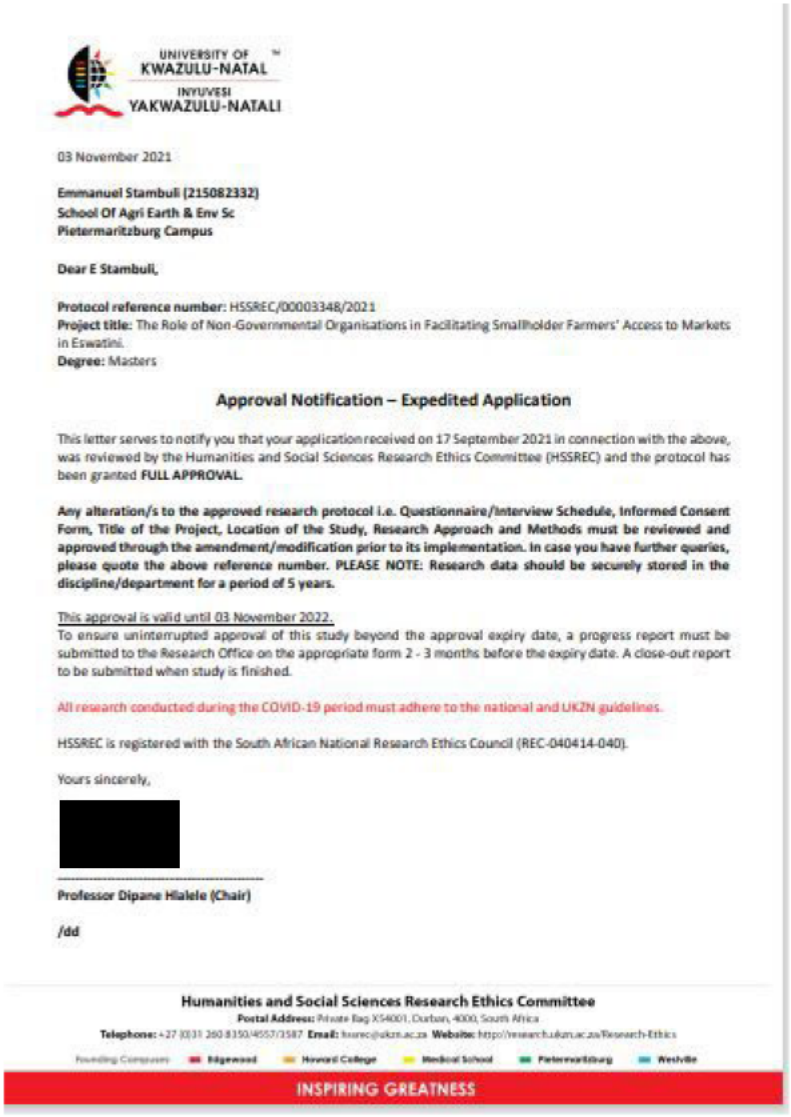
8. Would you agree that your work has had a positive impact on smallholder farmers in allowing them to produce more?

- In what ways have the farmers been positively impacted?

9. When does your work with Smallholder farmers start and where does it end in terms of market access provision?

- Does your work start from the production level within the market value chain?

Appendix 3: Ethical Clearance



UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

03 November 2021

Emmanuel Stambuli (215082332)
School Of Agri Earth & Env Sc
Pietermaritzburg Campus

Dear E Stambuli,

Protocol reference number: HSSREC/00003348/2021
Project title: The Role of Non-Governmental Organisations in Facilitating Smallholder Farmers' Access to Markets in Eswatini.
Degree: Masters

Approval Notification – Expedited Application

This letter serves to notify you that your application received on 17 September 2021 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL.**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

This approval is valid until 03 November 2022.
To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

All research conducted during the COVID-19 period must adhere to the national and UKZN guidelines.

HSSREC is registered with the South African National Research Ethics Council (REC-040414-040).

Yours sincerely,

[redacted]

Professor Dipane Hlalele (Chair)

/dd

Humanities and Social Sciences Research Ethics Committee
Postal Address: Private Bag X54001, Durban, 4000, South Africa
Telephone: +27 (0)31 260 8350/4557/3587 **Email:** hssrec@ukzn.ac.za **Website:** http://research.ukzn.ac.za/Research-Ethics
Founding Campuses: Edgewood, Howard College, Medical School, Pietermaritzburg, Westville

INSPIRING GREATNESS