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The perceptions of Moretele residents of small-scale agriculture: The case of Ga-Moeka village in the North-West Province



A research report submitted to School of Geography, Archaeology and Environmental Studies

In partial fulfilment of the requirements for the Degree of Master of Science Environmental Science (Coursework and Research Report)

February 2024

by

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Declaration

I, Takalani Malivhadza (Student number: 2140942), am a student registered for MSc Environmental Sciences (CW/RR) in the year: 2023. I hereby declare the following:

- I am aware that plagiarism (the use of someone else's work without their permission and/or without acknowledging the original source) is wrong.
- I confirm that ALL the work submitted for assessment for the above course is my own unaided work except where I explicitly indicated otherwise.
- I have followed the required conventions in referencing the thoughts and ideas of others.
- I understand that the University of the Witwatersrand may take disciplinary action against me if there is a suspicion that this is not my own unaided work or that I failed to acknowledge the source of ideas or words in my writing.

Signature:  Date: 16 July 2024

Acknowledgements

Firstly, I would like to thank my supervisor, Dr Sarita Pillay Gonzalez for her support, patience, and guidance throughout this research. She has really inspired me to work hard and trust myself more.

I would like to thank Professor Mulala Simatele for believing in me and entrusting me with various opportunities throughout the research period. These enabled me to realise and fulfil my capabilities, enriched my knowledge of the world in various ways, and tested my resilience. Passion got me started but resilience and dedication got me through.

I would also like to thank my mom and brothers who had made it their mission to see the accomplishment of this research, against all odds. Your support pushed me further.

I would like to thank everyone who took their time to participate in the study, especially since it was during the holiday season.

I also want to thank and appreciate myself. Looking back at my Honours research, in comparison to this, I have shown incredible growth as a researcher, and this is only the beginning.

Lastly, but not least, I would like to thank God for continuously positioning me to meet wonderful people. Every single person met during the year 2023 has been nothing but a blessing and I am thankful for God and you all for the impact and growth I experienced through the various encounters we had.

Dedication:

Cornelius Kuvhanganani Malivhadza

1972 – 2009

Abstract

In South Africa, small-scale agriculture is hindered by various obstacles such as the lack of structural initiatives towards land reform, the dominance of agri-business, and related difficulties of penetrating and flourishing in the market. This research sought to understand perceptions of rural residents of Ga-Moeka (in the North-West province in South Africa) of small-scale agriculture for positive rural development. Small-scale agriculture in rural areas like Ga-Moeka is perceived and practiced as a leisure activity. While the economic potential of small-scale agriculture is recognised, it is not necessarily considered as a primary mechanism to drive positive rural development. Perceptions of small-scale agriculture in the area indicate there is a need to further explore the economic potential of rural areas in a non-binary manner. Additionally, a significant and unexpected finding was the need to also challenge the definition of rural areas and stray away from binary definitions of urban/rural. The findings in this research may support policy makers to assess and put strategies in place that are in alignment with the public's interest, enhancing their participation in government initiatives and fast-tracking rural development.

Keywords: small-scale agriculture, economic stimulation, rural development

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CHAPTER ONE
FRAMES OF REFERENCE

1.1 INTRODUCTION

The sustainability of the food system has become a growing concern, especially with the whole system from production to household consumption contributing 30% towards global methane emissions (Lindgren *et al.*, 2018; Springmann *et al.*, 2018). This placed the food system centre stage on a global scale at conferences such as COP28 held in Dubai, in 2023 and Africa Agri Investment Indaba held in Cape Town, 2023 (Kriel, 2023; Winters, 2023). With events such as the COVID-19 pandemic, food insecurity increased even in developed countries, while issues such as a of lack of financing; effects of climate change; growing human population; and socio-economic inequality have affected food accessibility across the globe; especially in developing countries where "purchasing power" and "capital power" play a crucial role, excluding those without means of participating in the market (Geze *et al.*, 202; Bernstein, 2012; Competition Commission, 2021).

Although, it is the first-time food systems are being relooked from the sustainability stance, food has always been at the centre of challenges that face humanity, dating back to eras that birthed great philosophies such as Malthusian Theory of Population and Ester Boserup Theory of Agrarian Change (Oladimeji and Hassan, 2017; Soby, 2017). Since then, policies and initiatives to protect people from various discomforts - including hunger - were passed with the most notable one recently being the UN Sustainable Development Goals. The SDG 2 and 12 mandates are to have a pro-poor and inclusive society, especially concerning hunger and poverty (Asiamah, 2021). Although these philosophies and international agreements, together with other complimenting policies such as environmental policies, are still criticized for not adequately setting a guideline on the limits to be posed in the for sustainable food systems (Bernstein, 2012; Competition Commission, 2021). This enabled capitalists to exploit legislature's loopholes and establish monopolistic

commercial agriculture as a dominant means of mass food production to meet the population demand (Bernstein, 2013). However, even with large scale agriculture producing food that is enough to feed the whole population, it still encounters difficulties in reaching poor populations especially in developing countries (Kisaka-Lwayo and Obi, 2012; Woodhill *et al.*, 2020). While others may argue that this is a prema facie case and can be viewed as an excuse for food to not reach those without purchasing power in a capitalist world (Bernstein, 2012; Competition Commission, 2021). The issue of food insecurity in developing countries like Kenya, Mozambique, and Zimbabwe, is mitigated through small-scale agriculture to feed the poor population (Mburu *et al.*, 2015; Rohrbach *et al.*, 2003). The dominance of commercial agriculture in the food system tends to overshadow the crucial role that small-scale agriculture plays in bridging this gap (Kisaka-Lwayo and Obi, 2012; Woodhill *et al.*, 2020).

South Africa possesses its own unique story to voice concerning the evolution of agriculture. History confirms that indigenous people in South Africa always engaged in small-scale agriculture that extended beyond subsistence purposes and had their own food systems (Huffman, 2012). This system was interrupted by colonialism, in South Africa – there was also the apartheid regime (Huffman, 2012; Maudrie et al., 2023; Plaatjie, 1916). These historical events shaped the agricultural landscapes in South Africa and Africa, mostly through policies that favoured agri-business by the colonisers (Cousins, 2016). The lack of effective and sufficient support of the small-scale agri-business towards previously disadvantaged communities has left the sector with a decreased diversity representation – i.e. more white farmers than black Africans (Aliber and Cousins, 2013).

Currently, South Africa's agricultural sector has not been expanding favourably in comparison to other sectors that build the economy. In accordance with the work of Greenberg (2010) and Bernstein (2012), the agricultural industry has been contributing less to the economy with regards to production and employment, and rural regions are additionally

experiencing from declines in small-scale agricultural production (crop and livestock). (Kisaka-Lwayo and Obi, 2012). Apart from the historical injustices, there are new issues that challenge agriculture such as the impact of COVID-19 pandemic, lack of seriousness in addressing land reform, poor infrastructure, and the enforcement of agri-business model on small-scale farmers and change in lifestyles (Swarts and Aliber, 2013; Shackleton and Luckert, 2015; Hall and Kepe, 2017; Rusenga, 2020).

Scholars such as Shackleton and Luckert (2015) argue that even with South Africa being a semi-arid country, with some climate conditions that reflect the presence of Sahel in the north, agricultural practices have flourished in the past but several factors like access to resources and change in lifestyles led to a decrease in small-scale agriculture in rural areas. In their study, the authors found that a manifestation of the negative impacts of a decrease in agriculture in the Eastern Cape had less to do with the effects of climate change but rather with perceptions of the residents (Shackleton and Luckert, 2015). This was indicated amongst others, by the suggestion that earlier generations succeeded in running effective small-scale farms despite inadequate water and a lack of formal education (Shackleton and Luckert, 2015; Belmin et al., 2023). This is in comparison with the current generation that is giving up agricultural lands in search of a better life and economic prospects as this lifestyle is perceived as more appealing (Shackleton and Luckert, 2015). Furthermore, according to Mabin (1991), the abandonment of agricultural practices in rural areas is a common occurrence in South Africa and can be traced back to the Apartheid policies that propelled many South Africans into metropolitan work and non-agricultural lifestyles. After the dawn of democracy, the South African government made several attempts towards correcting this problem using different approaches such as forging relationships between small-scale farmers and formal retail businesses, and providing grants (DALRRD, 2023). However, there is still a gap between black people's interest in participating in agriculture (both small scale farming and

large commercial agri-business) and a lack of seriousness in promoting inclusivity in the agricultural sector.

Research has suggested possible causes for a decline and lack of interest by black people in agriculture despite the high unemployment rate and government support (Bernstein, 2013; Dubbled, 2013; Shackleton and Luckert, 2015). The research project seeks to contribute towards knowledge of the small-scale agriculture, a collaboration of explanatory and critical approach is taken to explain the cause or non-occurrence of the phenomenon, show causal connections and relationships, identify the problems with and/or connections to the broader social/cultural factors, and perceived social problems.

1.2 PURPOSE AND RATIONALE OF THE STUDY

The purpose of this research is to enhance understanding of people's perceptions of small-scale agriculture in rural areas in North West. This research hopes to contribute towards a more inclusive and reformed agricultural sector, which focuses on using public participation, in this case – looking at people's perceptions towards small-scale agriculture, to understand how policy can be better tailored for an average South African citizen who still battles with issues of lack of access, especially access to information.

South Africa's agricultural sector has created less options for people interested in commercial agriculture, particularly small-scale farmers (Cousins, 2019; Hall and Kepe, 2017; Bernstein, 2012; Greenberg, 2010). Small-scale farmers are continually at a disadvantage, resulting in losses, due to competing with capital intensive and technologically sophisticated large-scale farmers and, being incapable of seamlessly integrating into an agri-business model that is indirectly encouraged by the government.

The study focused on Ga-Moeka village, a remote community in the North-West province that is overseen by Moretele Municipality. This community is

excellent for a case study because it has a wide variety of factors influencing the state of the economy with residents of various backgrounds and ages as the area is relatively younger than other villages in Moretele Municipality. The community also had a history of small-scale farming, which ceased as its population grew, newer generations aspired to contemporary living styles, and farmlands were commodified. However, destitution and joblessness persist, while many individuals in the area rely on social subsidies for survival, despite possessing significant land holdings, having indigenous knowledge, and access to bureaucratic help.

1.3 RESEARCH QUESTION

How do residents in Moretele Municipality perceive small-scale agriculture, and why?

Sub-questions:

- How do residents of different age groups in Moretele municipality perceive small-scale agriculture?
- What is the present nature of small-scale agricultural activity in the area?
- What are the factors or conditions hindering and/or supporting small-scale agricultural activity?
- How can the findings from Moretele be used to critically analyse government policy or action in agriculture, especially in terms of small-scale agriculture?

1.4 RESEARCH AIM

This research aims to determine how residents of Ga-Moeka village in Moretele Municipality perceive small-scale agriculture, and to identify the material conditions that may be shaping their perceptions.

1.5 RESEARCH OBJECTIVES

- Determine the perceptions of different residents in Moretele to small-scale agricultural activity. Determine the nature of agricultural activity in the region at present, and whether there have been changes over time.

- Identify key factors that appear to be contributing to the nature of agricultural activity.
- Use findings from Moretele to critically analyse government interventions (or lack thereof) relating to rural land and small-scale agriculture.

1.6 SIGNIFICANCE OF THE STUDY

The purpose of this study is to determine how people in the Moretele Municipality perceive small-scale farming. Recognising these attitudes can assist us to better comprehend small-scale farming (or lack thereof) in the locale, as well as contribute to policymaking and activities that can improve rural-urban linkages between informal producers and the formal market. Research has demonstrated that improving rural-urban links minimises migration from rural areas, boosts the economy of rural areas, and promotes the growth of rural areas (Xu et al., 2021; Competition Commission, 2021).

Chapter layout

The research report will be divided into chapters that collaboratively contribute towards understanding and answering the research question. The chapters include:

Chapter 1 - Introduction: Gives background information on the broader context of what is to be researched, states the research question, aim and objectives.

Chapter 2 - Literature Review: Present a thorough examination and assessment of intricate information and arguments sourced from various outlets. Provide a comparative analysis of theories and concepts derived from diverse research approaches. Lastly, generate visual representations and identify areas of knowledge gaps.

Chapter 3 - Methodology: Gives an outline of the reasons for the research being conducted, the research design, and tools to be used; indicates the methods to be followed and how they aid in answering the research question, and ethical considerations.

Chapter 4 – Contextualization of the study area: Describing the study area in the grade scheme of things in terms of geographical, climatic and socioeconomic factors.

Chapter 5 – Empirical evidence and Thematic analysis: Presentation of information gathered and observed during fieldwork and analysing the data so to detect and define both inherent and categorical concepts within the evidence, i.e., themes with the use of codes linked to raw data as summary markers.

Chapter 6 - Conclusion: Give a synopsis of the research and main points gathered, conclude if the findings answered the research question and achieved its objectives.

CHAPTER TWO
THEORETICAL CONSIDERATIONS AND LITERATURE REVIEW

2.1. INTRODUCTION

The literature review focuses on subjects such agriculture, small-scale farming and issues that hinder food production in the 21st Century. The chapter demonstrates a critical reading of a wide-ranging literature (Hart, 2018). The chapter aims to map out previous research to study and justify the motivation behind the research question (Snyder, 2019). It highlights the results or assertions that have emerged from previous research endeavours and provides the writer's evaluation of how precise and comprehensive one's understanding is (Knopf, 2006). According to Knopf (2006), the benefits of a literature review are that it gives one a general overview of a body of research; reveals what has already been done well to avoid repeating the same research; gives new ideas to research on and determine where there are flaws in existing research; enables one to place their research in a larger context so that one can draw new conclusions.

This chapter discusses literature around small-scale agriculture in relation to governance, environmental implications, and social factors that shape people's perceptions of the phenomenon. The literature explores events and factors that affected and continue to affect small-scale agriculture in Africa from the late 1800s to present, with a particular focus on issues that small-scale agriculture faces in South Africa.

Recent studies show that small-scale farming contributes about 30% of the global food production and plays a crucial role in creating sustainable food systems (Elba, 2021). This 30% supplies mostly the rural population and the poorest of the poor. There are over five hundred million small-scale farmers, and small-scale agriculture supports livelihoods of around 2 to 3 billion people globally (Kisaka-Lwayo and Obi, 2012; Woodhill *et al.*, 2020).

The term 'small-scale' agriculture evolved over the years and grew more accommodating as situations vary from country to country (Kirsten and van

Zyl, 1998). The mostly commonly used definition is one that classifies small-scale agriculture as: farms that are less than 2.0 hectares, have limited resources and are not financially well-off. This definition has led to a negative perception of small-scale farmers as it emerged from an inability to maintain a status of 'viable' farms according to the 1970s standard (Kirsten and van Zyl, 1998). South African agriculture comprises of 2 classifications of agricultural producers: The subsistence (small-scale) farmers in the previously called "homelands"; and mass production commercial (mainly white) farmers (Kirsten and van Zyl, 1998).

The forces at work in South African agriculture are influenced by the country's history and politics (Kirsten and van Zyl, 1998). The term "small-scale" agriculture is associated with inadequacy, backwardness, non-productive, and non-profit, survival farming (Kirsten and van Zyl, 1998). This sense of negativity around the term has led to small-scale farmers being invisible and susceptible to scepticism and confusion. However, it is crucial to acknowledge that small-scale farmers play a vital role in rural economies, reducing hunger and poverty alleviation and can be a solution to some of the issues the country faces like rural development and food security in these areas (Woodhill *et al.*, 2022). Additionally, historically, Africans have undertaken small-scale farming, including for commercial purposes, dating as far as the late 1880s (Huffman, 2012; Kriel, 2023).

2.2 LAND AND THE HISTORY OF AGRICULTURAL PRODUCTION IN SOUTH AFRICA

This section focuses on literature regarding food production and trade in Africa and South Africa from the late 1880s. Gann and Duignan (1969) note that most literature focuses on African agriculture and economy during the colonial period, forsaking the pre-colonial and painting a picture that depicts Africans as a people not interested or engaged in trade, commodities and cash crops. However, despite the challenges faced by archaeologists when establishing the way of life pre-colonisation, there is enough evidence to suggest that African people led successful small-scale farms (Bundy, 1972; Gann and

Duignan, 1969). However, this already established food system was disturbed in the late 1880s (Huffman, 2012; Wiggins, 2014).

Wiggins (2014) illustrates that African small-scale agriculture evolved significantly in the 19th century last quarter when European powers entered Africa by force and established the settler's administration. This invasion resulted in 'globalisation' of food trade in mostly East Africa as these countries traded fresh produce that could not grow in European countries (Wiggins, 2014). This trade continued until the beginning of the 1930s, when there was shrinking confidence about Africa's agriculture. This confidence was revived post World War II when the Swynnerton Plan of 1954 to endorse cash crops in the reserves was fruitful (Wiggins, 2014). However, most arable land was already showing signs of environmental degradation which led to a downwards spiral of the African agricultural market (Wiggins, 2014).

By 1960, colonial Africa was independent and hopes to revive the agricultural trade markets looked promising - however, with ineffective policies and governance, these hopes rarely came true (Wiggins, 2014). The case with South Africa is slightly different, as it transitioned from the colonial era to Apartheid regime and later, to the new dawn of democracy.

In South Africa, the shift from the self-sufficient subsistence farming to relying on commercial produce was done sparingly over years, dating as far as the 1830s (Bundy, 1972). As written about by Plaatjie (1916), the first major legislation that altered the landscapes of agriculture in South Africa was the Native Land Act of 1913. This was a segregationist law that restricted black South Africans from possessing or renting out land outside of authorised reserves (Davenport and Saunders, 2000). Plaatjie (1916) accounts the distressful pressure that this act imposed on black South Africans as they lost their livelihoods and wealth overnight to become workers on their own farms or having to settle for alternatives that equally resulted in poverty. This Act was also the beginning of a very brutal and oppressive government for black South Africans. Hall (2014)

argues that the Natives Land Act of 1913 shaped the trajectories of most South Africans' lives.

After passing this legislation, the agricultural sector experienced a decline in crop production by Africans due to the increasing pressure on the population and environmental issues such as soil erosion, this also contributed to the further impoverishment of the people (Simkins, 1981). However, this did not affect the sector's performance towards its contribution to the GDP. It was in the late 1960s when Black Africans were relocated under the Bantu Act that agriculture's contribution towards the GDP declined, indicating that black South Africans continued with their agricultural practices in the lands they had settled in post the Land Act of 1913 tragedy (Simkins, 1981). The relocation to un-arable land further contributed to the trauma that deviated the Black population from agriculture, causing them to be solely dependent on food systems established by white commercial farmers (Simkins, 1981). Hall (2014) notes that, among others, legacies of this act as ushered included: The displaced history of urban destitution and disparity; the social and spiritual heritage of alienation; obscurity and failed peace-making; a political precedent of constitutional plurality; and dualistic governance denoting zones of tradition or custom.

Kongolo (2010) notes that this legacy persists to this day, affecting all aspects of life of South Africans and the Black majority are still on the receiving end of the negative impact. It is noteworthy to mention that the South African government has done tremendous work to combat these inequalities through policies, social support programmes, and initiatives (such as BEE policy, land redistribution programmes, providing agricultural extension officers to support small-scale farmer, grants, etc.) that are aimed at the upliftment of the black community (DALRRD, 2023). However, the implementation of these strategies by the government is constantly faced with obstacles and criticism. In relation to small-scale agriculture for commercial gain, these include the ineffective rolling out of the land reform programme and the inconstant support for small-

scale agriculture to thrive in a highly commercial farming field, amongst other issues (Bernstein, 2013).

The impact of what South Africa had endured in the past has not only led to the economic and social dismay, but also a psychological trauma, especially on black South Africans. Research indicates that years of trauma from racial oppression can manifest in intergenerational impacts (Mariska *et al.*, 2019). In South Africa, the Native Land Act of 1913 was the beginning of what Tshepo Lephakga calls a "flight from the black self," (Lephakga, 2013: p. 1). This phenomenon is a result of the land dispossession of black South Africans which had a terrible impact of their self-worth as they internalised the oppression (Lephakga, 2013).

Authors such as Plaatjie (1916) and Bundy (1969) give accounts of how successful agricultural practice was before the Native Land Act of 1913. Today, South Africa currently struggles with issues of abandoned agricultural land in rural areas which can be attributed to this "flight from the black self," amongst other factors, however it is still necessary to consider small-scale agriculture as a feasible possibility for poverty lessening (Lephakga, 2013; Shackleton and Luckert, 2015).

2.3 AGRICULTURE, GOVERNANCE AND POLICY IMPLICATIONS POST-1994

When the first democratically elected government took office in 1994, the ruling party established its goals and objectives for the new administration. Among these was to carry out reforms to land ownership in South Africa with the goal of building 'the economy by providing large-scale employment' (Rusenga, 2020). This was coupled with bills, that included the Land Reform (Land Tenants) Act 3 of 1996, that was aimed at providing labour tenants and their partners security in their utilisation and ability to obtain land; the Land Tenure Rights Act 112 of 1991, which aimed at enabling the improvement and restitution of specific land rights into ownership; the Marketing of Agricultural

Products Acts; and the Water Act, as well as Trade Policy and Labour Market Policy reforms.

The goal of these policies was to address equitable distribution of land concerns, right historical policy inequities, and put the agricultural industry on a less capitalist trajectory for expansion while also increasing the industry's competitiveness globally (van Zyl et al., 2000). However, many scholars have contested their effectiveness. Aliber and Cousins (2013), argue that the land reform has been unsuccessful. Other scholars, such as Rusenga (2020) and Hall and Kepe, (2017) also of this view. The government's implementation of an agribusiness model that inadvertently promotes large-scale production for (typically exportation) markets on small-scale farmers constitutes one of the most common criticisms levelled at this subject (Aliber and Hall, 2012; Kirsten and van Zyl, 1998; Rusenga, 2020). This does not disqualify the profitability of small-scale agriculture as there is enough international evidence that suggest that, through land distribution, small-scale farming can be enhanced, and has the potential to increase income and job opportunities, especially in rural areas (Cousins, 2016; Kirsten and van Zyl, 1998).

According to Bernstein (2013), since 1994, when the nation's government launched the distribution of land, white farms absorbed 85.8 million hectares (86% of rural land), with 10.6 million hectares under arable agriculture. The plan was designed on a market-assisted strategy, in which the state would provide grants to acquire property from a willing seller, allowing white farmers to give up their land (Hall and Kepe, 2017; van Zyl et al., 2000). The government then granted small social funding to needy households to purchase small pieces of land for habitation and small-scale cultivation (Hall and Kepe, 2017; van Zyl *et al.*, 2000). This was followed by subsidising Black capitalist farmers to buy bigger pieces of land, if they have the necessary resources to pursue commercial farming (Hall and Kepe, 2017). It was argued that this would reduce overcrowding and underutilisation of land (Hall and Kepe, 2017). Post 2010, the state implemented a strategy called Proactive Land Acquisition Strategy (PLAS) whereby the government bought the land themselves and leased it to

black farming households and communities on 30-year leases (that are renewable for another 20 more years prior to the government's consideration of transferring ownership of the land to the tenant) under the State Land Lease and Disposal Policy of 2013 (Hall and Kepe, 2017).

The Department of Agriculture, Rural Development and Land Reform did not stop there (DALRRD, 2023). It continued to show commitment to the realisation of its mandate by providing programmes to support small-scale farmers to aid them to thrive in the agricultural sector and rural economies and development. These initiatives included the increasing job prospects through the National Rural Youth Service Corps programme; decentralisation of Industrial Development Zones (IDZ) and Special Economic Zones (SEZ) to increase rural employment opportunities to counter the declining mining sector; and the Farmer Production Support Unit (FPSU) which is a rural outreach and capacity building unit that links farmers with markets (DALRRD, 2023).

Despite these efforts, commercial agriculture is still thriving and dominant in South Africa. Scholarship such Bernstein (2013) and Greenberg (2010) suggests certain challenges that are apparent and continue to be an obstacle against attempts to promote agriculture among marginalised groups. Greenberg (2010) argues that the lack of urgency on widening the base of food production is because the dominant idea is that the existing food systems can meet food need. This comes with incentivising of commercial agriculture which Cousins (2019) notes. The lack of measures to address the unsaturated market in South Africa is caused by the uneven distribution of resources amongst farmers (Cousins, 2019). White commercial farmers who can afford technology to their advantage get subsidies to continue to supply agro-food and buy small-scale farmers out of business when challenges beyond their control arise such as droughts, etc (Cousins, 2019). This has led to an extremely capitalised enterprises with the agrarian structure, which is 'dualistic' (Cousins, 2019).

Second, the sector today is the result of the apartheid agro-food system, which structured its legislation and regulations to favour white agricultural farmers

and agribusiness at to the detriment of consumers in general (Greenberg, 2010). This resulted in imperial orthodoxies that are still visible irrespective of constitutional policy shifts, and they (colonial orthodoxies) shaped a contorted reform centred on commercial 'viability' criteria and governed by state officials and agribusiness' strategic partners' (Hall and Kepe, 2017).

The third concern is the imposition of an agribusiness model that encourages large-scale cultivation for (export) markets on small-scale farmers (Aliber and Hall, 2012; Rusenga, 2020). This resulted in small-scale farmers being unable to perform in the market as they are faced with costs that are favourable to big commercial farmers (Greenberg, 2010). The costs include processing and distribution costs without compromising speed and reliability, and investing in technology and agrochemicals, amongst others. Another issue with following a corporate model is the administrative procedures involved in running such a business, which can be overwhelming and yet it is of paramount importance (Greenberg, 2010; Kirsten and van Zyl, 1998; van Zyl *et al.*, 2000). The model has negative consequences small-scale farmers as compared to other contenders, they lack conveniently developed, hierarchical global structures that provide a competitive advantage, standardisation, geographical division of labour, and few multinational businesses and trade agreements (Greenberg, 2010). The consequence of these costs are losses on the small-scale farmers or expensive goods for the consumers.

These shortcomings pose assumptions of inadequacy without investigating or understanding the sector (Greenberg, 2010; Kirsten and van Zyl, 1998). However, it is important to view small-scale agriculture with the perspective of its role in supporting the urban poor and rural communities (Kirsten and van Zyl, 1998). The focus on land redistribution should specifically aim at reorganising the agricultural system by significantly modifying the patterns, which will drastically alter the living chances of a significant number of South Africa's rural poor (Cousins, 2019). Most of the farmland may be reallocated through land reform with minimal impact on national food security, exports, and farm employment (Cousins, 2019). Cousins (2019) contends that pro-poor land

redistribution can create up to 1.2 million additional job possibilities. To accomplish this, the strategy must focus on approximately 250,000 market-oriented smallholder farmers as the primary recipients, and a minimum of 48 million hectares (or 60% of private property) must be transferred (Cousins, 2019). For the productivity of this land to be maximised, the system within the informal sector must be considered more positively to allow for flexibility within the small-scale agriculture sector.

Greenberg (2010) states that the food market outside of the corporate sector is 32-45%, including the informal' trading sector (which includes most small-scale farmers). Small-scale agriculture in its current state is said to be able to supply and sustain food systems in South Africa, without the corporate agriculture's assistance (Cousins, 2019). The informal sector (including small-scale agriculture) is distinguished by cheaper food prices, local produce sourcing, and, in some cases, faster movement throughout smaller distribution system or supply chain (Greenberg, 2010). These bring the retail outlet closer to the resident, resulting in a more efficient food supply system that is both beneficial to the environment and financially reasonable for both the consumer and the provider. In the case of small-scale agriculture, this can take a form of administering rural-urban linkages, revitalising rural economies and promoting community building.

With an estimated population of 19,337,772 people living in rural areas, it is essential that rural economies are sustainable to support the residents and take priority in the development agendas set by the government (Global Data, 2021). The Department of Agriculture, Rural Development and Land Reform recognises the need for small-scale agriculture enhancement in rural areas to maintain their economies and ensure that the areas are liveable (DALRRD, 2023). This is reflected by their accomplishments, which include over five thousand farms leased by the DALRRD; more than 55 000 registered farmers and over 150 00 000 mil tons of commercial maize crop established (DALRRD, 2023). There are also big retails that see potential in collaboration with small scale farmers and supporting local economies. In a case study by Competition

Commission (2021), such a collaboration is apparent when Spar, a retail chain in South Africa, works with local communities in the Limpopo Province to buy its agro food. This collaboration encouraged small-scale farming in the area, rejuvenated the local economy and enhanced the rural-urban linkage. More work is done by Non-Government Organisations that are funded by the state and industry organisations such as Spar. These organisations bridge the gap between skill shortages, capital and resource scarcity for small-scale farmers in rural areas.

When looking at a bigger scheme of things, both commercial and small-scale agriculture have their distinct roles that they play in growing the economy. The few commercial agricultural producers collaborate closely with other intricate economic industries such as mining-chemicals-energy, non-food-retaining sectors, logistics and transportation, and a variety of financial services, as well as others that connect the agro-food system to the broader economy and the world's economy (Greenberg, 2010). However, small scale agriculture also has its benefits that tied it to other policies that are essential for the success of the country. For example, it promotes legislation that governs urban planning such as 15 minutes cities, greener and inclusive communities that promote a sense of belonging. It also supports legislature such as the environmental and social development and others. Small-scale agriculture with proper investment is an inclusive solution to poverty alleviation and other wicked problems, while commercial agriculture benefits the elite few, is environmentally unsustainable and slows down development in sense that it results in less people active in the market than there could be.

2.4 PLANNING FOR THE FUTURE: CHALLENGES AND OPPORTUNITIES

In all aspects of life, planning of the challenges, placing suitable mitigation measures and exploiting opportunities that the future might have been essential. Planning for a future sustainable food system starts today with reflecting on what is unsustainable with the current one, how it can be

improved, what are the alternatives, and why a specific food system is more favourable than the other.

South Africa's agricultural economy is deeply influenced by various factors, including market structures, climatic conditions, and socio-economic practices. The Competition Commission's 2021 report provides a comprehensive analysis of the agricultural sector's market structure, highlighting significant issues related to market concentration and its impact on competition. The report indicates that high levels of concentration in certain agricultural markets can stifle competition and innovation, which are crucial for economic growth and sustainability in agriculture (Competition Commission, 2021). The Commission emphasizes the need for policies that promote competitive practices and reduce barriers for small and emerging farmers to enter and compete effectively in the market (Competition Commission, 2021).

Drought is a recurrent and severe issue impacting South Africa's agriculture. Danso-Abbeam et al. (2024) discuss the socio-economic and environmental impacts of drought on smallholder farmers in the Free State Province. Their study shows that drought significantly affects crop yields and livestock, leading to food insecurity and increased poverty levels among farming households (Danso-Abbeam et al.,2024). The authors argue for integrating climate risk management into extension services and promoting non-agricultural income-generating activities as mitigation strategies (Danso-Abbeam et al.,2024).

Smallholder farmers in South Africa employ various drought-risk management (DRM) strategies to mitigate adverse effects. These strategies include rainwater harvesting, crop diversification, and reliance on government and NGO interventions (Danso-Abbeam et al.,2024). However, the effectiveness of these strategies is often limited by the farmers' access to resources and information. The study by Danso-Abbeam et al. (2024) suggests that enhancing the farmers' adaptive capacity through better access to weather information and

financial services, such as crop insurance, can significantly improve their resilience to climatic shocks (Danso-Abbeam et al.,2024).

Another critical aspect of South Africa's agricultural economy is the adoption of circular bioeconomy practices (Sekabira et al, 2024). The study on circular bioeconomy practices in four RUNRES African city regions, including South Africa, highlights how these practices can enhance household food security by recycling organic waste into valuable agricultural inputs (Sekabira et al, 2024). This approach not only improves soil health and crop yields but also contributes to sustainable farming practices that are crucial for long-term agricultural productivity (Sekabira et al, 2024). Although, the agricultural economy of South Africa faces significant challenges, there are opportunities to enhance resilience and sustainability through competitive market policies, effective drought-risk management strategies, and the adoption of circular bioeconomy practices

Projections for future food system

In the 1960s, when challenges of food-population balance raised, the green revolution technology saved many low-income countries from large-scale famines (Jouzi *et al.*, 2017; Khush, 1999). Today, the world is faced with a comparable situation but even more complex than before, planetary boundaries are threatened, the climate is changing for the worse, and food demand is increasing as population growth increases too. The Sustainable Development Goals aim to not only eliminate poverty and hunger by 2030, but also ensure that every person, consistently has economic, social, and physical access to adequate, nutritious, and secure food that can meet their nutritional requirements and preferences for food for an active and healthy life (Lindgren *et al.*, 2018). Amid these issues, there is a need to prioritise environmental conservation in great depth.

Recent studies indicate that between 2010 and 2050, the world's population growth is expected to increase to 9.8 billion people (Lindgren *et al.*, 2018). In

the absence of technical changes and focused mitigation efforts, the environmental effects of the food system may increase by 50-90% as population and income levels rise (Springmann *et al.*, 2018). This is a scenario that policymakers around the globe are working tirelessly to avoid. However, the food system is quite complex, and there is a range of factors that need to be considered to have the desired food-population balance to be achieved. These factors include addressing issues within the current food system such as food waste and loss, dietary transitions, food production methods and economic growth, while future considerations also need to be considered like population demand, number of resources needed to supply food sustainably and the possible environmental impact of the estimated demand and supply and how these can be mitigated (Lindgren *et al.*, 2018; Sala *et al.*, 2017). Complex as is, these issues require a system thinking approach to detect threats at various stages and gives an opportunity to put mitigation measures in place. The scale of small-scale agriculture becomes a good starting point to model an ideal food system.

Small-scale agriculture as the main food system

Studies have shown that small-scale farming plays a vital role in the food security of developing countries, even though it is not enough to combat food insecurity in these countries (Gassner *et al.*, 2019; Jouzi *et al.*, 2017). It is estimated that around half of the people who are considered to live in hunger in developing countries rely on small-scale farming for food (Jouzi *et al.*, 2017; Kisaka-Lwayo and Obi, 2012). Therefore, for developing countries, the solutions to food insecurity lies within adequate, efficient and effective support of small-scale agriculture. However, despite the crucial role it plays in addressing food poverty in developing countries, it is still not considered a capable food system to adopt for feeding the world's population. Due to the scale, it is practiced at, small-scale agriculture is disadvantaged by its insufficient resources which

leads to unsustainable practices (Kisaka-Lwayo and Obi, 2012; Nunan, 2015). These range from social, ecological and economical shortcomings.

Scholars such as Kisaka-Lwayo and Obi (2012) and Mburu *et al.* (2015) state that in most developing countries, vulnerable communities practice small-scale agriculture on fragile ecosystems, leading to environmental degradation, ranging from deforestation and overutilisation of water resources to make provisions for small-scale agriculture. This is supported by Nunan (2015) who further argues that due to these unsustainable practices, vulnerable communities depending on critical natural resources, like fragile ecosystems, continuously find themselves stuck in a loop of a vicious cycle of degradation and poverty. However recent studies such as Mburu et al. (2015) and dos Santos Silva et al., (2021) indicate that these arguments are no longer applicable in the current day and age as farmers are more aware of environmental issues surrounding their agricultural practices and are implementing environmental and climate friendly solutions to mitigate the impact of their activity. This includes the use of sustainable farming such as precision farming, nature-based fertilisers (e.g. using fruits and peels for mulch and as supplements to increase soil nutrients) and climate smart farming (e.g. planting drought-tolerant crops, greenhouse farming, and rainwater harvesting)(Mburu et al., 2015). The main issue today is that although sustainable practices are good for the environment, they reduce agricultural output by 25% compared to conventional agriculture (Jouzi et al., 2017). This reduction, however, is still acceptable and as the waste can be reused and recycled, as compared to the 17% lost to food waste/loss in the current food system which discards $936 billion per year (Marchant, 2021).

Like large-scale agriculture, small-scale agriculture also has its own economic limitations, like its proven record to alleviate poverty in rural communities (Gassner *et al.,* 2019). The main argument made against small-scale agriculture that it is not able to consistently produce high quality products for the world's population (Dercon and Gollin, 2014). To support this argument, the performance of small-scale agriculture in developing countries is referenced

(Dercon and Gollin, 2014). However, Gassner *et al.* (2019) argues that it is not small-scale agriculture's inability to alleviate poverty that makes it an undesirable dominant food system but rather the capacity (or lack thereof) needed to elevate the farmers to a standard that can alleviate poverty. This during the COP28(2023) and Africa Agri Investment Indaba (2022) when a debate concerning the lack of financial and technical support for small-scale farmers was raised (Kriel, 2023; Winters, 2023). Amongst other issues, the participants of the two conferences argued that climate change increased the unpredictability of agricultural projects and that it was safer to finance large scale agricultural projects over small-scale agricultural projects as they were more technologically advanced to mitigate climate related issues than their counterpart (Kriel, 2023). Although, susceptible to climate related misfortunes, small-scale agriculture provides other economic benefits on a local scale such as local economic stimulation through employment, entrepreneurial and other economic opportunities, which can drive economic growth within a country or even a community (Kriel, 2023). The economic growth eventually leads to poverty alleviation within the community and small-scale farmers are adapting and showing more awareness of their activity on the environment (Kriel, 2023).

Small-scale agriculture also presents an integrated approach towards promoting food sovereignty and justice by incorporating Indigenous knowledge and addressing historical food injustices (Maudrie et al., 2023; Sélingué, 2007; Thompson and Carter, 2022). This statement is further supported by Apraku et al. (2021) and Mburu et al. (2015) in their respective studies who (respectively) further demonstrates that small-scale agriculture, through knowledge sharing, promotes community building.

Essentially, developing countries like South Africa, should draw inspiration from their pre-colonial food systems with a fusion of present lifestyles and knowledge; of which Huffman (2012) successfully illustrates that African countries had self-sufficient food systems that had environmental, economic and social aspects of small-scale agriculture into consideration and how these

functioned well until colonialism disrupted these food systems. This, however, does not disqualify large scale commercial farming as a supplier, rather it could be focused more on exports to increase political power of the country.

2.5 CONCLUSION

Small-scale agriculture has demonstrated immense support towards uplifting vulnerable communities out of food poverty in many parts of the global South. However, in South Africa, small-scale agriculture is not necessarily faced with issues of food poverty alleviation, but rather, challenge of a changing landscape of what rural areas look like and what rural residents are interested in.

This included but not limited to, the increased reliance on social welfare and the government's inability to effectively support small-scale farmers in their farming struggles. While this is the case, the lack of capacity within communal farming remains the main contested factor against small-scale agriculture as the main food system in developing countries like South Africa. This biased argument is based on small-scale agriculture's current trends, without looking at the potential the sector has if it had government support. Amongst other benefits small-scale agriculture offers, it also increases environmental sustainability, economic growth in the area, and provides a suitable means of advocating for food sovereignty as people grow their own food in their own way.

CHAPTER THREE
METHODOLOGY AND DATA COLLECTION

King (1994) defines a research methodology as 'a theory or analysis of how research does and should proceed'. It is a combination of a selection of methods, the implications surrounding the selected methods and how the methods will be used (Campbell and Bunting, 1991). This chapter focuses on presenting a selection of methods chosen to answer the research question in this study and provides justifications for the choice of methods.

Overarchingly, this study follows a qualitative research methodology. Qualitative research strives to develop theories and understanding, with an objective to increase insight into the human condition (Garbers, 1996). Qualitative research uses tools like participant observation, an overview of documents, open-ended unstructured interviews, and artifacts to collect data (Garbers, 1996).

3.1 RESEARCH DESIGN

The research design focuses mainly on paradigms, ontologies, and epistemologies (Guba and Lincoln, 1994). Feilzer (2009:7) defines a paradigm as 'an acceptable model or pattern, as an organising structure, a deeper philosophical position relating to the nature of social phenomena and social structures.' The evolution of the paradigm debate has led to multiple philosophical standing of seeking the "truth" such as positivism, interpretivism and middle-ground approaches and they all provide the truth - whether objective or relative (Schwandt, 1994)

The "truth" pursued in qualitative research evaluates accounts based on their alignment with existing information rather than being measured against criteria for establishing 'absolute truth' (Denzin and Lincoln, 2005). The truth is, therefore, constructed and not subject to grand laws (Denzin and Lincoln, 2005). This

leads to the idea of relativist ontology, which is the idea that reality is constructed in engagement with social actors, and it is constantly changing, and the research process is also part of this changing reality (Guba and Lincoln, 1994). In this constantly changing reality, the truth is guided by epistemologies – positions of what constitutes acceptable knowledge. Therefore, this requires qualitative researchers to be cognizant of the truth they are pursuing and be open-minded about the research process, its limitations and referring to knowledge as final. This leads to the philosophical position assumed in this project, an interpretivist stance as truth is investigated through individual observers with their own perceptions and understanding of reality.

3.2 QUALITATIVE RESEARCH APPROACH

This qualitative study employs a blend of phenomenological and ethnomethodological approaches as outlined by Garbers (1996). The phenomenological approach involves the researcher's pursuit of comprehending the significance of events and interactions as experienced by ordinary individuals in particular situations (Garbers, 1996). The ethnomethodological approach is characterised by the researcher's exploration of how individuals construct and interpret their everyday lives (Garbers, 1996).

Qualitative research methodology involves a collection of varying empirical materials such as case studies, personal experiences, introspective, interviews, historical and observational texts that describe the routine and problematic moments and meanings in individual's lives (Ritchie et al., 2013). The empirical materials can be studies on a longitudinal time horizon, which is over several years; or cross-sectional time horizon which refers to observations made at a single point of time (Melnikovas, 2018).

This research study uses a case study approach, and adopts the data collection methods of literature review, in-depth interviews and participant observation. This was undertaken using a cross-sectional time horizon due to

time constraints. A case study aids researchers to examine complex phenomena in the natural setting to increase understanding of them by narrowing it down to manageable research question (Heale and Twycross, 2018). Due to its qualities, a case study as a research strategy is a good option for researchers who are undertaking research on a smaller scale with limited resources (Rowley, 2002).

It is frequently critiqued for missing integrity and impartiality in comparison to other qualitative approaches (Rowley, 2002). However, one of the advantages of using a case study is its ability to offer insights that might not be achieved in other methods (Rowley, 2002).

This research focuses on a group of people in a specific area to understand the perceptions that rural residents in South Africa held towards small-scale agriculture for commercial purposes. The chosen case study in this research is a community of Ga-Moeka in the Moretele Municipality. This community was found suitable for this study as it has a people with agricultural background, a settlement with characteristics that are both rural and urbanised to some extent and a municipal development plan that aspires to increase agricultural activity in the area. The background to this case study, and rationale, is explained further in the Study Site Chapter.

Data Collection

High-quality data collection is essential for the development of information in social sciences (Axinn and Pearce, 2006). This study made used of several data collection tools as a research strategy, which was essential for the integration of data to gain a holistic understanding of the subject (Axinn and Pearce, 2006). This approach allowed for a balance in the different tools whereby one tool would cover the weaknesses of the other. Employing a variety of instruments for data collection permitted the researcher to obtain data gathered from one technique that was not discovered in another technique; decreased non-sampling shortcomings through supplying duplicated data

collected from various sources; and guaranteed that a potential bias from one approach does not occur in different approaches. The data collection in this study was done through methods: in-depth interviews, participant observation and a literature review.

Sample and Sampling

The formula to determine a sample size is a highly debated subject among methodologists (Marshall et al., 2013). The ambiguity within qualitative research trickles into the methodologies (Andrade, 2020). The onus is on the researcher to determine the sample size in accordance with what is being studies and whether the research question/s has been answered (Mthuli et al., 2022).

However, a recommended criteria to estimate an adequate sample size is using saturation and sufficiency. Saturation in process follows the idea that the sheer quantity of essential participants usually ends up apparent as the study develops, as new categorises, themes or explanations stop forming from the data, while sufficiency centres on the diversity of participants and sites that make up the population at large so that those who were not studied can have an opportunity to connect to the experiences of those in it (Mthuli et al., 2022). Other factors that influence sample size include, but not limited to, the researcher's experience, the quality of information collected, analysis techniques used, etc (Andrade, 2020).

Using the Define, Explain, Justify, and Apply sampling strategy, the researcher opted for a selection of study participants for in-depth interviews that was a non-random, purposeful sample of two experts, two community leaders and 20 community members. The selection of community members was based on location and knowledge/experience with agriculture (i.e. having a vegetable patch or garden). The group of 20 community members was selected based on ages, geographical locations of residence, whether they were farmers or non-farmers. The selection of the community members was done at random with potential participants accessed through door-to-door visits. Additionally,

the study considered inputs from an Agriculture expert from the Agricultural Research Council (ARC) and her inputs contributed towards understanding the reasons behind a decline in agricultural activity among the youth, government support available towards agricultural activity and other themes such as how communities can empower themselves to foster rural development in their areas. These inputs were accessed through a YouTube interview with Food for Mzanzi and permission was granted by the Food for Mzanzi CEO.

A representative group of 20 members of the community is required and suitable for the magnitude of the study in question, given the limitation of resources, limitations on time, and research topic (Lakens, 2022). Additionally, the emphasis does not lie with numbers, but rather on identifying qualitative accounts and personal accounts to guide more representative research. A selection of 20 community members allowed for recurring themes to be more prevalent as most of the answers were similar. However, each interview was unique, offering insights into other themes that were further investigated in interviews that were conducted at a later stage that could not be explored in early ones, which provided more perceptions on issues that the researcher did not consider prior to engaging in the fieldwork.

Observations

The researcher visited the study area numerous times to observe the landscapes and the patterns that residents portray in relation to agricultural activity. The observations were done simultaneously with the interviews. This was done from the 18th of December 2023 until the 21st of January 2024. The visits occurred two-three times a week, depending on the weather. The observations were done by walking through the study area, taking pictures (See Chapter 5) and taking notes of vegetation patterns that dominated the area.

The crops on several streets sighted assisted in understanding the intensity and type of small-scale agriculture that was present in the study area. This also assisted the researcher with the openings of the conversations with potential participants for example, those with crops like fruit trees and corn, the researcher would introduce themselves and casually inquire and compliment the potential participants' green fingers as informed by observations made.

In-depth interviews

In the current research, comprehensive interviews were performed with the individuals, who shared their thoughts on small-scale agricultural production in their region through narratives. They accompanied the researcher on a tour into their histories and encounters with small-scale agricultural activities, both substance and commercial, to provide insights into the subject. The interviews were anonymous but recorded and complied with the university's ethical considerations.

The first set of people questioned were members of the community, and their responses contributed towards improvement of and preparation of a set of questions that would be asked to experts. As there were no experts interviewed, the questions that came up from engaging with community members were mostly answered by the ARC researcher. To access and interview different age groups, different communication methods were utilised. Interviews were done both online and in-person. Interviews that were done online were conducted through social media platforms such as WhatsApp, Facebook, LinkedIn and Instagram. This communication mode allowed for better access to the youth, as they expressed being more comfortable with having an online chat over WhatsApp/Instagram calls or text than a visit. Most of them expressed that the reason for this was that the festive season was a very busy time therefore this suited their schedules better. House visits were made to households that had an elder sitting outside. Most of the potential participants approached welcomed being interviewed, mostly

because they were already familiar with the researcher and the researcher presented themselves in a respectful and polite manner.

The researcher realised that the issue with festive season and closure of many organisations also meant that most experts were not available for interviews. To mitigate this matter, the researcher proceeded to search for a subset of data that was in alignment with the research topic and consulted with online platforms whereby a YouTube video of a discussion with a researcher from Agricultural Research Council, hosted by Food for Mzanzi.

With permission from the organisation's co-founder, Ivor Price, the video from Dr Finca uploaded on YouTube on the 13 December 2023, provided a relevant expert's insight relating to this project's topic. The insights from Dr. Finca substituted an interview with an expert in the field. In an era where social media plays a significant role in information access, it is also important to note that there are issues of how to ethically evaluate the usage of information that is already publicly available (Patterson, 2018). In this regard, researchers such as Longhurst (2009) and Markham (2012) have acknowledged the ambiguity of issues of privacy with regards to the information that individuals publish online. It is therefore the researcher's job to portray this information from the stance of the individual and their circumstances – without imposing the researchers' understanding of the world on the thoughts of the individuals. The researcher is also to accept the limitations that come with this type of data collection whereby he/she (the researcher) must accept the parts of the individual's life that are shared, without making further assumptions (Patterson, 2018).

Data Analysis: Thematic Analysis

Thematic analysis is a crucial component of research since it aims to help researchers make interpretation of the "raw" material obtained to clarify or articulate observable phenomena. The methodology employed in this study for data analysis aligns with the approach outlined by Köhler *et al.* (2022) in their article on Templates in Qualitative Research Methods: Origins, Limitations,

and New Directions. The primary objective of the data analysis was to identify overarching themes that encapsulate perspectives, experiences, and motivations related to the subject under study (Köhler *et al.*, 2022). To address the research question, a more experimental approach was taken, focusing on participants' thoughts, emotions, and actions, guided by the theoretical assumption that language reflects reality (Terry *et al.*, 2017).

The analysis took a methodical thematic assessment approach, using a focused zoom-in and zoom-out technique to move through more advanced concepts and individual perspectives, experiences, and intentions (Köhler et al., 2022). This approach facilitated the exploration of general trends in the field as well as variations in individual experiences and motivations. The zoom-in technique delved into each interview at a detailed level to avoid overlooking important variations and prevent premature convergence on a narrow set of high-level themes (Köhler *et al.*, 2022).

The subsequent steps involved summarising all interviews to capture the core themes identified initially and then employing a zoom-in approach again to code verbatim interview content within each theme across participants (Köhler *et al.*, 2022). This deep dive into the data allowed for an in-depth comparison of quotes across participants, revealing nuances and variations in perceptions and experiences related to template use.

The subsequent phase involved constructing a thematical framework, which entailed an active process of pattern formation and identification, guided by the research question (Terry *et al.*, 2017). Building on the codes established earlier, this phase refined themes into more meaningful patterns, resulting in the development of a thematic map of candidate themes through a reflective process of data engagement.

In the final stages, the thematic map was reviewed and defined, ensuring alignment with the coded data and creating a final thematic map with clearly defined themes. These themes are subsequently discussed in Chapter 5: Presentation and Interpretation of Results.

Ethical Considerations

Due to historical unethical research, especially under medical sciences, the need for ethical approval before approaching participants is needed for data collection (Gelling, 2016). Ethical approval for this study was obtained from the University of the Witwatersrand Ethics Committee in June 2023 – clearance number: GAES_2023_07_008. Before obtaining the approval, an application was made and it addressed issues of anonymity, confidentiality, describing the study, and dangers involved in conducting the fieldwork.

In terms of approach, the researcher reached out on Facebook, in the streets and in house-to-house visits for individuals that were interested in participating in the study. The researcher then described the research and its purpose, which were also stated on the participant information sheet. When the potential participant agreed to take part in the study, a consent form would be handed to the participant and have their rights read out in Setswana Language to ensure that there is no misunderstanding. Other issues such as not offering incentive or any sort of payment to the participants were explained before signing the consent form. To safeguard participants' identities, they remained anonymous by default, with the option of dropping their anonymity if they wanted to be featured in the report.

The interviews were recorded with the interviewees' agreement using a tape recorder. The data gathered was retained on a computer with a password for one year after the study report is submitted, after which it will be deleted. The study was considered medium risk to participants and contact information for assistance was supplied.

Limitations

The study had various limitations and opportunities. The researcher's familiarity with the study area significantly increased access to participants. The researcher also used subtle strategies to access participants like dressing

modestly and using a respectful form of address towards elders. This did not only impress the elders but also encouraged them to open more about their experiences and sharing more information about the village itself and what they consider to be the overall perception of the community is towards small-scale agriculture.

The fieldwork was done during the festive season from the 18th of December 2023 to the 21st of January 2024. This limited the researcher's access to institutions like the Agricultural Research Council and Agricultural Extension Offices. However, secondary data from experts in these institutions was used. This data was in a form of interviews from experts uploaded on YouTube. This afforded the researcher an opportunity to have an expert's opinion on the subject matter and not compromise the quality of the findings.

The interviews done over text were found to be limiting as these eliminated communications by body language and the use of filler words. The absence of body language conveyance and interpretation limited the researcher's understanding of the participant in their personal space.

3.3 CONCLUSION

Research design for this study was inspired by the research onion model by (Saunders and Tosey, 2013). In pursuit of the truth, the researcher took an interpretivist philosophical position. With the use of research methods that complimented each other for the truth to be pursued without bias. The use of a case study allowed the researcher to narrow down the researched phenomena to a single place in a certain period as a representative sample of a larger group.

The procedure of the data collection phase was explained in detail to allow replicability, so that reliability and validity of the chosen research method. The use of in-depth interviews and observations enabled the researcher to collect data like a traveller on a journey/a miner in a mine: researching with an open mind but still looking for treasure.

CHAPTER FOUR
CONTEXTUALISATION OF THE STUDY AREA

Contextualising the study area allows the researcher to set the scene for the reader which acts as a backdrop for the events and perceptions that people have of their space. The following chapter looks at the site's geographical locations, environmental and climate condition, economic activity, socio-economic factors. This chapter aims to assist the reader in positioning themselves to better understand what shapes the perceptions of those studied on site.

Ga-Moeka village is a 7,2km^2 set settlement located in Moretele Municipality in the North West Province, South Africa. Moretele Municipality is in the North-West Province, within the Bojanala District. Historically, Former President L.M. Mangope of the independent Bantustan Baphuthatswana governed the current Moretele Municipality throughout the Apartheid period (Jones, 1999).

4.1 GEOGRAPHICAL CONTEXT

The North West Province is a province located north central of South Africa and links South Africa and Botswana. It is known as the largest Platinum production area in the world (Steyn, 2006). The land in the North West Province is characterized as 28% arable land, 56.8% grazing and 14.9% conserved (Botai et al., 2016). The topography of the land is generally flat and gently undulating (Materechera, 2010). It is predominately rural area (65%) while urban areas constitute of 35% of the total settlements (Botai et al., 2016). Moretele Local Municipality is located to touch boarders of four provinces, namely North West, Gauteng, Limpopo and Mpumalanga, which puts it at an advantage in terms of access and linkages to other provinces (Moretele Municipality IDP, 2021).

4.2 ENVIRONMENTAL AND CLIMATE CONDITIONS

The village has similar environmental and climate conditions to those of the Moretele Municipality (Moretele Municipality IDP, 2021). It falls within the savanna and grassland biomes (Cole et al., 2021). The geology of the Municipal area is composed of mainly arenaceous and argillaceous sedimentary strata with volcanic lavas and intrusive (Moretele Municipality IDP, 2021). It is also characterized by climate conditions that have warm to hot summers, and both unreliable and highly variable rain (Materechera, 2010). The area is also susceptible to frequent mild droughts and occasional floods (Botai et al., 2016; Moretele IDP, 2023).

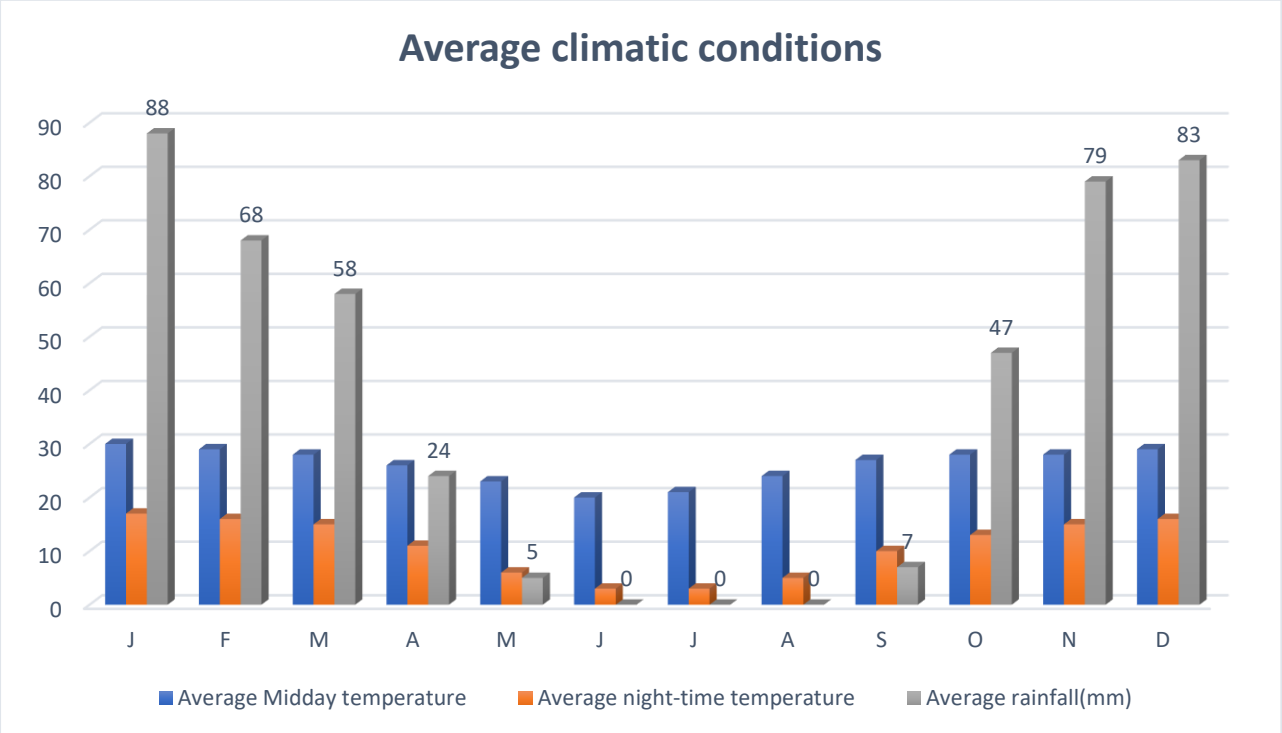

Figure 1: Climatic conditions within Moretele Municipality. Source: SA Explorer (2023).

This, coupled with the environmental conditions fosters inadequate soil moisture and poor soil fertility in the area which is evident in the vegetation that thrives being one that is drought-resistant such as corn and pumpkin veins. This also impacts the agriculture in the area, and the economy (Materechera, 2010).

4.3 DEMOGRAPHICS

Moretele Local Municipality has a population of 191306 with 51% of the population being between the ages of 18 to 64 years (Wazimap,2023). The language spoken by most of the population is Setswana (Wazimap, 2022). There are over 55 000 houses with 9.6% being informal dwellings. 43,4 % of the households are headed by women while 262 households are headed by persons under the age of 18 years (Wazimap, 2022). The area has an annual household income of R14 600 which is below the poverty line of R1335 per month (R16020 annually) (Business Tech, 2021; Wazimap, 2022; Statistics South Africa, 2023a).

Governance of the area is shared between the municipality and traditional authorities, with traditional authorities being the custodians of the land while local municipality oversees service delivery (Wazimap, 2022). Services provided to the community is relatively poor (Moretele Municipality IDP). At a local scale, only 57.1% of the population gets its water from regional or local service provider, while most of the population relies on buying water from neighbours, vendors, and digging up boreholes. Infrastructure for electricity and the electricity itself is provided directly by Eskom, and only 4.2% of the population has access to flush or chemical toilets, while most rely on pit latrines (Wazimap, 2022). In terms of education, 34.2% of the Moretele residents have completed matric or higher (Wazimap, 2022).

4.4 ECONOMIC ANALYSIS

The municipality comprises of rural villages that depend on social grants and subsistence farming for survival (Wazimap, 2022) About 25.8% of the population is employed, of the 25.8%- only 65% are employed in the formal sector (Wazimap, 2022). These employment opportunities are in neighbouring towns such as Hammanskraal, Pretoria CBD, and shopping centres around the area, while others find employment opportunities further away from Moretele Local Municipality. On average, most people in the municipality earn an annual income of R30 000 (Wazimap, 2022). The municipality does not have a defined

economic driver as most people rely on social grants, subsistence agriculture, and employment in neighbouring towns (Moretele Municipality IDP, 2022).

Future Spatial Development for Moretele Local Municipality

The local government intends to foster cooperation among numerous stakeholders as stipulated by the Comprehensive Rural Development Programme (Moretele Local Municipality, 2020). This plan is carried out throughout the municipality's boundaries as part of a Local Economic Development Strategy (LED), which is powered by the Manufacturing industries, Agriculture, and the tourism industry, which are mostly headed by Micro and Medium Enterprises and proprietors. In accordance with Principle 4 of the Development Principles, the municipality has an agricultural and rural growth plan that seeks to safeguard high-potential farmland while also encouraging expansive small-scale commercial farming enterprises. This LED strategy includes Ga-Moeka as it is situated within the municipality's main developmental corridor, which is Soutpan Road.

Ga-Moeka village is one of the communities that are prone to floods and veld fires that have potential to destroy properties, livelihoods, and infrastructure (Moretele IDP 2022/2023, 2018). The matter of occasional floods in the western parts of the Municipality (Ga-Moeka, Swartdamstat and Ga-Motla) are being addressed through the construction of a catchment area/dam, and water channels, which will serve as a good storage for the agricultural activity being researched.

4.5 STUDY AREA: GA-MOEKA

Ga-Moeka village is located within Ward 25 of the Moretele Municipality in the North-West province, -25.3352° or 25° 20' 7"S; 28.0588° or 28° 3' 32"E (Mapcarta, 2023). The settlement has a resident population of 3756 (StatsSA, 2022). Most of the people are black Africans. More than 20% of the village's inhabitants have little to no income or survives on a monthly budget of R4800 (StatsSA,

2022). Unlike surrounding villages in Moretele Municipality, Ga-Moeka is completely under the Municipal authority (Moretele Municipality IDP, 2021). The village consist of an old section called Mzimdala and a new section, which comprises mainly of RDP houses on a floodplain and the residents are mostly youth.

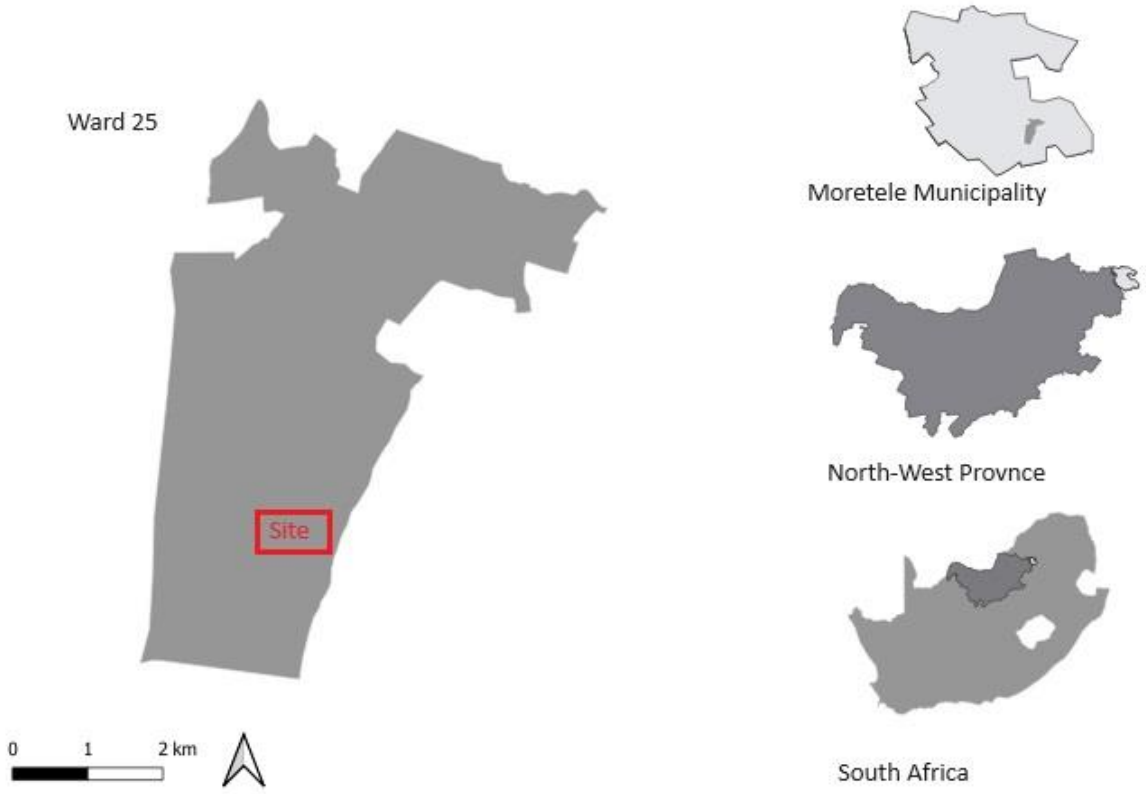

Figure 2: A map of the study area: Ga-Moeka with the province.

The village's populace is diversified in terms of age and experience. Amongst other, this region has been selected because includes agricultural indications, with numerous inhabitants throughout decades participating in both livestock and crops small-scale agriculture (subsistence and commercial). In addition to the longstanding tradition of small-scale agriculture in the neighbourhood, the site was chosen to see if geographical differentiation affected inhabitants' perceptions of small-scale agriculture.

The community is situated alongside the development corridor and is classified as a minor hub under the Moretele Integrated growth Plan 2022/2023. This secondary nodes' growth is stipulated to protect, enhance and promote

business activities within the identified areas and provide training to local and potential farmers to diversify crops, while the medium-term goal is to provide infrastructure to farmers and promote infrastructure development (Moretele IDP, 2023/2024). These developments will be accompanied by a tourism strategy (Moretele IDP, 2023/2024).

4.6 CONCLUSION

In conclusion, this chapter has provided a comprehensive overview of Ga-Moeka village within the context of the Moretele Municipality in the North West Province, South Africa. By examining the geographical, environmental, climatic, socio-economic, and governance aspects of the area, a groundwork for understanding the dynamics shaping the residents' perceptions and livelihoods was laid. Ga-Moeka, with its unique blend of traditional and contemporary elements, serves as a microcosm reflecting broader challenges and opportunities faced by rural communities in South Africa. It is evident that Ga-Moeka's position along the development corridor and its inclusion in the municipality's Local Economic Development Strategy are pivotal factors influencing its future trajectory. By recognising these contextual nuances, a backdrop of the complexities underlying residents' attitudes towards small-scale farming are set in place and these will contribute to informed decision-making for sustainable development in the region.

CHAPTER FIVE
FINDINGS

The aim of this chapter is to present and analyse data collected on the perceptions of rural residents in South Africa towards small-scale agriculture. The data was collected between December 2023 and January 2024. The different methods that were used included observations and in-depth interviews with various stakeholders in various sites in the village of Ga-Moeka in the North-West Province, South Africa. What follows are various subsections on the findings and themes that emerged from the findings.

5.1.1 OBSERVATIONS OF THE STUDY AREA

An observation of the vegetation in the study area was done to better understand the area on different scales. The fieldwork took place during a rainy season which enhanced the amount of greenery on site. The area has an abundance of different kinds of mature trees and grass, which are also visible on an aerial map (see Figure 3).



Figure 3 map showing the study area with main and collector road. (Source: Google Earth, edited by author).

From figure 3, there is also a difference in vegetation intensity north of the Pavement and south of it. South of the pavement are the RDPs which are 21 years old while the north is over 40 years old. The older settlement is associated with mature trees in the north of the area. This distinction, however, is influenced by other factors like demographics, plot sizes and the scale of the above map (Figure 3).

Household vegetation and gardening

Employing a zoom-in technique, Vuma road (pavement[1]) was surveyed to closely observe the type of vegetation on either side of the road. The difference in plot sizes along the road averaged around 1 053.2 m^2 on the north, while the south is made up of, on average, 450 m^2 plot sizes. The availability of land in the north, allowed its residents more space to practice farming while the houses on the south were closely compacted, with less land (see Figure 4 below). Another significant observation was the street frontage of both areas. The north had an abundance of wild grass between the fences and the street. The grass would extend into people's yards. While the street frontage in the south would be exposed soil surface and raked by the owners of the yards within immediate vicinity.

[1] This road is known as the pavement in the area as it is a paved road. This was influenced by the type of material used to construct it (bricks), it was also the first pavement in Ga-Moeka and lastly, the actual name of the road was made known several years after the construction of the road.



Figure 4: Types of vegetation present along Vuma Road. The vivid lines imply the dominance of the vegetation type in the yard and the shaded colour implies the second most dominant vegetation on the yard. Source: Google earth (2022), edited by author.

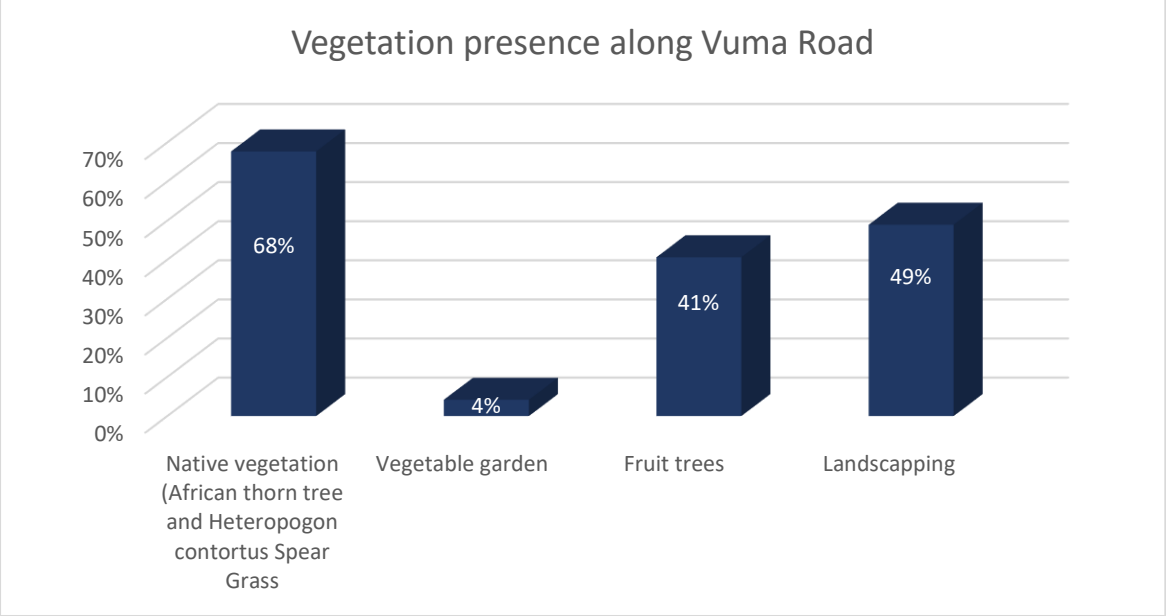

Figure 5 the dominance of various vegetation[2] along the 1.86km pavement, Vuma road with a total of ninety-six plots.

The vegetation in the different yards along the pavement were observed (see Figure 4 and Figure 5) and the observations indicated that wild vegetation (thorn trees and grass) dominated the area, followed by non-fruit trees then

[2] Pictures of various vegetation in the area are below.

fruit trees. The reason behind the preference for non-fruit trees(49%) over fruit trees (41%) was that unpicked fruit brought about a lot of smell during the harvest season, while non-fruit trees were low maintenance (less cleaning) and equally provided shade and beatified the yards. Only four houses along the 1.86 km street (measurement provided by Google Earth, 2022) had visible vegetable gardens. However, surveying the North and South side of the settlement together skewed the findings, this prompted the need individual observations of each side. The graph below shows the findings from this observation, with 46 (North) and 50 (South) houses survey along the Vuma road (pavement).

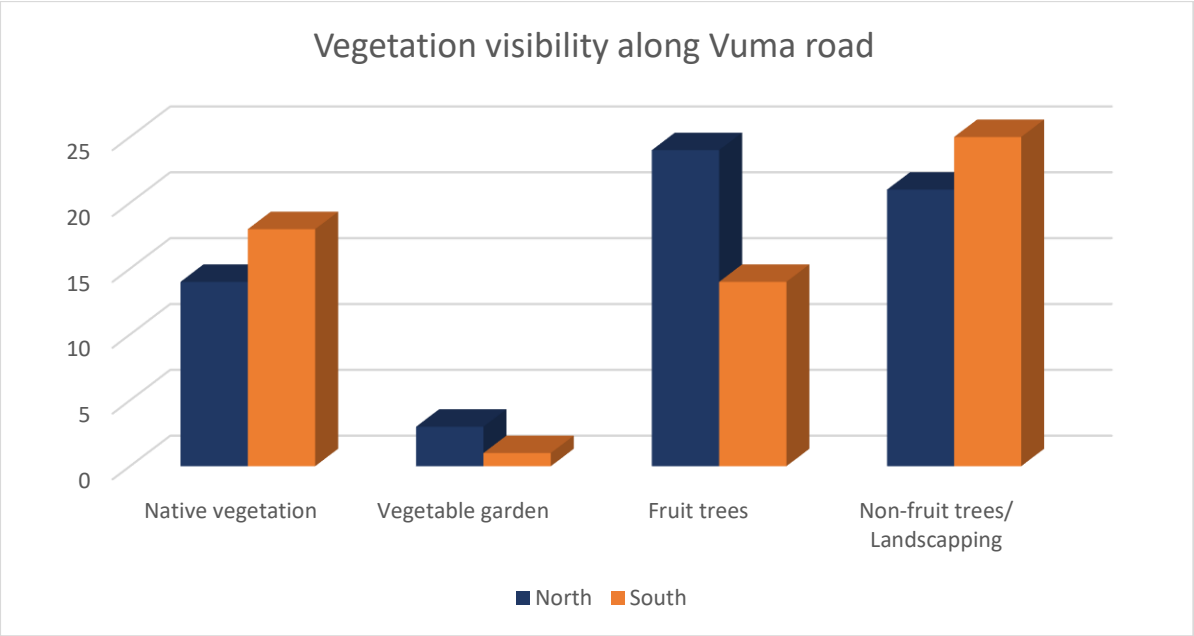

Figure 6: Vegetation visibility along Vuma road and indicating vegetation preferred by residents on each side of the pavement.

These findings indicate that residents of the RDPs prefer to grow non-fruit trees, mostly for beautification and shade in their front yards while households in the South plants a lot of fruit trees. The fruit trees planted in most yards include peach, banana, mango, grape, guava and citrus trees; while staple crops such as corn, beans and pumpkin veins are also prominent in most gardens (shown in figures below). The pictures also provide insight into behaviours of the residents who have fruit trees. The trends indicated that households with fruit trees would usually have more than 3 fruits in their yards. In the following

pictures, fruit trees are highlighted in yellow to indicate dominance in different parts of the area.



Figure 7: 1 in 2 houses have at least fruit trees in the old section of the area. Visual presentation of fruit tree intensity in the area. Located North of Vuma road (the pavement).



Figure 8: The young fruit trees in the recently built RDPs. Visual presentation of fruit tree intensity in the area. This is located along the main road, Soutpan Road.



Figure 9: A typical vegetable patch in the area, with crops like corn, beans, and pumpkin veins. This is located North of Vuma road (the pavement).



Figure 10: A typical vegetable patch in the area, with crops like corn, beans, and pumpkin veins. This located North of Vuma road (the pavement).



Figure 11: A yard growing grass on its own than having the owner choose specific vegetation to grow, located North of Vuma road (the pavement).



Figure 12: Yards where owners chose to have less vegetation along the pavement, Vuma road.

Government Projects

Another observation that was made in the study area was a parcel of land approximately a hectare in size (figure 14 below). The plot is fenced and has a water tank. Upon inquiry, it was discovered that this land was allocated for communal agriculture. However, it was not in use yet. Questions around the utilisation of this land were asked and senior citizens were aware of the available land but preferred growing crop on their yards, while the youth in the area were not aware of what the land was for.



Figure 13: Land allocated to communal farming; the land had been irrigated but it has turned into a grassland again. This is located along the pavement, Vuma road.

The last significant observation was of the water project that commenced before the fieldwork took place (see Figure 15 below). This project was implemented by the Moretele Local Municipality, and it aimed to increase water supply in the area by establishing this project as the node of the entire network. Notably, the onus is upon the residents to connect themselves into the network and draw water through their own outdoor taps. Interviewed participants believed that these recent projects were the governing party's strategy to get the residents to vote for them again in the coming election.



Figure 14:A utility hole which is part of the water project along the Pavement, Vuma road.

5.1.2 SEMI-STRUCTURED INTERVIEWS WITH RESIDENTS

The semi-structured interviews occurred alongside the field observations. Below are the main findings of the interviews, organised according to key themes.

Demographics

Participant information (Community members)					
Participant No.	Age	Group	Gender	Occupation	Education level
1	18	B	F	Matriculant	Grade 12
2	20	B	F	University student	Grade 12
3	23	B	M	University student	Bachelor
4	76	A	F	Retired	Incomplete h. school education
5	47	A	M	Unemployed	Not specified
6	45	A	F	Unpaid care labour	Bachelor
7	25	B	M	Unemployed	Grade 12
8	27	B	M	Self-employed	Grade 12
9	18	B	M	Matriculant	Grade 12
10	46	A	M	Factory worker	Incomplete h. school education

11	49	A	F	Unpaid care labour	Bachelor
12	69	A	F	Retired	Incomplete h. school education
13	23	B	M	University student	Bachelor
14	31	B	F	Office worker	Bachelor
15	28	B	M	Office worker	Bachelor
16	27	B	F	Self-employed	Grade 12
17	29	B	M	Factory worker	Grade 12
18	45	A	F	Unpaid care labour	Grade 12
19	25	B	F	University student	Bachelor
20	56	A	F	Teacher	Bachelor

**h.school= high school*

Age groups

The researcher interviewed 20 community members in Ga-Moeka. The ages of the interviewed persons ranged from 18 to 77. The ages were grouped according to major transitions (such as the transition from labour-intensive work to industrialised work, amongst others) that took place in recent history. This was done to position the interviewees' experiences in context to national events and global influence.

The decrease in small-scale agriculture was most prevalent in the 1960s (Simkin,1981). This was accompanied by the transition of the country's economy from intensive blue-collar jobs to white collar jobs (Habib and Padayachee, 2000). This served as dividing line in time between Group A (Baby boomers and Generation X: 1946-1980) and Group B (Millennials and Generation Z:1981- 2006) (Berkup, 2014). It is notable that in the findings there were distinct differences in the views of the two age groups (discussed below).

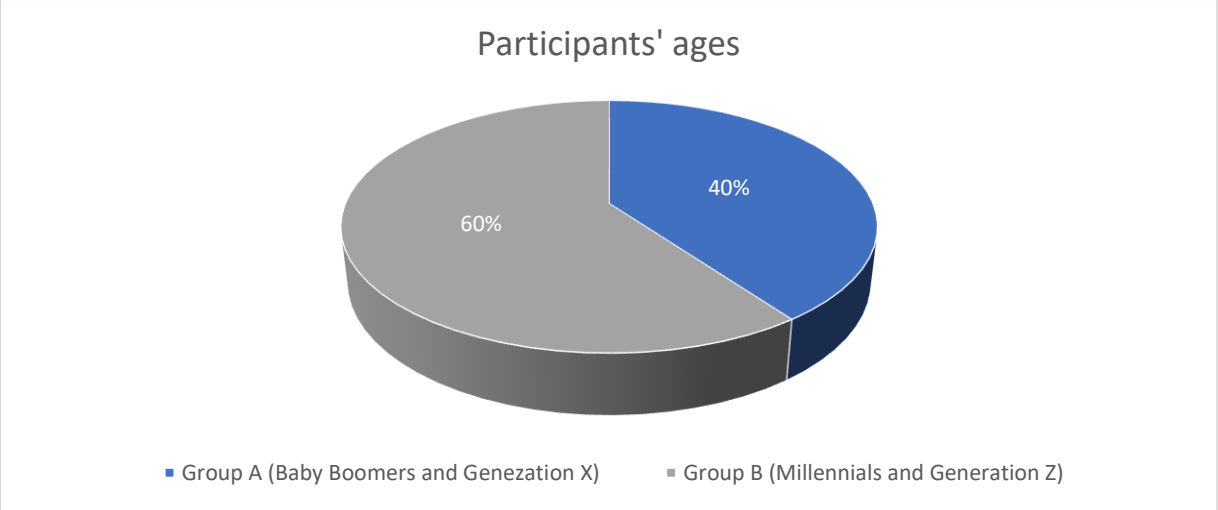

Figure 15: The percentage of participants in a specific age group.

Occupation and level of education

The participants interviewed were mostly women who participated in unpaid care labour, and unemployed youth in their 20s and 30s (both male and female). 62,5% Group A participants had completed grade 12 and mostly spent their career years working various jobs in urban areas and have now retired while others have dedicated their time to unpaid care labour (supported by husbands or widowed). Only 25,7% of the population in Ga-Moeka that is above 20 years of age have completed matric and 3% has furthered their studies.

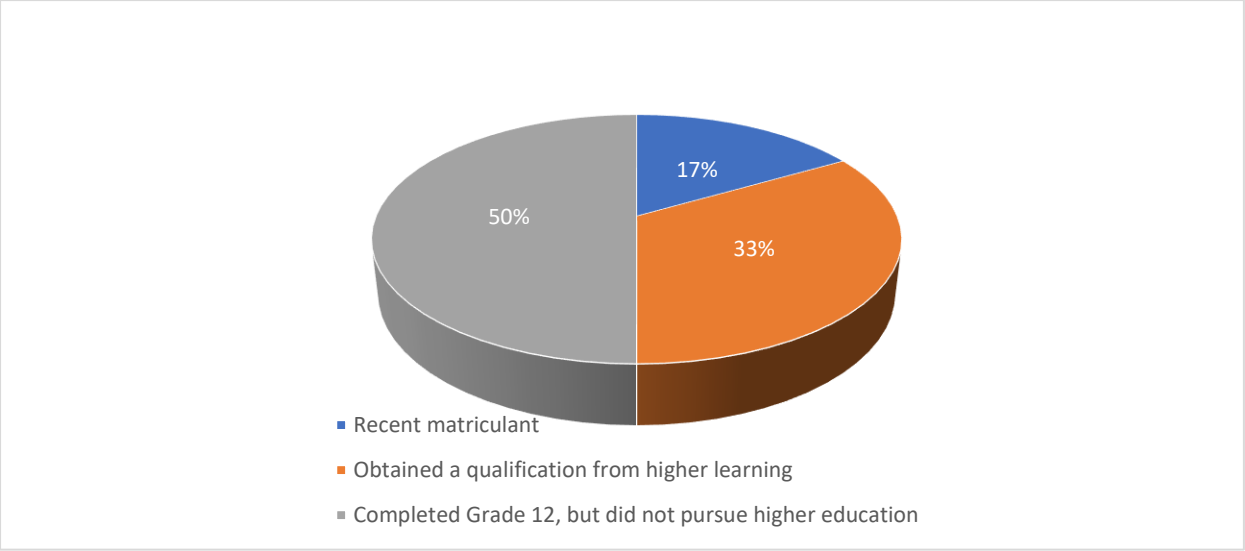

Figure 16: Qualifications held by rural residents in Ga-Moeka.

Place of birth

Most of the participants (85%) were not born and raised in Ga-Moeka. However, they originated from within the North West Province. Although from different parts of North-West, most of the Group A participants were born under the Bophuthatswana administration and associated with the Batswana culture. This enabled the participants to easily integrate into the village.

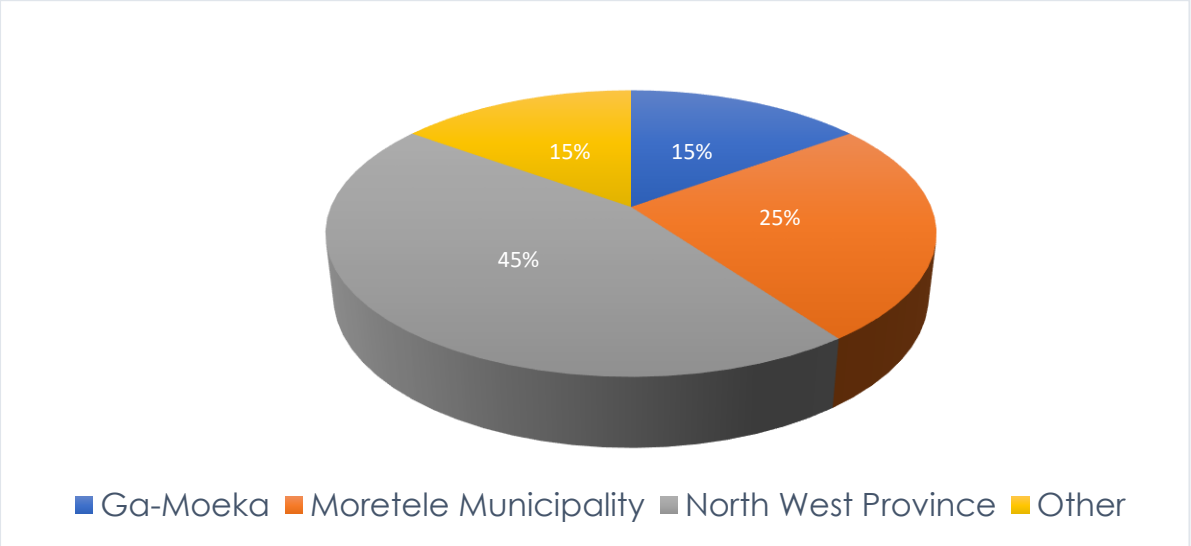

Figure 17: Chart showing where participants originate from.

5.2.1. THEME 1: AGE, TIME, AND DIFFERING PERSPECTIVES OF AGRICULTURE

In the interviews, it became evident that the temporality of participants' life stories served as important background to their perceptions. In the context of South Africa – Apartheid, the dawn of democracy, and their respective legislative shifts are some of the significant vehicles that drove change in perceptions in South Africa.

During the interviews, historical shifts and events emerged regularly when the participants were asked about their background, family history with growing one's own food and whether they are currently growing their own food or not. 87,5% of the participants in Group A indicated that they came from families that practiced small-scale agriculture and they also participated in the agricultural activities that took place on their farms. However, in their

adulthood, they sought employment in urban areas while others were involved in unpaid care labour, and this continued until they reached retirement age. Currently Group A females have their own backyard gardens to keep themselves engaged while at home.

At the time of the interviews, 75% of participants in Group A had their own vegetable gardens in the yards. While 83,3% Group B, indicated that they had no interest in agricultural activities for distinct reasons such as:

"It does not suit my personality… it requires patience and dedication." – Participant 3, Group B

"I would rather be on my phone on social media than outside… it seems like such hard labour with less profits." -Participant 7, Group B

"I would try it, but the issue of water [scarcity] is discouraging me." – Participant 15, Group B.

Participants 1 and 8 had different views:

"Growing up my dad loved farming and before we moved here, he had a little patch in my mom's garden where he planted tomatoes to produce just for us (subsistence farming). The reason why we moved here was for my dad to carry on […] farming and producing not only for us but supermarkets as well. That's where I learnt about farming and that's where the inspiration came from. [I will be carrying out the legacy]. I have big plans for our community. My dad started something great, and I want to carry it on." -Participant 1, Group B

"…because if a lot of people consider farming, it means that the price of the food will decrease since there will be a large quantity of food produced. Instead of buying milk, they can get milk at a low cost and

when food is cheaper people will have much to save and less to spend"

– Participant 8, Group B

In all the interviews, shifts in the scale of land where people practiced their agricultural activities changed over time. Although none of the Group A participants explicitly mentioned the issues of forced removals under the Bophuthatswana administration, they refer to witnessing the land for agricultural purposes in their families decrease from 'mashemo' (direct translation: big farms) to tshingwana (direct translation: small vegetable garden/backyard garden patch). The decrease in scale was influenced by the global and local economic and environmental shifts with some participants stating that:

"My family owned a ten morgen [8.567 ha] farm in Jonathan [rural community in Moretele Municipality] from 1962 - 2005. This farm was so big, we could not see our neighbours' houses. We grew corn, [etc.] … and after harvest, we would put the corn in about 50 50kg sacks to Gabedi for processing (go-shilwa) and for each 50kg sack of unprocessed corn, we would get 25kg of maize meal. However, due to rain shortage, families relocating to villages such as Ga-Moeka, Swartdamstad and Soutpan, closer to Mabopane (previously a major economic hub in the area), the system started dying down and there was an introduction of processed maize meal sold in supermarkets, so we sold our farm and relocated to Ga-Moeka too. This was around 1985."

– Participant 12, Group A

Environmental factors, shifts in the economy and technology have influenced the agricultural activity in Ga-Moeka over time. This is further supported by Participant 12, who narrates the formations of Ga-Moeka village and indicates *that* the village emerged because of people relocating from their big farms to smaller yards and closer to employment opportunities, letting go of agriculture

as the main source of sustenance. However, agriculture continued as part of culture, as one of the participants disclosed in their response.

Amongst other factors, the decrease in exposure to agricultural activity contributes significantly to the evident lack of interest by the youth (Group B). Participants of Group A with backyard gardens stated that they have the gardens as a form of activity to keep busy at home. Group B participants also made similar observations about their elders, holding a perception that agriculture is a "fun" activity for elders rather than essential. These claims are also supported by the underwhelming presence of small gardens within the community and even fewer gardens in the RDPs where mostly youth reside (see map 3 above). One participant noted this too, stating that:

> *"Today's youth is not interested in learning how to grow their own food, which is scary because we live in an unstable economy, what will happen to them when we are not there, and they cannot feed themselves? Food is life and they should not rely on buying from shops."*
>
> - Participant 4, Group A

5.2.2. THEME 2: ADAPTATION, CULTURE, AND INNOVATIONS

In the period of the fieldwork (December- January), the area experienced some heavy rainfall, however, not enough to cause damage or flooding. The vegetation in the area, especially in the north, did assist in enhancing natural drainage by absorbing most of the water, while the north showed signs of difficulty with infiltration through the exposed clay soil. Although the area was green, it is important to note that the food-related vegetation was mostly water-resistant crops and mature fruit trees. These require less water from the surface and rely on the moisture below, drawn through the roots (Mburu et al., 2015). However, there are various methods and strategies of climate adaptation that residents of Ga-Moeka incorporate in their agricultural endeavors.

Ga-Moeka residents uphold many Batswana traditions, including related to traditional foods. A success in growing these foods in a climate crisis has

consequently led to evolving indigenous knowledge. Participants 4 and 5 had unique ways of ensuring success in their gardens. Participant 4 is a retired elderly woman whose family had a farm in one of the rural villages of Moretele Municipality where she learned grafting[3]. This practice has enabled her to have more fruit trees in her yard while saving water.

Participant 5 used to work in large commercial farms in Limpopo, and he mitigates issues of climate change by taking the risk of growing his crop in winter so that he can control the amount of water that goes into his garden. He does this to avoid the uncertainty of the weather and rain during summer as plants are fragile and do not want extreme heat which quickly kills the leaves or floods which weaken their stem. Although, it was not popular with participants to grow their crops in winter, grafting was well-known in the area as several yards had similar horticulture and supplementing it with rain-harvesting.

The infusion of Indigenous knowledge, experiences from workplaces and innovative ideas have shown to foster resilience and success of crop production of those who are interested in small-scale agriculture in the area. Thus, crops that have cultural value are still thriving. This suggests that a new generation of indigenous knowledge is being developed and passed on amongst the residents and it is evolving to suit the new climatic conditions that the world faces today.

Many cited that there was a problem with the food being consumed today. Notably, although Group B was not keen on engaging in agricultural activities, they still preferred fresh produce from their backyards over the ones from large commercial farmers. This was due to their perceptions around unknown chemicals (GMOs) used to accelerate the growth of this produce. All

[3] Grafting is an agriculture procedure in which one plant is attached to another to produce a desired effect. The upper portion of the plant (the scion) bonds to the bottom section of the plant (the rootstock), and the two parts develop together to produce one plant. This method of propagation is commonly used in agriculture, notably in fruit tree production, where it enables the proliferation of certain cultivars and the generation of disease-resistant plants.

participants understood that GMOs were used to meet the food demand, however, they found the method questionable with some stating that:

> *"Children today are growing abnormally; I am 24 and there are some children born in 2006 that look older than me. That cannot be healthy."*
>
> - Participant 7, Group B.

and

> *"We do not know what is in these chemicals, young people are now having old people diseases and dying soon while we are still healthy. This shows that there is a problem with today's food."*
>
> - Participant 4, Group A

The potential health threats that are associated with large-scale food production led to both young and older participants preferring food grown in their backyard as opposed to commercial producers of food. They stated that home-grown produce had benefits such as saving them money, having the pride of growing one's own fresh produce and most importantly, it calmed their anxiety pertaining to the production process involved in mass food production. This trust in locally produced and familiar foods by the residents serves as an essential argument for the necessary increase in advocacy for food justice and food sovereignty, where the "new" indigenous knowledge can be mobilized. However, due to convenience and frequent access, their distrust in the processes involved in mass food production did not inhibit purchasing from big retail stores.

5.2.3. THEME 3: TOWARDS AN INDEPENDENT FOOD SYSTEM IN A RURAL AREA

The above discussion indicates what participants think of small-scale agriculture. Group A considers it to be a necessary life skill, while Group B is not against it but appears disinterested in learning about it. Notably, all participants, regardless of age, stated that they would support their friends and family should they decide to pursue an education or career in agriculture.

There is, however, the perception that small-scale agriculture was limited to producing for household use and to sell the surplus. Some of the responses included:

> *"… in most rural areas it is practiced due to low income, or in some cases elderly believe that veggies/fruits produced by them are healthier than the one from stores which are processed."* – Participant 2, Group B.

> *"Small-scale agriculture is when we gather and make farming and retain a portion of harvest for household [use]."* - Participant 10, Group A.

This understanding placed limitations on the term "small-scale agriculture" which constrained it to subsistence agriculture. However, when asked whether small-scale agriculture can be used as a vehicle for economic stimulation within their community, the participants agreed with most citing that it would be a challenge as people in Ga-Moeka did not have the skills nor the equipment to invest in agriculture beyond subsistence farming, with Participant 5 raising a concern that,

> *" I have used work in white farms in Limpopo, I know farming very well. I still farm even here as you can see. But I prefer farming on a bigger plot because it is more profitable… I think Moeka has a great market for a farmer like me. Only if I had the land, but government is not assisting in making this possible. "*
>
> – Participant 5, Group A

5.2.4. THEME 4: ECONOMIC STIMULATION AND RURAL DEVELOPMENT IN GA-MOEKA VILLAGE

Theme that was also prominent in the interviews with community members was achieving rural development. The general understanding of rural development amongst participants is that:

"rural development refers to the process of improving quality of life in rural areas. It can include things like improving infrastructure, increasing access to education, and healthcare and promoting economic development." – Participant 20, Group A

Group B participants had an understanding that offered an understanding that included the drawing in of that drew in corporate franchises and trusted brands into the rural communities. They expressed their struggle to access such services and needed employment closer to home. Participant 7 elaborates:

"it is a struggle to get my car some fuel as the petrol station is so far away, big commercial areas are also far. So, through bringing big businesses like Shoprite and petrol stations, the local economy will be stimulated, increasing employment opportunities and encouraging partnerships with the residents which small-scale agriculture can play a role in. This will also expose the youth to entrepreneurship and working with big companies. Like how the unemployed youth has been exposed to working in organisations like schools through the Assistant teacher's programme." Participant 7, Group B

Although, most participants were worried about the food from retailers like Shoprite as the uncertainty of how it was produced, the presence of these businesses were welcomed in the village, with convenience being the most echoed reason for their necessity.

Another approach to rural development that was proposed was based on community-based skills sharing and initiatives. This included hosting monthly community gatherings whereby skills, knowledge, services and goods can be exchanged. Amongst other participants, Participant 1 (who is familiar with the medical field by virtue of her parent's profession) explains other benefits of the community gatherings:

"Everyone can come together maybe once a month and share skills that enables us to live heathy which will also be cost effective and decrease pressure on the likes of the health system… If you have a small business

idea can be announced and we support. This will also enable us to know what is happening in the community."-Participant 1, Group A

This view was echoed by Dr Finca who stated that rural development is not entirely the government's responsibility but rather people had to take initiative to uplift their lives and communities (See 5.2.5 below for more information).

It is worth noting that all participants acknowledged that small-scale agriculture is a good vehicle to drive rural development, however, they also believed that rural areas have more to offer than their agricultural produce. They are also adapting to post-industrial and declining agricultural economic activity by offering more services and less labour-intensive output such as logistical services like water tank refilling, transporting children to school, and a thriving taxi industry; and more service focused products like running a hair salon, and tutoring; while others run businesses like bakeries, taverns and spaza shops.

5.2.5 EXPERT OPINION

The valuable professional opinion used to evaluate the findings came from Dr Andiswa Finca, who is a Range and Forage Science researcher specializing in collective management of communal rangelands and working under the Agricultural Research Council for 18 years. Her work is centered on partnering with communal livestock farmers and youth to develop sustainable solutions that balance economic viability with ecological health. A key goal of her research is to enhance livestock production, enabling farmers to access formal livestock markets and improve rural livelihoods.

Dr Finca's opinions for this research report are extracted from an interview she had with Food for Mzanzi on the 13th of December 2023. The interview explored the link between farming and rural development, including the creation of jobs and community development. Amongst others, the question about what could be delaying rural development in rural areas was the most relevant to this research report, to which she answered that:

"…I would say just the ability to be able to make or to provide for yourself through farming would enable you to -say maybe- upskill yourself, invest in your children's education and you able to build structures that will help you with your farming and you would have improved water supply, access to electricity to support whatever that you are doing. And also people in some areas where when they are serious about whatever it is that they're doing; it could be gardening, it could be livestock but, when there is that level of commitment, you would find that there will be external investors or even the department (i.e. government) that come help out with sharing animal handling facilities and in some villages with irrigation system and even green houses for them to improve their production in whatever area that they are focusing on. So, when you are at the level where you can provide for yourself, then definitely access to Health Care also becomes more feasible..." Dr Finca (Food for Mzanzi, 2023, 27:19).

Additionally, she alluded to the fact that rural development is a result of several partnership between various stakeholders:

> *"in spaces where we talk about development of pastoralist, which is the global term that is used for communal farmers, we do not invite the people that are in logistics that would make these things possible, e.g., infrastructure. For example, accessible like the areas are accessible through improvement of the roads so, um based on my understanding at rural level you will find uh that the farmers are at the beginning of the value chain they are the primary producers so they would either uh sell their animal miles to be taken to the fit lots and then from the fit lots they are prepared for Market or if they are in the position to participate in the markets themselves in the formal markets themselves"* – Dr Finca (Food for Mzanzi, 2023, 22:11).

She also specified that there are government funding and private investors that invest, provide equipment, training and advice for people

who show commitment to establishing and operating in the formal market, while being competitive with high quality products.

In response to increasing youth participation in the agricultural sector, Dr Finca states that due to high unemployment rates, the agricultural sector is faced with a challenge of offering training to youth to attract them into the field, but these initiatives often yield unfavourable results. She explained that the youth only accept these training programmes for temporary income generation and not consider the skills developed for a long-term income generation.

5.3 CONCLUSION

In summary, the data analysis revealed four major themes. Theme 1 uncovered the different perspectives that participants had towards small-scale agriculture. This was influenced by age and experiences. Theme 2 narrated the tale of cultural identities and how these have evolved with time as new global dilemmas emerge such as climate change, and these have fostered a platform for innovation and cultural practices to collaborate to reduce hunger in rural areas. Theme 3 focused on diversifying the work within small-scale agriculture in rural areas by inviting the processing and logistics sectors to also play a part in promoting rural development in these areas through collaboration with the community. Finally, Theme 4 explored the idea of what economic stimulation and rural development should look like from the perspective of the participants, of which they indicated that a radical approach towards rural economies is needed as these economies have more potential than being limited to agricultural activity. These findings can offer valuable insights into the evolution of rural dynamics in the new South Africa, discussed further below.

CHAPTER SIX
DISCUSSION

This chapter discusses the key themes that emerged in Chapter Five, relating them to literature and providing the findings' significance to the field of study. Additionally, the chapter also presents limitations of the study, issues of reflexivity and future research directions.

To reiterate, this research study looked at perceptions of rural residents of Ga-Moeka village towards small-scale agriculture. This research was guided by the question: How do residents in Moretele Municipality perceive small-scale agriculture, and why? This question was posed with the following objectives:

- Determine the perceptions of different residents in Moretele to small-scale agricultural activity. Determine the nature of agricultural activity in the region at present, and whether there have been changes over time.
- Identify key factors that appear to be contributing to the nature of agricultural activity.
- Use findings from Moretele to critically analyse government interventions (or lack thereof) relating to rural land and small-scale agriculture.

6.1 SUMMARY OF KEY DATA FINDINGS

The key findings based on Chapter 5 were as follows:

Key Findings	
1.	87,5% of Group A participants came from background with a farming history, while 92% of Group B participants have been exposed to some sort of farming (mostly backyard gardening) in their lives.
2.	75% of Group A participants have small gardens in their backyards.
3.	83,3% of Group B participants had no interest in agricultural activity.
4.	75% percent of Group A farmers were females.

5.	85% of participants stated that there is a need for innovative means of encouraging economic stimulation in the area (citing skills development programmes, etc.)
6.	75% of participants noted a concern over the current food system, especially in relation to the use of GMOs.
7.	The is little trust/relationship between government and the community as government interventions (water node and communal agricultural land) were not well-received within the community.

Key Findings 1,2,3: The influence of generational experiences

Separated by age in the two groups, the general perception of the participants was that small-scale farming was not an integral part of their daily lives. 75% of Group A (participants between 44-78 years of age) still pursue farming endeavors even though it is on a smaller scale than in the past, and they practice it for entertainment purposes than survival while 83,3% of Group B (participants between the ages of 18-43) are mostly not interested in agriculture. Scholars such as Shackleton and Luckert (2015), and Dubbled (2013), write of similar findings in the Eastern Cape and Kwa-Zulu Natal respectively. In their findings, they reveal that the current generation is less inclined to agricultural activity, leading to abandonment of agricultural land (Dubbled, 2013; Shackleton and Luckert, 2015). They outline how the reliance on social grants, and the pursuit of a lifestyle in urban areas, is a major contributing factor for this decline(Dubbled, 2013; Shackleton and Luckert, 2015). Other studies also suggest that the identity of rural areas are evolving with time (Soini et al., 2012; Kesselman, 2023), and means of ensuring that small-scale agriculture in these areas is evolving with the times are necessary to make it relevant for the current generation. This also supports Key Finding 5 about the need for more innovative means of economic stimulation in rural areas.

Key Finding 4: Women in Small-scale agriculture.

Various studies have indicated that most small-scale farmers in rural areas were females (Francis et al., 2005; Nunan, 2015). Consistent with these studies, this research study found that the nature of agricultural activity in the area constitutes of 75% of the participants that were still engaging in agricultural practice for subsistence purposes were female. 33% of male participants practiced small-scale agriculture but with the intention to sell (and have experience of commercial farming), while 27% of female participants had the same intention. Although the difference is not alarming, this trend is in alignment with other South African literature such Bernstein (2013) and; Shackleton and Luckert (2015) whereby small-scale farmers in rural areas are females while males within the agricultural space dominate large-scale commercial farms. Kesselman (2023) reiterates this by stating that the food system in South Africa is currently unjust and still supports colonial and apartheid structures, disadvantaging the poor, Black people, and women. It is important to note, however, that contrary to most literature from African countries (Munyua et.al., 2009; Mthi et al., 2018), females in this research study engaged in the activity as a supplementary activity rather than as for survival.

Key Finding 5: Rural potential beyond agriculture.

The need for a skills development programme within the area was mentioned by 35% of participants. With 10% of the participants unemployed and an unemployment rate of 45% in the area (StatsSA, 2022). The participants indicated that the government should intervene in providing skills development programmes in Ga-Moeka to increase rural development. This raises the relevance of Kesselman (2023) on decolonizing food systems in South Africa, including the importance of empowering rural areas in alignment with the nations' priorities such as decreasing the unemployment rate.

The absence of sectors such as processing and logistics when discussing small-scale agriculture in rural areas increases the lack of access to information

available to these rural communities, therefore limiting their perception of small-scale agriculture and narrowing the economic opportunities that exist within it. These issues, in rural areas, without other sectors to support rural development contribute to a declining rate of rural development. For other parts of the value chain to be active, the intensive labour can be minimized by making use of the fresh produce that already exists on site. Processing opportunities were discussed that would benefit the landscapes of Ga-Moeka. Ga-Moeka, has an abundance of fruit trees, which presents economic opportunities to stimulate the economy of Ga-Moeka village. Dr Finca made an example of people turning to businesses such as making fruit jams, and dried fruits.

Key Finding 6

25% of the participants raised concerns around the use of GMOs and the perpetuated consumption of processed foods that retail imposes on people. Although the participants' understanding of GMOs was not tested, it was sufficient to conclude that they understood that there was something wrong with the food supplied by commercial retail. As Rostoks et al. (2019) explain, genetically modified organisms (GMOs) and highly processed foods have increasingly become popular in food production, so have their possible negative effects. This further supports claims by Rostoks et al. (2019) that GMOs still require more research to ensure their safety for human consumption and their impact on the environment. Furthermore, Louzada et al. (2022) argue that highly processed food contributes greatly towards non-communal diseases and other health risks. However, in consistency with Key Findings 3, the youth were not concerned enough to start growing their own food as this was seen as an activity that did not produce immediate profits/results.

Key Findings 7

Participants had despondent responses towards government interventions. The water node and agricultural land that the municipal government has introduced in the area has had little to no effect on the residents as they believe that this was done as an electioneering strategy by the governing party as the voting season approached. Similar instances have been witnessed across the country, while this pattern has been observed over the past 20 years of the democratic government in South Africa (Kgarose, et al., 2023). The South African population has had a decreasing confidence in the South African government as there has been a lot of "empty promises" made (Kgarose, et al., 2023).

6.2 PRACTICAL IMPLICATIONS

One of the purposes of this research was to determine how the findings from the area can be used to critically analyze government policy (such as National Development Plan (NDP) 2030, Agricultural Policy Action Plan (APAP) and Land Reform Policies) or action in agriculture, especially in terms of small-scale agriculture.

Perceptions towards rural areas

The findings indicate that it is important to consider the uniqueness and changing nature of rural areas in South Africa. Perceptions of the participants show that although they recognize that the area is classified as a rural area, they live within a complex society that has "urban" elements brought about by generations of experiences collected from interacting with urbanized spaces. This has caused rural areas to deviate from the "open country, small settlements and dependence on agriculture and natural resources, and high prevalence of poverty and isolation" definition (Dasgupta et al., 2014; Soini et

al., 2012). In recent years, categories that befit the landscapes of Ga-Moeka have been advocated for to be considered "peri-urban" which allowed more nuanced analysis of the permeable boundaries of 'rural' and 'urban' and diversified economic systems that exist across the urban-rural spectrum (Dasgupta et al., 2014). This provides a basis for policy to carefully consider the interrelationships between what is now considered rural areas like Ga-Moeka and the impact these areas can have economically. This can be done through various interventions such promoting the processing of fresh produce from rural areas like Ga-Moeka whereby fruit becomes a secondary resource in the form of jams, juice, and snacks (e.g., dried fruit).

Lack of synergy between government and people

There is a disconnect in information between the government and their targeted audience. This has resulted in a lack of synergy in the roles and expectations of both parties in rural development. In this study, the local municipality has implemented various projects such as the water node and allocating a communal agricultural land to the community, however this has interpreted as electioneering, while the participants also indicated that they are interested in the advancement of their community and would like skills development training programmes in the area. This indicates the lack of effective communication between government and community members and misalignment in interests. This can assist policymakers, especially in the spatial planning field (IDPs, SDFs, and UDFs) to consider the interventions at a local scale more carefully, ensuring that these interventions align with the community's interests and build trust.

6.3 LIMITATIONS

The research looked at the notion of small-scale agriculture being a sustainable means of food production in South Africa. It was aimed at investigating whether small-scale agriculture would still be considered a

vehicle to alleviate poverty in rural areas today or whether more innovative ways of stimulating rural economies were needed. The study did not necessarily seek to understand factors to reduce hunger in these areas as it is assumed that even the poorest have access to social grants provided by the government that assists with reducing hunger in most households that do not have other sources of income.

6.4 SIGNIFICANCE OF STUDY

There is limited research in areas such as Ga-Moeka, and the findings point to a need to undertake further research in similarly under-researched rural communities in South Africa. This study indicated a crucial difference in the mindset of those in rural areas in relation to farming. The generation gap between the youth and elders, influenced by life experiences and factors affecting the broader context they have lived in, indicates how rural areas have evolved with time. For example, in the past, subsistence farming was one of the main sources of food, whereas today the convenience of easily accessing fresh produce is preferred – despite the potential risks and uncertainty of how the food is grown.

One important contribution made by this research is one that encourages the re-evaluation of the potential that rural areas have in playing a more active role in transforming 21st century food systems into sustainable ones. Soini et al. (2012) and Kesselman (2023) are among the scholars that have written on the limitations that the traditional perceptions of what a rural area is can have. This research study found a similar theme emerging amongst participants in their youth who aspired to see success in their area that was beyond traditional activities such as small-scale farming. Instead, they advocated for skills development that would advance them to be competent in work that gave them a better chance to compete in the fast-changing and technologically advanced economy, even if it were within the agricultural sector.

CHAPTER SEVEN
CONCLUSION

The aim of this research was to determine how the residents of Ga-Moeka village in Moretele Municipality perceive small-scale agriculture, and to identify the material conditions that may be shaping their perceptions. The findings indicated that the residents' perception of small-scale agriculture was that it was a capital intensive yet fewer rewarding means of income generation. Some of the material conditions that shaped the perceptions included a perception of the activity being associated with poverty and backwardness. There have been drastic shifts in lifestyle and economy that increase in the influence of technology (social media, white collar jobs, decreased hard labour). This has changed people's perception of what is viewed as success, and most importantly limited access to various information pertaining to the evolution of small-scale agriculture indirectly encourages the negative perceptions towards small-scale agriculture.

As this was an exploratory study that looked at a small case, it does require further research. The vast literature that is available on small-scale agriculture and how it can be used as a vehicle to improve lifestyles of rural residents does not always consider the current landscapes that rural residents live in, especially in South African villages such as Ga-Moeka. This can be a starting point for researchers and policymakers within the agriculture and development space to place small-scale agriculture in today's context to so that it evolves and re-invent itself in a manner that suits todays' needs and create a futuristic perspective that is worth investing in, i.e. presenting small-scale agriculture in rural areas in a positive image that can be seen as a lucrative place for investment. Lastly, the notion of what a rural area is, especially in South Africa as of today, needs to be investigated in terms of what defines and characterises a rural area, and whether villages such as Ga-Moeka should still be classified as rural areas if they do not fit the traditional definition and characteristics of a rural area.

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Annexure

Participant information sheet

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Private Bag 3 Wits, 2050
Fax: 02711 7176029
Tel: 02711 7176006

Dear Sir / Madam

My name is Takalani Malivhadza. I am a Master student in the School of Geography, Archeology and Environmental Studies at the University of the Witwatersrand, Johannesburg. My supervisor is Dr Sarita Pillay-Gonzelaz. I am conducting a research study about the perceptions of different people on agriculture in rural areas and what causes these perceptions. The study title is: The perceptions of Moretele residents on small-scale agriculture: The case of Swartdamstad in North West Province

I am inviting you to take part in an interview. If you decide to take part, your participation in this research study will last about 10 months. The interview will take place between July and October, at your earliest convenience and at a time that suits you.

With your permission, I would like to audio record the interview. This data will be stored in a password encrypted computer for 1 year and then deleted. Only I, the researcher, will have access to the data.

During the research activity, I will need to ask for some personal information about you, including your position, qualifications, and race.

The interview will be confidential and anonymous. When I share the results of the research study, I will not include your name or anything else that could identify you. With your permission, other researchers may use the data collected from this research study, but your name and any personal information will not be used or passed on.

If you decide to take part in the research study, it should be because you want to volunteer. You do not have to take part. You can stop being in the study at any time. You do not have to answer any questions if you do not want to. You will not get any direct benefits if you choose to join the research study. You will not lose any services, benefits or rights you would normally have if you decided not to join. Taking part in the research study will not cost you anything. You will not be paid for being in this research study.

The risks for this research study are no more than what happens in everyday life / some of the questions asked may make you feel sad or upset. If this happens, I will stop the interview and continue another time.

This research study will be written up as a research report. If you would like to receive a summary of this report, I will be happy to send it to you.

If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,
Takalani

Researcher:
Takalani Malivhadza,
Email: 2140942@students.wits.ac.za,
Phone: 0725126489

Supervisor: Dr Sarita Pillay-Gonzelaz
Email: sarita.pillay@wits.ac.za
Phone: 0117176590

Consent Form

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Private Bag 3 Wits, 2050
Fax: 02711 7176029
Tel: 02711 7176006

Title of project: The perceptions of Moretele residents on small-scale agriculture: The case of Ga-Moeka village in North West Province

Name of researcher: Takalani Malivhadza

I, ……., agree to participate in this research project.

I agree to the following:

(Please circle the relevant options below)

The research study was explained to me. I understand what this study is about.	YES	NO
I understand that I can volunteer to take part in the study.	YES	NO
I agree that the interview may be audio recorded.	YES	NO
I agree that direct quotations from my interview may be used by the researcher in their research report.	YES	NO
I agree that my participation will remain anonymous (my name or other identifying data will not be used by the researcher in their research report.	YES	NO
I agree that other researchers may use the information I provide in my interview (depending on their own ethics clearance being obtained) but my name and any personal information will not be used or passed on.	YES	NO

…… (signature)
…… (name of participant)
…… (date)

…… (signature)
…… (name of researcher/person seeking consent)
…… (date)

Interview schedule

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Private Bag 3 Wits, 2050
Fax: 02711 7176029
Tel: 02711 7176006

Interview Schedule (Community members)

Research topic: The perceptions of Moretele residents to agriculture: The case of Ga-Moeka village in the North-West Province

Researcher: Takalani Malivhadza, 2140942

Supervisor: Sarita Pillay Gonzalez

Supervisor contacts:

E: sarita.pillay@wits.ac.za

P: 0117176590

Section A:

Thank you for agreeing to participate in this study on perceptions of residents in the area towards the small-scale agriculture and the involvement of residents in the sector. I am Takalani Malivhadza, from Wits University and I am writing a research report to meet the requirements for completing MSc in Environmental Science degree that I am currently enrolled for. This study is for the purpose of a school research report and is not affiliated with any governmental program and there will be no benefits to the community as a direct result of this study. This study will be anonymous. Please do advice at any moment should you need to a comfort break.

Section B:

(Greetings)

How are you?

May I record this interview?

[Introduction]

1. Could you please tell me more about yourself, education level and a bit of family history? (Probe)
2. Was farming ever part of your family?
   (Probing)
   - (If yes): Do you still practice farming?
   - What were the benefits of having your own farming?

[Body]

3. What is your understanding of the small-scale agriculture?
4. What is your understanding of rural development?
5. What is your perspective of Agriculture being a driving force for rural development?
6. Is it a viable option for poverty alleviation in an area such as Ga-Moeka?
7. According to your understanding of the community, do you think the current generation is interested in agricultural practices, for both substance and commercial purposes? (Probe)
8. Is the any programme or support by the government to assist with poverty alleviation in the area? (Probe)
    - What kind of program?
    - How effective is it?
9. Would you encourage your loved ones, e.g. children or friends, to pursue a career in small-scale farming or agriculture as a whole? (Probe)
10. What kind of rural development would you be interested in and best suits the area?
11. Do you have anything that you would like to add, in addition to what was covered?

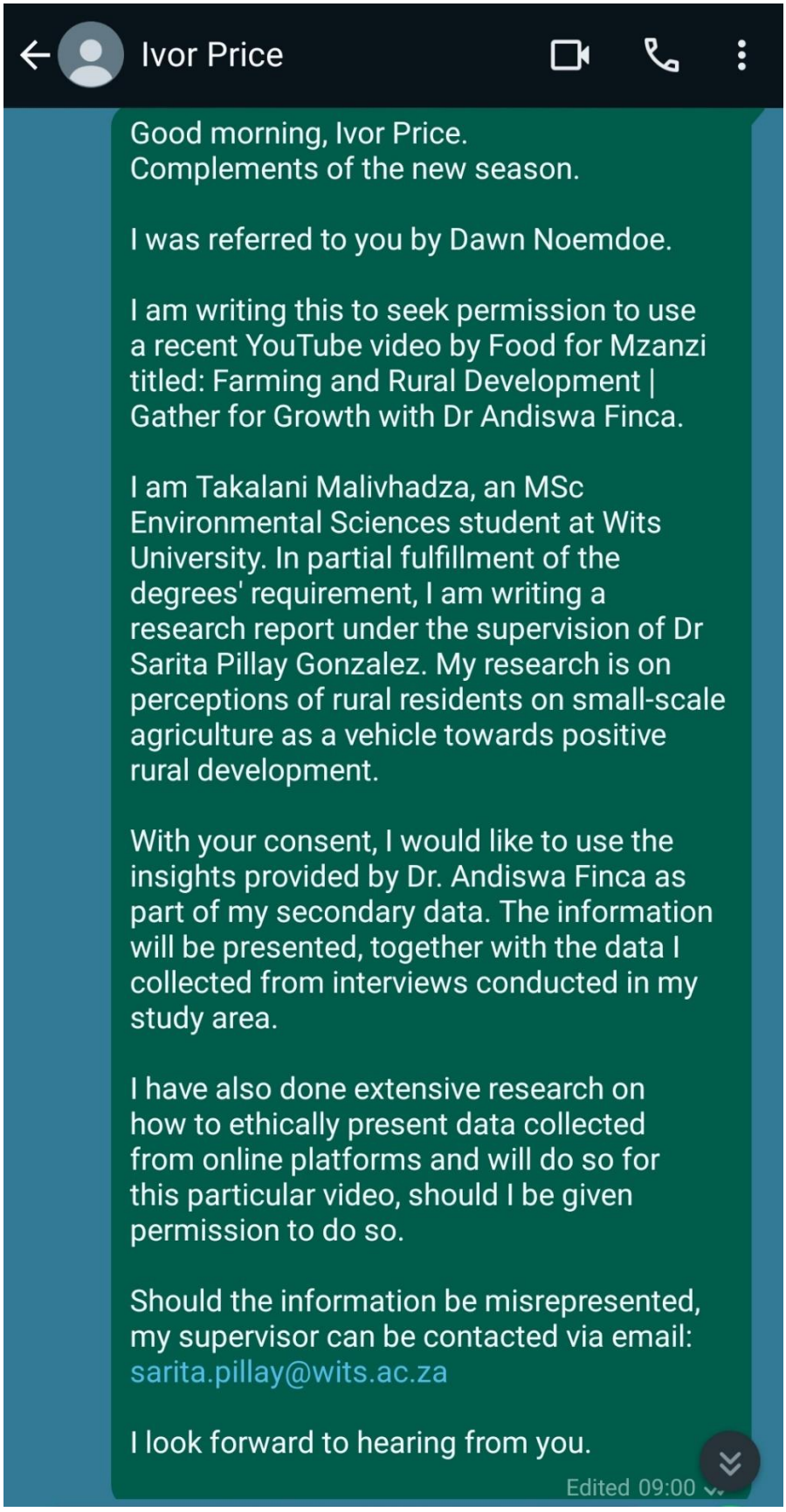
Section C:

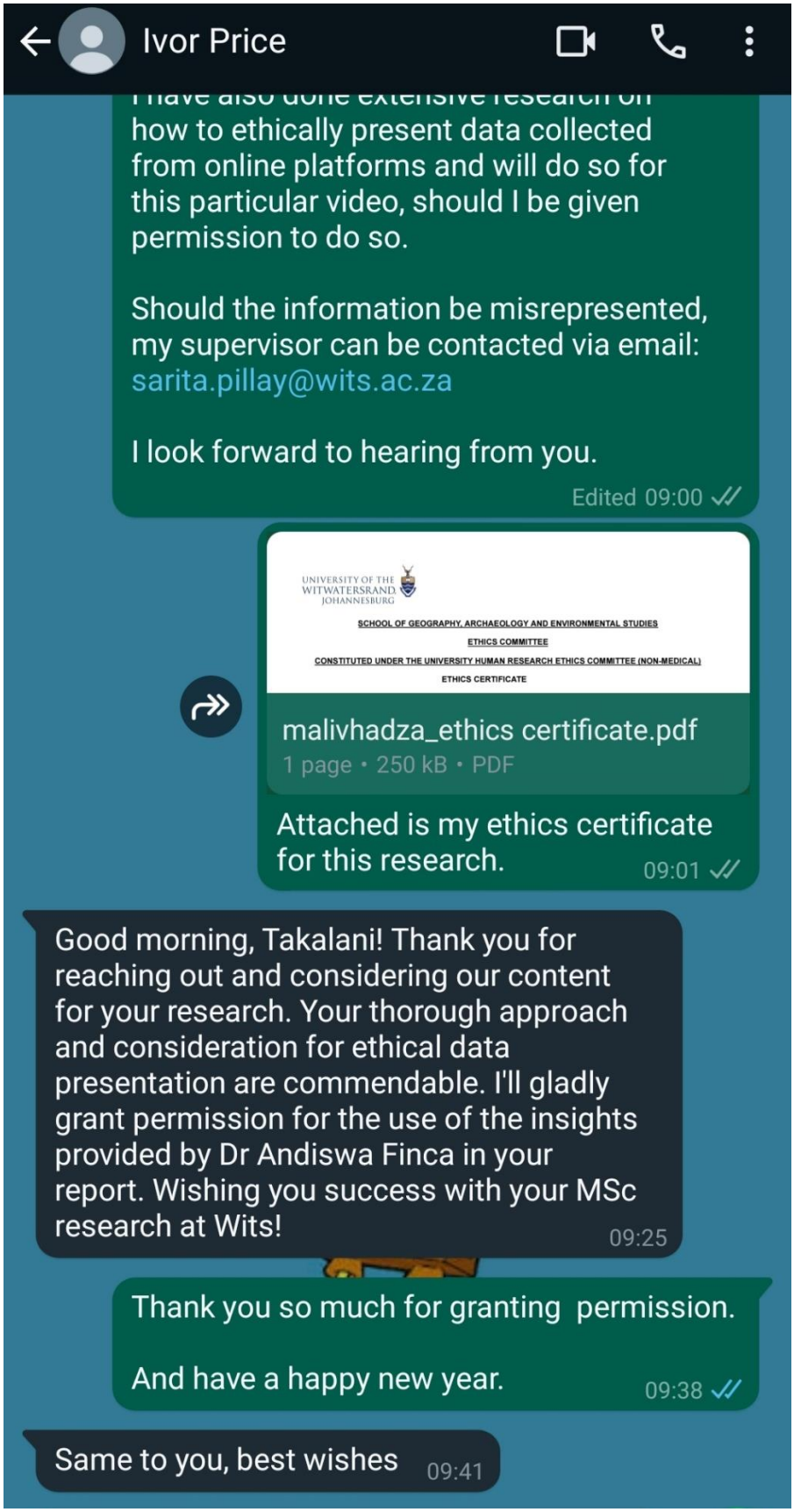
[Closing]

Thank you for your time and participation in the study. Your input is much appreciated. In case, I have further questions, would you be okay with scheduling another session?

Thanks once again, enjoy the rest of your day.

Food for Mzanzi permission slip
Obtained on the 02nd of January 2024




Ivor Price
how to ethically present data collected from online platforms and will do so for this particular video, should I be given permission to do so.
Should the information be misrepresented, my supervisor can be contacted via email: sarita.pillay@wits.ac.za
I look forward to hearing from you.
Edited 09:00
UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
SCHOOL OF GEOGRAPHY, ARCHAEOLOGY AND ENVIRONMENTAL STUDIES
ETHICS COMMITTEE
CONSTITUTED UNDER THE UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
ETHICS CERTIFICATE
malivhadza_ethics certificate.pdf
1 page • 250 kB • PDF
Attached is my ethics certificate for this research.
09:01
Good morning, Takalani! Thank you for reaching out and considering our content for your research. Your thorough approach and consideration for ethical data presentation are commendable. I'll gladly grant permission for the use of the insights provided by Dr Andiswa Finca in your report. Wishing you success with your MSc research at Wits!
09:25
Thank you so much for granting permission.
And have a happy new year.
09:38
Same to you, best wishes
09:41

Ethics certificate

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

SCHOOL OF GEOGRAPHY, ARCHAEOLOGY AND ENVIRONMENTAL STUDIES

ETHICS COMMITTEE

CONSTITUTED UNDER THE UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)

ETHICS CERTIFICATE

PROTOCOL NUMBER: gaes_2023_07_008

PROJECT TITLE

The perceptions of Moretele residents to agriculture

INVESTIGATOR

Takalani Malivhadza (2140942)

SCHOOL/DEPARTMENT OF INVESTIGATOR

SCHOOL OF GEOGRAPHY, ARCHAEOLOGY AND ENVIRONMENTAL STUDIES

DATE CONSIDERED

20 JUNE 2023

DECISION OF THE COMMITTEE

APPROVED UNCONDITIONALLY

EXPIRY DATE

On submission of project report for final assessment

ISSUE DATE OF CERTIFICATE 26 June 2023 **CHAIRPERSON** _____

(DR ALEX WAFER)

cc: Supervisor : Sarita Pillay

DECLARATION OF INVESTIGATOR

To be completed in duplicate and **ONE COPY** returned to the Chairperson of the School/Department ethics committee.

I fully understand the conditions under which I am are authorized to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee.

_____ _____

Signature **Date** 22 / 09 / 23

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES