

Are Non-Governmental Organisations effective in increasing access to agricultural markets within rural communities?

A comparative study of female smallholder farmers
within the eMazabekweni, KwaNokweja, Hopewell and
Carisbrooke communities, Ubuhlebezwe Local
Municipality, KwaZulu-Natal, South Africa

Laila Hansrod

213504378

Supervisor : Dr S. A. Desai
Co-Supervisor : Dr S. L. Nkomo

December 2019

The financial assistance of the National Research Fund (NRF) towards this research is hereby acknowledged. Opinions expressed and conclusions arrived at, are those of the author and not necessarily to be attributed to the NRF.

Declaration

I, Laila Hansrod (213504378) acknowledge that all work presented in the thesis entitled: *Are Non-Governmental Organisations effective in increasing access to agricultural markets within rural communities? A comparative study of female smallholder farmers within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal, South Africa* is my own work. All sources that were used have been duly recognised and the research that has been conducted has not been submitted in any form to any other institution for the fulfilment of a degree. It is being submitted to fulfil the requirements for the degree of Masters of Science in Geography and Environmental Management in the College of Agriculture, Engineering and Science at the University of KwaZulu-Natal, South Africa.

L Hansrod

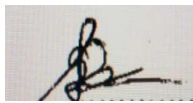
Signature

2020/08/14

Date

The research was carried out under the supervision of Dr Sumaiya Amod Desai (University of KwaZulu-Natal) and co-supervisor Dr Sphumelele Lucky Nkomo (University of KwaZulu-Natal).

Signed: _____



Dr Sumaiya Amod Desai

Signed: _____

Dr Sphumelele Lucky Nkomo

Date: 2020/08/13

Date: _____

Dedication

To women

For fulfilling multiple roles, daily.

Acknowledgements

This research would not have been possible without assistance from the following people:

I would like to thank my supervisors, Dr Sumaiya Amod Desai and Dr Sphumelele Lucky Nkomo for all their assistance, patience, guidance, perseverance and hard work.

The eMazabekweni, KwaNokweja, Hopewell and Carisbrooke Communities for being so welcoming and always being willing to participate. This research would not have been possible without them.

Thank you to my peers for encouraging and motivating me to persevere.

I would like to thank my parents for their encouragement, love and support.

Thanks to my sister for being my comic relief.

Also, to my husband for constant love and support.

Abstract

Background: Poverty within rural areas encourages females to practice smallholder farming as a poverty alleviation strategy. Whereby female smallholder farmers provide for themselves and are able to sell their produce to sustain their livelihoods. Female smallholder farmers often do not have the capability to participate in agricultural markets due to their lack of access to these markets, resources, inputs and extension services. These limitations decrease the ability of a rural female smallholder farmers to be able to maintain their livelihoods, whilst ensuring food security within their households. Non-Governmental Organisations (NGOs) claim to provide farming assistance to minority groups, such as women. The objective of this thesis was to determine whether NGOs are actually making a difference among rural communities.

Aim: The aim of this study is to investigate the effectiveness of NGOs in increasing access to agricultural markets as a poverty alleviation strategy amongst female smallholder farmers.

Methods: Comparative research was undertaken among female-headed households from two smallholder farming communities that received agricultural assistance from NGOs and two smallholder farming communities who were unable to access any assistance from NGOs. These communities fell within the Ubuhlebezwe Local Municipality, and are the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities. A purposive sampling strategy was utilised. The study employed triangulation, utilising both quantitative and qualitative data collection strategies. Quantitative methods included a structured questionnaire which was followed by statistical analysis using Statistical Package for Social Science version 25. Qualitative methods included participatory exercises and focus group discussions.

Results: While NGOs are present within the eMazabekweni and KwaNokweja communities, their presence has not majorly assisted women to overcome institutionalised barriers such as access to agricultural markets. It was found that the Hopewell and Carisbrooke communities, who do not receive any assistance, lie in a state of disrepair as compared to those communities who do receive assistance. Therefore it must be noted that while assistance from NGOs within the eMazabekweni and KwaNokweja communities have had a minimal trickledown effect among female smallholder farmers, they were still able to make a minuscule difference. However, the implementation of these programmes are not sustainable for the future and only provide a short-term band-aid solution.

Conclusion and recommendations: Programmes for the provision of extension support need to be designed to specifically target women within rural communities while taking institutionalised barriers to agricultural market access into consideration. Additionally, communities need to be involved in the development of programmes that are going to be initiated within their communities.

Key words: Female-headed smallholder farms, agricultural market access, non-governmental organisations, female farmers

Table of contents

Declaration	i
Dedication.....	ii
Acknowledgements	iii
Abstract.....	iv
Table of contents	v
List of tables	viii
List of figures	x
List of plates	xi
List of abbreviations	xii
Chapter 1: Introduction.....	1
1.1 Motivation for the study.....	1
1.2 Aim.....	7
1.3 Objectives.....	7
1.4 Research questions	7
1.5 Scope and limitations of the study.....	8
1.6 Thesis Chapter outline.....	9
1.7 Chapter summary	9
Chapter 2: Literature Review.....	10
2.1 Introduction	10
2.2 What is the definition of rural?.....	10
2.3 Agriculture in Africa	11
2.3.1 <i>Agriculture, smallholder farms and food security in the developing world</i>	12
2.4 Female-headed households and poverty.....	13
2.4.1 <i>The additional challenges that women face</i>	14
2.4.1.1 Women and land ownership	15
2.4.1.1.1 Women, land ownership and policy in South Africa	16
2.5 Agricultural market access	18
2.5.1 <i>Barriers to market access</i>	18
2.5.1.1 Agricultural market access in female-headed households	19
2.6 The role of Non-Governmental Organisations in agricultural market access.....	21
2.6.1 <i>The LIMA Rural Development Foundation's Abalimi Phambili Farmer Support Programme</i>	22
2.6.1.1 A case against non-governmental organisations	24
2.7 The role of infrastructure in market access	24
2.8 Conclusion.....	26
Chapter 3: Conceptual frameworks	27
3.1 Introduction	27
3.2 Political ecology.....	27
3.2.1 <i>Feminist political ecology</i>	31
3.2 Urban Bias Theory	32
3.3 The Sustainable Livelihoods Approach.....	34

3.3.1 <i>The Principles of a Sustainable Livelihood</i>	35
3.3.1.1 People – centred.....	35
3.3.1.2 Responsive and participatory	35
3.3.1.3 Multi – level.....	35
3.3.1.4 Partnerships.....	36
3.3.1.5 Sustainable	36
3.3.1.6 Dynamic.....	37
3.3.2 <i>The Sustainable Livelihoods Framework</i>	38
3.3.4 <i>The advantages and disadvantages of the Sustainable Livelihoods Approach</i>	40
3.3.4.1 Advantages	40
3.3.4.2 Disadvantages	40
3.4 Feminisation of poverty	41
3.5 Conclusion.....	42
Chapter 4: Research methodology.....	44
4.1 Introduction	44
4.2 Background of the study areas	44
4.2.1 <i>Integrated Development Plan</i>	44
4.2.1.1 Harry Gwala District Municipality Integrated Development Plan (2017 – 2022)	45
4.2.1.2 Ubuhlebezwe Local Municipality Integrated Development Plan (2017/2018).....	46
4.2.1.2.1 The Abalimi Phambili Farmer Support Programme by the LIMA Rural Development Foundation.....	47
4.3 Research instruments.....	50
4.3.1 <i>Primary data</i>	50
4.3.2 <i>Secondary data</i>	51
4.4 Methodological approaches.....	51
4.4.1 <i>Triangulation</i>	51
4.4.2 <i>Quantitative methods</i>	52
4.4.2.1 Questionnaire survey	52
4.5 Selection of samples.....	53
4.5.1 <i>Purposive sampling approach</i>	54
4.6 Qualitative Research	55
4.6.1 <i>Participatory Rural Appraisal</i>	56
4.6.1.1 Focus group discussions	57
4.7.1.1.1 Observations	58
4.6.2.1.2 Problem ranking matrix	60
4.6.2.1.3 Mental maps.....	61
4.6.2.1.4 Venn diagrams on institutions	61
4.7 Procedure for analysis of data	61
4.7.1 <i>Statistical Package for Social Sciences (SPSS)</i>	61
4.8 Fieldwork experiences.....	62
4.8.1 <i>The eMazabekweni and KwaNokweja Communities</i>	62
4.9.2 <i>The Hopewell and Carisbrooke Communities</i>	67
4.10 Conclusion.....	69
Chapter 5: Data presentation, analysis and discussion	70
5.1 Introduction	70
5.2 Demographic and personal information	70
5.2.1 <i>Food security</i>	84
5.3 Access to land and services.....	86

5.4 Crop and livestock production	94
5.5 Extension support.....	99
5.5.1 Livestock production.....	106
5.6 Broiler production	106
5.7 Infrastructure and agricultural market access.....	114
5.8 Agricultural market participation	121
5.9 Feedback on extension services	125
5.10 Participatory exercise findings	133
5.10.1 Problem ranking matrix.....	133
5.10.2 Venn diagrams indicating the relationship among community stakeholders from the community's perspective.....	142
5.10.3 Mental maps	150
5.11 Conclusion.....	163
Chapter 6: Summary, Recommendations and Conclusion.....	164
6.1 Introduction	164
6.2 Summary of key findings	164
6.2.1 Objective 1: To investigate the gendered barriers to market access that prevent female smallholder farmers from participating in agricultural markets within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal.....	164
6.2.2 Objective 2: To determine the extent of support that is provided by NGOs for rural female smallholder farmers in the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal.....	166
6.2.3 Objective 3: To investigate whether NGOs intervention through agricultural extension support has increased the ability of female smallholder farmers to access agricultural markets within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal	167
6.2.4 Objective 4: To investigate whether increased access to agricultural markets has assisted female smallholder farmers to improve their livelihoods within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal.....	169
6.3 Conceptual reflections.....	170
6.4 Recommendations	172
6.4.1 Policy reform and female targeted interventions.....	172
6.4.1.2 The inclusion of rural females in the development of rural development programmes.....	173
6.4.2 Stakeholder partnerships	173
6.5 Contributions of this thesis to the field.....	174
6.6. Conclusion.....	175
References	177
Appendix 1: Questionnaire	200
Appendix 2: Ethical Clearance	237

List of tables

Table 5. 1 Head of respondent’s household in (%).....	71
Table 5. 2 Age of respondents (%)	72
Table 5. 3 Number of people living within the respondent's household (%).....	73
Table 5. 4 Marital status of respondents and respondents whose spouse is a migrant labourer (%)	77
Table 5. 5 Respondents whose family members have relocated and reasons for relocation (%).....	78
Table 5. 6 Respondent’s main source of respondent's monthly income (%)	79
Table 5. 7 Respondents who rely on small-scale farming as a primary source of income (%).....	82
Table 5. 8 Employment held by respondent (%)	83
Table 5. 9 Respondents main source of food (%).....	85
Table 5. 10 Land ownership among respondents (%).....	86
Table 5. 11 Respondents who have access to land for crop cultivation (%).....	87
Table 5. 12 Respondents who have immediate access to water, their main source of domestic water and main source of water used for irrigation (%).....	88
Table 5. 13 Distance walked by respondents to access water (%).....	90
Table 5. 14 Respondents who feel that walking further to acquire water puts them at a greater risk of being attacked (%).....	91
Table 5. 15 Main sources of energy within respondent’s household (%).....	92
Table 5. 16 Respondents primary participation in crop production or livestock production (%)	94
Table 5. 17 Location of crops that are grown by the respondent (%).....	94
Table 5. 18 Crops that are grown by respondents in each community (%)	97
Table 5. 19 Challenges with crop farming within the communities (%)	99
Table 5. 20 Respondents who are assisted by LIMA (%).....	99
Table 5. 21 Respondents who use fertiliser and what fertiliser they use (%)	100
Table 5. 22 Respondents land preparation technique (%)	101
Table 5. 23 Respondents who receive inputs, agencies who provide these inputs and what inputs are provided (%).....	102
Table 5. 24 Training received by respondents (%).....	104
Table 5. 25 Agencies who provided training to respondents (%).....	105
Table 5. 26 Respondents who participate in broiler production (%)	107
Table 5. 27 Respondents who received inputs for broiler production (%)	108
Table 5. 28 Type of inputs received for broiler farmers (%)	109
Table 5. 29 Respondents who received training for broiler farming (%)	110
Table 5. 30 Agencies that provided training for broiler farmers (%).....	110
Table 5. 31 Type of training received by respondent for broiler farming (%).....	111
Table 5. 32 Type of structure within which respondent grows their broilers (%)	112
Table 5. 33 Respondents who sell broilers in the marketplace (%).....	113
Table 5. 34 Methods of communication that respondents have access to (%).....	114
Table 5. 35 Respondents who own a vehicle (%).....	115
Table 5. 36 Distance that respondents travel to access the nearest transport route (%).....	116
Table 5. 37 Respondents who have access to agricultural markets in which to sell their crops (%)	121
Table 5. 38 Respondents who trade crops at this agricultural market (%).....	121
Table 5. 39 Respondents ability to make profit from agricultural markets in order to sustain their livelihood (%)	123
Table 5. 40 Financial capital that respondents use to participate in agricultural markets (%).....	124
Table 5. 41 Respondents who have received extension support (%).....	125
Table 5. 42 Respondents who have received extension support from LIMA (%)	126
Table 5. 43 Respondents whose household living conditions have improved due to extension support (%).....	127
Table 5. 44 Respondents who think the NGOs run programmes created jobs within their community (%)	128
Table 5. 45 Type of jobs that NGOs run programmes created (%)	129
Table 5. 46 Respondents who notice NGOs personnel visiting their community (%)	130
Table 5. 47 Respondents who think that they have learnt beneficial skills (%).....	130

Table 5. 48 Respondents who think that their communities have had interventions from NGOs or government departments (%).....	131
Table 5. 49 Respondents who perceive assistance that they received has made a positive impact within their community (%).....	132
Table 5. 50 eMazabekweni community’s problem ranking matrix	133
Table 5. 51 KwaNokweja community’s problem ranking matrix.....	135
Table 5. 52 Hopewell community’s problem ranking matrix	138
Table 5. 53 Carisbrooke community's problem ranking matrix.....	140

List of figures

Figure 4. 1: Map illustrating the location of the Ubuhlebezwe Local Municipality within KwaZulu-Natal	48
Figure 4. 2: Map illustrating the location of the Ubuhlebezwe Local Municipality with the Harry Gwala District Municipality	49
Figure 5. 1: Level of education received by respondents in % (n = 50 per community)	74
Figure 5. 2: Reasons why respondents have relocated in % (n = 50 per community)	76
Figure 5. 3: Household duties of respondents in % (n = 50 per community)	80
Figure 5. 4: Number of meals eaten within respondents household per day in % (n=50 per community)	84
Figure 5. 5: Livestock production within respondent's household (n=50 per community).....	106
Figure 5. 6: Methods utilised by respondent to access closest agricultural market to sell produce (n=50 per community).....	118
Figure 5. 7: Distance that respondents have to travel to access closest agricultural markets (n=50 per community).....	120
Figure 5. 8: Number of times that respondents trade at agricultural markets (n=50 per community)	122
Figure 5. 9: Venn diagram drawn by eMazabekweni community	142
Figure 5. 10 Venn diagram drawn by eMazabekweni community	142
Figure 5. 11: Venn diagram drawn by Hopewell community.....	146
Figure 5. 12: Venn diagram drawn by Carisbrooke community.....	148
Figure 5. 13: A mental map of the current facilities within the eMazabekweni community	152
Figure 5. 14: A proposed mental map of the facilities that are considered vital to the eMazabekweni community	153
Figure 5. 15: A mental map of the current facilities within the KwaNokweja community	155
Figure 5. 16: A proposed mental map of the facilities that are considered vital to the KwaNokweja community	156
Figure 5. 17: A mental map of the current facilities within the Hopewell community.....	158
Figure 5. 18: A proposed mental map of the facilities that are considered vital to the Hopewell community ...	159
Figure 5. 19: A mental map of the current facilities within the Carisbrooke community.....	161
Figure 5. 20: A proposed mental map of the facilities that are considered vital to the Carisbrooke community	162

List of plates

Plate 4. 1 Newly tarred roads en route to the eMazabekweni community.....	Error! Bookmark not defined.
Plate 4. 2 A resident from the eMazabekweni community offering the researcher bananas from her garden.....	65
Plate 4. 3 The eMazabekweni community.....	66
Plate 4. 4 Mountainous terrain in the KwaNokweja community.....	66
Plate 4. 5 The Hopewell community.....	68
Plate 4.6 The Carisbrooke community.....	68
Plate 5. 1 A Department of Education’s public library within the KwaNokweja community.....	75
Plate 5. 2 A woman from the Carisbrooke community collecting water from a public tap within the community.....	81
Plate 5. 3 A female smallholder farmer's crops in her homestead garden in the eMazabekweni community.....	83
Plate 5. 4 A makeshift public tap within the eMazabekweni community.....	89
Plate 5. 5 Women from the eMazabekweni community head loading water containers in order to walk back to their homes.....	91
Plate 5. 6 Crops grown in a respondents back yard within the eMazabekweni community.....	96
Plate 5. 7 Farmers from the eMazabekweni community packing their potatoes.....	98
Plate 5. 8 A broiler farm in the KwaNokweja community.....	107
Plate 5. 9 A broiler house in the KwaNokweja community.....	113
Plate 5. 10 A vandalised bus stop in the Hopewell community.....	119
Plate 5. 11 Respondents from the KwaNokweja community moving within one of the respondent’s households to participate in PRA exercises.....	137

List of abbreviations

AIDS	: Acquired Immunodeficiency Syndrome
ANC	: African National Congress
APP	: Abalimi Phambili Farmer Support Programme
ASGISA	: Accelerated and Shared Growth Initiative of South Africa
ATMs	: Automated Teller Machines
BPFA	: Beijing Platform for Agriculture
DSTV	: Digital Satellite Television
FAO	: Food and Agriculture Organisation
FET	: Further Education and Training
GDP	: Gross Domestic Product
GEAR	: Growth, Employment and Redistribution
GLOPP	: Globalisation and Livelihood Opportunities for People living in Poverty
HIV	: Human Immunodeficiency Virus
IDP	: Integrated Development Plan
KPMG	: Klynveld Peat Marwick Goerdeler
LIMA	: LIMA Rural Development Foundation
LRAD	: Land Redistribution for Agricultural Development
MDGs	: Millennium Development Goals
NDP	: National Development Plan
NGOs	: Non-Governmental Organisations
NPC	: National Planning Commission
PRA	: Participatory Rural Appraisal
RDP	: Reconstruction and Development Programme
RRA	: Rapid Rural Appraisal
SAFE	: Sanitation Appropriate for Education
SAPs	: Structural Adjustment Policies
SDF	: Spatial Development Framework
SDG	: Sustainable Development Goals
SEDA	: Small Enterprise Development Agency
SLA	: Sustainable Livelihoods Approach
SLF	: Sustainable Livelihoods Framework

SPSS	: Statistics Package for Social Sciences
StatsSA	: Statistics South Africa
TV	: Television
STIs	: Sexually Transmitted Infections
UN CEDAW	: United Nations Convention of the Elimination of all forms of Discrimination Against Women
UN	: United Nations
URT	: United Republic of Tanzania
VAT	: Value Added Tax
WFS	: World Food Summit
WHO	: World Health Organisation
WWF	: World Wildlife Fund

Chapter 1: Introduction

1.1 Motivation for the study

According to Klynveld Peat Marwick Goerdeler (KPMG) (2015; 1) 60% of the African continent's land is occupied by agriculture. The agricultural sector serves as Africa's largest source of income, contributing 32% towards the continent's Gross Domestic Product (GDP) (KPMG, 2015). More than half of the African population are employed within the agricultural sector. This sector has the capacity to reduce poverty within Africa, while ensuring food security. However, over the past two decades, this sector has incurred underinvestment and has been neglected due to investment into other sectors such as animal reproduction for consumption (Mosana, 2013; KPMG, 2015).

According to the World Wildlife Fund (WWF) (2016) South Africa comprises of a dual agricultural economy, which consists of commercial farms as well as small-scale subsistence farms mostly located within rural areas, previously referred to as homeland areas. Since the end of the apartheid era within the country, there have been changes in governmental policies and legislature (Alexander, 2019). These changes aimed to integrate the country into global markets, improve farm labourer conditions as well as address the land redistribution issues in the post-apartheid era. Participation in global markets through exports of produce provides an opportunity for local farmers to display their farming abilities internationally however, South African farmers are unable to participate in this market, as they do not possess the appropriate skill sets or technologies when compared to farmers in developed countries. Additionally, farmers in developed countries receive subsidies and training from their governments (Kwa, 2001; WWF, 2016).

In recent years, the South African government has provided subsidies to commercial farmers which allow them to grow crops that meet the demands of foreign countries and can be exported (WWF, 2016). This has caused a decrease in the prevalence of farms that grow staple crops such as wheat and maize, in favour of crops with a higher value (WWF, 2016). The change in planting practices has caused South Africa to import much of their staple foods, creating an environment where smallholder farmers are not able to compete with the prices of imported food.

According to Ngcukana (2017) and Seery (2017) the cost of food has rocketed over the past decade, reaching an all-time high of 6.9% in June 2017. A study by the Pietermaritzburg

Agency for Community Social Action (PACSA) done in 2018 has shown that a basket of nutritious food items has increased in price by R20 on a month-to-month basis, with farmers warning that food prices may increase due to erratic rainfall patterns and drought conditions experienced in South Africa (BusinessTech, 2018). Simelton *et al.* (2012) suggest that the global production of staple crops will decline due to prolonged periods of increased temperatures and a lack of rain. Subsistence and smallholder farmers will be affected the worst by changes in temperatures and rainfall patterns as many of these farmers do not have the capacity, resources or skills to adjust to drought related challenges thus making them unable to rely on subsistence farming. Subsistence farming can be described as farming for the needs of oneself and one's family without surplus of crops for trade (Baipheti and Jacobs, 2009).

The National Agricultural Marketing Council (2017) reports that studies conducted in November 2017 indicate that rural areas face higher staple food prices when compared to the price of staple foods within urban areas. Statistics South Africa (StatsSA) (2016) state that rural households in the North West, Eastern Cape and KwaZulu-Natal cannot attain all the foods that they require for the month as it is more than the amount that they had budgeted for food.

Ndlovu (2017) states that one third of South Africa's population resides within rural areas. Many of these residents have the capability to survive and thrive on their land, however rural communities are overlooked in terms of investments, therefore they continuously remain underdeveloped. Many rural residents rely on subsistence and smallholder farming as a source of livelihood, in order to ensure household food security and their survival. Albeit they are excluded from the formal economy, barred from access to agricultural resources and denied access to land, which leads to increased poverty amongst rural households (Baipheti and Jacobs, 2009; Neves and Du Toit, 2013; Ndlovu, 2017).

Within South Africa, a large majority of rural households rely on smallholder agriculture as a vehicle to reduce poverty and increase rural development (Pienaar and Traub, 2015; Boko *et al.*, 2018; Wondimagegnhu *et al.*, 2019). Poverty is rife amongst rural communities within South Africa, as many look to smallholder farming as a means of reducing rural poverty (Machethe, 2004; Tibesigwa and Visser, 2016). Oluwatayo (2019) describes smallholder farming as farming that occurs on small plots of land where mostly subsistence crops and sometimes cash crops are grown. Smallholder farmers rely on family members to assist them with production and their farming practices usually consist of outdated techniques, old technology, low profits and a seasonal labour force mostly made up of women. It is important

to note that women play an important role in the production of crops within smallholder farms (Bizcommunity, 2019; Oluwatayo, 2019).

In South Africa, women can be considered the poorest of the poor, with many women and children bearing the brunt of poverty due to their lack of access to resources and lack of land ownership (Akinsola and Popovich, 2002; Rogan, 2014; Bizcommunity, 2019). Research indicates that there is a noticeable difference in poverty experienced by female-headed households as compared to households that are male headed, with female-headed households being poorer than male-headed households (Rogan, 2014).

A female-headed household refers to a household in which a man does not permanently live and the women provides most of the financial and social support for her family. Female-headed households can be defined as households or families that are economically supported by women (Budlender, 2003; European Institute for Gender Equality, n.d). A study by Kapungu (2013) highlights that women face more challenges when accessing markets when compared to men. These challenges include the lack of a labour force, not being able to access market information and the high costs of transportation to markets. This can be attributed to patriarchal ways of living within rural areas, where women are considered less worthy than men.

Women need resources to maintain their livelihoods, however cultural and policy barriers prevent them from accessing these resources thus exacerbating their poverty conditions (United Nations Women, 2013). In order to overcome poverty, many women partake in smallholder farming to maintain their livelihoods, however their lack of access to resources and inability to own land due to cultural and patriarchal systems which cause them to remain within the cycle of poverty. Poverty among females in rural areas highlights the importance of smallholder female farmers, not only for being able to provide for themselves, but also for being able to sell their produce in order to sustain their livelihoods. Female smallholder farmers often do not have the capability to participate in agricultural markets due to their lack of access to resources, inputs and extension services (Mkhabela, 2007; Kokotsi Moeng, 2011).

These limitations further inhibit female smallholder farmers in many rural areas. However, Non-Governmental Organisations (NGOs) have been formed and funded with the intention of assisting smallholder farmers by providing them with the training and assistance that they need to build the capacity to farm for a sustainable future (Bizcommunity, 2019). Due to the institutionalised injustices that women in rural areas face, many of them do not benefit from the presence of NGOs within their community. The communities studied in this research will

endeavour to provide insight into the plight of female smallholder farmers within the respective communities. Also in relation to the aid that they receive whether this aid is viable in the long term such as does this aid allow female smallholder farmers access and participation into the agricultural markets to improve their livelihoods.

If smallholder farmers had access to agricultural markets, they might be more inclined to practice agriculture however, the access to agricultural markets within rural communities remains a challenge for policy makers (Maponya *et al.*, 2016). Mthembu (2010) and Khapayi and Celliers (2016) cite land issues, transaction costs, poor infrastructure, and lack of information regarding markets as barriers to agricultural market access amongst smallholder farmers. These issues present even more of a challenge to women in South Africa, more so women in rural South Africa, as they do not have access to basic facilities, such as health care, let alone access to and ownership of land as a sustainable way to earn an income. Thus leaving women vulnerable and insecure in their livelihoods (Ndlovu, 2017).

Smallholder agriculture provides a means of income and maintains food security amongst 43% of rural women (Food and Agriculture Organisation (FAO), 2017). Rural women provide most of the work force behind agricultural labour, yet remain unpaid for this work (Brand South Africa, 2012; FAO, 2017). Results from the United Nations' World Food Programme Gender Policy and Strategy have revealed that gender inequality plays a key role in hunger and poverty amongst women and girls, indicating that more than half of female adults and children are chronically hungry (FAO, 2017).

Cultural and policy barriers prevent women from accessing resources, causing them to be classified within the poor and disadvantaged group, creating a link between women's lack of access to resources and poverty within female-headed households (Schmitt *et al.*, 2002; UN Women, 2013). Female-headed households are prevalent within rural areas, due to the migration of men to cities in search of work, and have been shown to be significantly poorer than those households that are headed by males (Nwosu and Ndinda, 2018). One of the most significant assets which women lack access to is ownership of land (Akinsola and Popovich, 2002; Moleka, 2018; Bizcommunity, 2019). Cultural barriers prevent women from owning land as it is believed that men are the rightful owners (Cross and Hornby, 2002; Moleko, 2018; Bizcommunity, 2019). Women routinely plough the land to produce crops in order to ensure food security within their households however, they lack ownership of the land on which they are farming.

With their limited resources, many women still endeavour to practice agriculture as a means to sustain themselves and their families. Women who are planning to partake in agricultural activities often struggle to gain access to financial assistance, water, irrigation tools and seedlings (Dludla, 2014). Internationally, the role of NGOs has become more prevalent since the late 1970s (Banks and Hulme, 2012). In South Africa, the number of NGOs has dramatically increased in the past two decades mostly owing to an increase in the budget that is allocated to emerging farmers by the South African Government (Khapayi and Celliers, 2016). NGOs have been viewed as hope for meeting the needs of poor citizens within developing countries, most of whom are suffering due to the failure of the governments within their country, by providing assistance and promoting development (Banks and Hulme, 2012). NGOs are often praised by civil society for their unique and innovative methods of development, most of which occur at a grass roots level (Banks and Hulme, 2012).

This study entailed a comparison study among female smallholder farmers within four communities in the Ubuhlebezwe Local Municipality, KwaZulu-Natal to determine the effectiveness of NGOs in increasing access to agricultural markets. Two of these communities receive assistance from NGOs while the other two do not receive any assistance. A comparison study was essential in order to compare the effects that receiving assistance from NGOs has on the farmer's livelihood versus the livelihoods of those who do not receive any assistance from NGOs.

Female smallholder farmers residing in rural areas were chosen for this study as they are recognised as a marginalised group within society (Tibesigwa and Visser, 2016a; Bizcommunity, 2019). Additionally, rural-urban migration has caused female-headed households to become common within rural communities (Nwosu and Ndinda, 2018). Gender inequalities, cultural norms and patriarchal systems have made it difficult for women to own land, access resources, and earn a wage that is equal to their male counterparts (Nyamota, 2016; Bizcommunity, 2019). Additionally, women bear the brunt of the HIV/ AIDS burden as they become the heads of their households (Mazibuko, 2013; UN Women, 2013). South African women residing in rural areas have also been previously disadvantaged by the apartheid system as their family units became fragmented due to the rural-urban migration of men during the apartheid era (Reed, 2013).

Khapayi and Celliers (2016) explain that over the past two decades, the South African Government has implemented policies and programmes as well as increased their budget for support of emerging farmers. However, there is no evidence that these initiatives have been

successful. This study is necessary as many projects are initiated and invested in however, often do not reach their full potential due to negligence on behalf of the NGOs, mismanagement of funding or challenges facing farmers which have been misidentified. It is important to understand failures and successes within the agricultural sector, as this sector is the key to poverty reduction at household level (FAO, 2011b). Furthermore, this study focuses on female smallholder farmers, who are a vulnerable group within society. Findings from this study can be used to inform future policies and programmes. This study enlisted a holistic approach as the plight of women within rural communities cannot be understood in isolation. There are social, historical and economic factors that affect living conditions within a rural setting.

When examining the Integrated Development Plan (IDP) for the Ubuhlebezwe Local Municipality it was discovered that The LIMA Rural Development Foundation has been listed as one of the most active NGOs within this municipality. The LIMA Rural Development Foundation was established in 1989 with the intention of promoting growth within communities in a dignified and sustainable manner. Emphasis is placed on marginalised communities in low-resource settings, such as rural communities. LIMA receives assistance through corporate organisations such as Nedbank, as well as government departments such as the Department of Human Settlements (LIMA, n.d).

The LIMA Rural Development Foundation's Abalimi Phambili Farmer support programme (APP) began nationally in 2015 and intends to run around the country for fifteen years. This programme was initiated within the Ubuhlebezwe Local Municipality in 2016 and is expected to run within the municipality for a period of four years. This programme intends on providing support and services to smallholder farmers who have a background of underdevelopment. This is achieved by providing inputs, credit, mechanisation, agricultural advice and access to markets. This programme will allow smallholder farmers to have the means to access agricultural markets, while creating jobs, improving production and strengthening the relationship between stakeholders (LIMA, 2015). LIMA Rural Development Foundation was chosen for this study, as they are one of the most active NGOs that offers agricultural extension support within the Ubuhlebezwe Local Municipality however the presence of smaller NGOs has also been taken into consideration. Furthermore, the eMazabekweni and KwanNokweja communities receive extension support from NGOs, more specifically LIMA while the Hopewell and Carisbrooke communities do not. A comparison between these communities was essential in order to determine the effectiveness of NGOs in terms of increasing access to agricultural markets for female smallholder farmers

1.2 Aim

The aim of this study is to investigate the effectiveness NGOs in increasing access to agricultural markets as a poverty alleviation strategy amongst female smallholder farmers.

1.3 Objectives

- To investigate the gendered barriers to market access that prevent female smallholder farmers from participating in agricultural markets within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal.
- To determine the extent of support that is provided by NGOs for rural female smallholder farmers in the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal
- To investigate whether NGOs intervention through agricultural extension support has increased the ability of female smallholder farmers to access agricultural markets within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal
- To investigate whether increased access to agricultural markets has assisted female smallholder farmers to improve their livelihoods within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal

1.4 Research questions

This research investigates the effectiveness of farmer support programmes that are offered to rural communities by NGOs. The intention of these programmes is to increase access to agricultural markets to decrease poverty among female smallholder farmers. This research will be conducted as a comparison study. Comparison studies observe two or more groups who have similar characteristics. The aim of a comparative study is to gain a greater understanding of the processes, mechanisms and factors that shape our world, and in this case, the four communities respectively (Lewis-Beck, 2004; Azarian, 2011).

In order to address the objectives outlined above, a set of broad research questions were generated to guide the researcher and provide direction for the study. The questions are as follows:

1. What institutionalised barriers exist for female residents of the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities?
2. In addition to LIMA, which NGOs are active within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities and what assistance do they provide?
3. What type of extension support is provided to females within these communities?
4. Are the extension support programmes that have been initiated within these communities sustainable and able to provide long-term support for poverty alleviation among female smallholder farmers.

1.5 Scope and limitations of the study

This study required research to be conducted amongst female-headed smallholder farms within four communities in the Ubuhlebezwe Local Municipality, KwaZulu – Natal, South Africa. Triangulation was used to enhance this study, thus comprising of quantitative and qualitative data. Collection of quantitative data will allow for an integrated, organised and logical understanding of how female-headed households use smallholder farming as a means of poverty alleviation in rural communities. Quantitative data collection will take into account statistical factors while the collection of qualitative data will integrate the importance of human knowledge and experiences.

The communities in this study, based in KwaZulu – Natal, South Africa provided the researcher with statistical information such as household personal details. Qualitative methods of data collection were used to capture participant's indigenous knowledge, beliefs and experiences which enable them to cope with the struggles of everyday life. These cannot be captured statistically. When using quantitative research instruments such as a structured questionnaire, subjectivity presented a challenge to data collection as respondents might have provided a biased answer out of fear of being reprimanded. Qualitative methods using participatory rural appraisal (PRA) has assisted in overcoming this barrier. Additionally, language barriers posed a problem. The researcher's first language is English, whilst the participant's first language is isiZulu. In order to overcome this challenge, isiZulu speaking assistants were recruited to assist with administration of the questionnaires as well as translations during the focus group exercises. However, direct translations from English to isiZulu are not always easy, especially for questions where technical terms have been used. Thus, respondents might have not

understood the questions. In order to overcome this challenge, assistants who were fluent in isiZulu were recruited.

Throughout this study the researcher was the facilitator, taking into account the respondents' issues, opinions, perceptions as well as possible solutions and putting them into the contexts of the conceptual frameworks mentioned in chapter 3. The data that was collected from the questionnaires were analysed using the statistical package for the social sciences (SPSS) version 25. Outputs from SPSS were then copied into Microsoft Excel to diagrammatically illustrate graphs chapter 5. Microsoft Word was utilised to create tables for the results chapter and Paint was utilised to formally recreate maps that were illustrated during the mental map exercise.

1.6 Thesis Chapter outline

Chapter 2 will provide a detailed overview of literature regarding smallholder farming among females as well as access to markets from a global to a local scale. Topics that influence smallholder farming among females will also be included in this chapter. Chapter 3 will discuss the conceptual frameworks such as political ecology, urban bias theory, the sustainable livelihoods approach and the feminization of poverty. Chapter 4 will discuss the methodology used throughout this research, including quantitative, qualitative and PRA methods as well as provide a brief overview of the sites where the research was conducted. Chapter 5 will analyse and discuss the data that was collected. Lastly chapter 6 will assess the findings of the research, provide suggestions and deliver a conclusion to the research.

1.7 Chapter summary

In this chapter, a motivation for this study has been provided. The aim and objectives of the study have been mentioned as well as the scope and limitations. Lastly, a chapter overview for this thesis was provided. The following chapter will outline literature relating to the research topic and gaps in the research that support the motivation for the study.

Chapter 2: Literature Review

2.1 Introduction

This chapter will outline the definition of rural, provide a background of agriculture in South Africa and highlight the role that smallholder farmers play in the agriculture sector. Thereafter it will discuss female-headed households and the challenges that they face, provide a link between women, land ownership and policies, examine infrastructure within the rural context and examine agricultural market access in South Africa. Furthermore, this chapter will discuss the role of NGOs in increasing access to rural markets. This chapter will examine these concepts on an international, national and local scale and will discuss case studies where relevant.

2.2 What is the definition of rural?

There is no absolute definition for the term rural or rurality. Chigbu (2013) and Medani (2016) indicate that these terms mean different things to different people across the world and is dependent on the context of the discipline in which it is being used. Countries have different ways of separating areas that are urban from those that are rural. Generally, rural areas are considered less populated and more agriculturally inclined than urban areas.

Chigbu (2013) identifies rural areas as areas that have high levels of poverty, are more traditional in their approach, rely mainly on agriculture, experience development as well as change at a much slower rate than those areas that are classified as urban. Polity (2013) refers to the Eastern Cape in South Africa when defining the term rural. This definition explains that areas can be considered rural when they lack access to basic services such as access to safe drinking water, health care and appropriate sanitation. There are high levels of poverty within these areas, unemployment rates are high and infrastructure remains underdeveloped.

Within developing countries such as those in Africa, one assumes that rural areas can be equated with poverty and degraded living conditions. Muula (2007) and Chigbu (2013) disagree with this statement, reiterating a statement made by Muula (2007: 4) who proclaims that

Rurality is like beauty, which is in the eye of the beholder.

In order to contradict the generalisation that poverty is experienced within all rural areas, Chigbu (2013) provides an example pertaining to the presence of oil in the Niger Delta in

Nigeria. This indicates that there is an excess of oil within this area thus making it resource-wealthy however residents cannot maximise the benefits of this wealth due to their lack of knowledge, skills and resources.

Deavers (1992) and Miller (2013) state that in order for rural areas to be incorporated into policies, their definition needs to be understood however the definition of rural is constantly adapted to suit policies that are being created. Chigbu (2013) states that similar and differing characteristics must be taken into consideration when defining rural areas. These characteristics need to be considered in order to understand that rural areas change as they respond to globalisation and developments in technology. Thus, one has to understand that rural areas are sometimes not completely rural and do contain characteristics that are usually associated with areas that are distinctly urban. Therefore, rural areas can be defined as follows (Chigbu, 2013: 815)

Land-spaces with a culturally defined identity; situated within a place statutorily recognised as non-urban; and occupied by settlers predominantly depending on the primary sources of labour for their livelihood.

2.3 Agriculture in Africa

KPMG (2015) states that agriculture has the ability to eradicate poverty and food insecurity within the African continent. Thirty five percent of Africa's gross domestic product (GDP) is constituted by agriculture and this sector employs a majority of the African continent's labour force. South African Department of Agriculture, Forestry and Fisheries (2018: 2) states that in 2017 the contribution of the agricultural sector to South Africa's GDP was 2.2%.

Agriculture in South Africa plays a significant role in economic development within the country and contributes to household food security (South African Department of Agriculture, Forestry and Fisheries, 2018). A survey that was conducted by the South African government in 2017 indicated that a small percentage of household within the country participated in the agricultural production of food crops, with this production mostly occurring in homestead gardens (South African Department of Agriculture, Forestry and Fisheries, 2018). These houses participate in agricultural production in order to supplement the sources of food within their household.

2.3.1 Agriculture, smallholder farms and food security in the developing world

Quisumbing *et al.* (1995) and FAO (2018) indicate that there are 800 million people in the developing world who experience food insecurity. These people struggle to meet their food and nutrition needs. For the past three consecutive years, hunger and chronic food deprivation has dramatically increased and is most likely to continue increasing in the years to come.

The widespread accepted definition of food security is one that was agreed upon at World Food Summit (WFS) in November 1996. The definition is as follows (Napoli *et al.*, 2011: 7; Tibesigwa and Visser, 2016b: 1)

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life.

Quisumbing *et al.* (1995) states that food insecurity can be attributed to the growth in population and the ever-increasing demand for food which agricultural production in many developing countries fails to meet. Food productivity is further limited by rapid urbanisation (due to increasing populations), land degradation and changes to our climate.

Oluwatayo (2019) describes smallholder farming as farming that occurs on small plots of land where mostly subsistence crops and sometimes cash crops are grown. Smallholder farmers rely on family members to assist them with production and their farming practices usually consist of outdated techniques, old technology, low profits and a seasonal labour force mostly made up of women. Dioula *et al.* (2013) and Riesgo *et al.* (2016) state that while smallholder farmers are the most prominent role players within a rural context, they are also the most food insecure. This food insecurity can be attributed to biophysical and socioeconomic challenges. Dioula *et al.* (2013) suggests that smallholder farmers play a crucial role in the sustainable production of healthy and nutritious foods that will decrease food insecurity within their communities.

Riesgo *et al.* (2016) reiterates this point by stating that increasing the production capabilities of smallholder farmers may allow them to become more socially and economically resilient, thus having a positive impact on their food security. An increase in smallholder farmers may have an impact on the livelihoods of the poor, allowing them to become food secure and earn an income from their excess produce which can be sold (Riesgo *et al.* 2016). This point is further reinforced by an example from Riesgo *et al.* (2016) who state that during the green revolution in Asia, it was smallholder farmers who kept the cities fed due to their production surpluses.

This study examines female-headed households within rural communities. Budlender (2003) defines female-headed households as households or families that are economically supported by women. Additionally, women play the role of chief decision maker and sole breadwinner. Female-headed households can be considered the poorest of the poor, and are usually more vulnerable to food insecurity than male-headed households due to gender inequalities, lack of land ownership and their inability to access economic resources which will allow them to increase productivity (Kassie *et al.*, 2015; Tibesigwa and Visser, 2016b).

Although in rural areas there is a presence of women who practice small-scale farming, it is also evident that most women, especially those who are the heads of their households are reluctant to participate in farming due to the burden of the other roles that they fulfil. Those who do participate in farming mostly use their crop yields for self-consumption and do not sell their produce in markets, simply because these women do not have the resources, skills or time to grow crops to such an extent (Tibesigwa and Visser, 2016b). Furthermore, Tibesigwa and Visser (2016b) also found that smallholder crop production contributed more towards food security within female-headed households compared to those households that are headed by males.

Additionally, Kassie *et al.* (2015) conducted research to determine the gendered dimensions of food security within Malawi. They have concluded that female-headed households face higher levels of food insecurity when compared to those households that are male-headed. This can be attributed to the lack of productive assets within female-headed households. The inability of female-headed households to access physical resources, social capital, farming aids, lack of access to markets, irregular rainfall patterns and the inability of government policies to aid and protect these women in the case of crop failures also plays a role in the levels of food insecurity among female-headed households (Kassie *et al.*, 2015).

Furthermore, Kassie *et al.* (2015) and Tibesigwa and Visser (2016b) suggest that in order to increase food security among female-headed households, women farmers need to be empowered through the implementation of the correct government policies and programmes which will support their efforts to increase their household food security levels through smallholder farming.

2.4 Female-headed households and poverty

Chant (2003: 1) assert that approximately 60-70% of the poor population across the globe can be considered female and this will continue to rise as the years progress. StatsSA (2019a)

reiterates this point, stating that half the female South African population live below the poverty line. In the recent years, it has come to light that women constantly bear the ever-growing burden of poverty which is disproportionate in comparison to their male counterparts.

An extensive amount of literature has indicated that men and women experience poverty differently (Wennerholm, 2002; Chant, 2003; Baipheti and Jacobs, 2009). Definitions and understanding of poverty often neglects the differences between genders in terms of income, resources, services as well as gender based violence and illnesses. These differences may occur at an individual level or between female-headed and male-headed households (Jackson, 2005). The extent of women's poverty is evident within the four communities surveyed during this study. Throughout this study, there was an abundance of female-headed households who were willing to participate in this research, as they needed to express their woes. Even though there were policies in place to assist female smallholder farmers, many of these women still faced disparities within their communities with regards to lack of access to resources and skills.

2.4.1 The additional challenges that women face

Gender inequalities influence a woman's ability to own land, access the rights to their land, access resources, assets and knowledge (Roehr, 2007; Kokotsi Moeng, 2011). Additionally, inequalities exist within patriarchal government policies which add an additional strain on women whose needs are constantly undermined or misunderstood (Kokotsi Moeng, 2011).

Women are tasked with the provision of food and water for their families, household chores and looking after the children and elderly. There is no water infrastructure within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke research communities. This entails that in addition to women doing household chores, these women also have to walk long distances to access the nearest water source (Barnett, 2004). Walking to access water is time consuming and exhausting as women spend approximately half their day walking to collect water and thereafter have to carry the heavy containers home.

Rural-urban migration also plays a role in the additional burdens that women face, as men and youth move away to cities in search of employment (Thet, 2012). Push factors such as the lack of infrastructure, lack of basic services, lack of job opportunities and opportunities for furthering their education influence the migration of men and youth to cities. Pull factors to urban areas include the misconception that living in urban areas guarantees a better standard of living. Many opportunities in urban areas are temporary however migration rates remain high as many are enticed by pull factors such as the attraction of city lights, new technology, higher

wages, educational facilities and the provision of basic services such as water and healthcare (Thet, 2012; Reed, 2013; Jedwab *et al.*, 2015).

Men migrating to cities often results in these men participating in extra-marital affairs as they engage in intimate activities with multiple partners (Barnett, 2004; Thet, 2012). This encourages the spread of diseases such as human immunodeficiency virus (HIV) or acquired immunodeficiency syndrome (AIDS) and sexually transmitted infections (STIs) as women must choose between the stigma that is associated with HIV/AIDS or the dishonour that is associated with separating from their spouse (Nyamathi *et al.*, 2010; UN Women, 2013). The AIDS burden has a detrimental effect on society at large, but especially on women (Gabrielsson and Ramasar, 2013). The HIV/AIDS epidemic affects women in their roles as primary care givers (Gabrielsson and Ramasar, 2013; Health24, 2014). Although a woman might be suffering from HIV/AIDS herself, she is tasked with looking after family members who are also ill. In many instances (and also occurring within the four study communities) a grandmother has to assume the role of primary caregiver for her grandchildren whose parents have become too ill or have passed away due to HIV/AIDS (Gabrielsson and Ramasar, 2013). In addition, a women's additional role as primary care giver might affect her ability to go to work or earn an income therefore reducing the household income. Furthermore, due to illness a women's pursuits of further education might be disrupted (Gabrielsson and Ramasar, 2013; Health24, 2014). Within many communities' women are stigmatised as those who spread these diseases, and are often rejected by the man who infected her. She is also blamed for the death of her children who die due to mother-to-child transmission (Nyamathi *et al.*, 2010; Health24, 2014).

2.4.1.1 Women and land ownership

Access to and ownership of land is vital for the production of food, household stability and food security (Bob, 2008). Women across the world tell the tale of tilling the land, but lacking the access to the rights of the very land which they till (Bob, 2008; Tibesigwa and Visser, 2016b). The lack of rights leaves women vulnerable to the loss of their only source of food production and income (UN Women, 2013). Women's access to land rights can be linked directly to fulfilling their human rights such as the right to life, a safe and secure place to stay, food security and good health. Women who are provided with the appropriate land rights and access to land are able to adequately provide for their family's basic needs. According to Maslow's Hierachy of Needs a person can only proceed to fulfilling more advanced needs after

fulfilling their basic needs such as food, housing, education and the correct nutrition (UN Women, 2013; Cherry, 2019).

A study conducted by Jacobs *et al.* (2011) indicates that there is a discrepancy in the land that is owned by females and that which is owned by males. It is evident that a vast majority of land in Sub-Saharan Africa is owned by men, while women own a minority of land, most of which is of poor quality. Patriarchal systems play an influential role in the gendered ownership of and access to land (Bob, 2008). Legal ownership of land does not necessarily equate to physical ownership or control of land. Land can be accessed through ownership or use however control of land provides the ability to dictate how the land is used and who benefits from the use of the land (Bob, 2008).

Cultural stereotypes that exist within communities also affect a woman's land rights. Social stereotypes within a community prevent women from challenging the authority of men, thus, they are subjected to relationships filled with domestic violence which they have to tolerate or face poverty after leaving their partner (Cross and Hornby, 2002; UN Women, 2013). In some rural areas within South Africa, traditional authorities exercise their power to prevent women from participating in land reform. Kimani (2008) explains the case of a woman in Uganda whose husband had passed away, but she was barred from accessing his land by her in-laws. She was evicted from this land however with legal assistance, the land was returned to her. This can be linked to the prevalence of HIV/AIDS, as a woman's rights to land are overlooked in cases where her husband passes away. Without right to land, women face poverty, food insecurity and turn to other methods as a source of income such as prostitution which further places them risk of contracting deadly diseases such as HIV/AIDS (UN Women, 2013). The lack of access to land rights poses a barrier to agricultural market access for women. If they are unable to access the land for farming purposes, they will not be able to produce crops to sell as a source of income.

2.4.1.1.1 Women, land ownership and policy in South Africa

Policies and legislation implemented by the post-apartheid African National Congress (ANC) – led government in South Africa focuses on gender equality. These policies are committed to ensuring that women gain equal access to land and are involved in policy and decision-making processes. This was supposedly implemented through the 1992 Land Policy document, which recognises women's rights to land. Additionally, the Reconstruction and Development Programme (RDP) was intended to address gender inequalities and extend government

agricultural support services to women (Weideman, 2004; Rakolojane, 2013). The 1996 Green Paper on South African Land Reform, The Constitution of the Republic of South Africa and the 1997 White Paper on Land Reform in South Africa all highlight the obligation of the South African government to achieve gender equality. These policies recognise the important role that women play in agriculture as well as the key role that access to land plays in overcoming poverty (Weideman, 2004; Rakolojane, 2013). South Africa is also a signatory on the Beijing Platform for Agriculture (BPFA) and the UN Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) which is committed to female empowerment through action upon women's rights (Weideman, 2004; Commission for Gender Equality, 2010).

In the aforementioned commitments, it is evident that South Africa is committed to gender equality, however the implementation of policies and legislation alone will not amount to equality in land ownership and access (Weideman, 2004). Hall (1998) iterates this point stating that while the intention to achieve gender equality is made evident in these policies, there are no suggestions on how to achieve this. Moleko (2018) states that statistics indicate that a meagre number of women in South Africa own land, while the remaining land is owned by men. This indicates that while policies are put into place, they are ineffective at a grassroots level. Additionally, when President Cyril Ramaphosa came into office he initiated the Thuma Mina Campaign which translates to "send me". The campaign intends on implementing activities in South Africa to improve the lives of citizens by solving their problems. President Ramaphosa has the intention to go from door to door to listen to citizen's woes thus affording the government the opportunity to reconnect with South African citizens. These efforts have been implemented in an attempt to correct the wrongdoings of President Ramaphosa's predecessor, Jacob Zuma. Some of the activities include improving service provision, alleviating environmental degradation and land expropriation (Zulu, 2018). Recently there has been increased speculation surrounding the expropriation of land however, President Ramaphosa has ensured the nation that there is nothing to fear. South African government is currently in the process of drafting the expropriation bill (Zulu, 2018).

Land expropriation intends on reforming land in South Africa in order to empower those who were negatively affected by the apartheid regime, However, the expropriation bill will allow for expropriation of land without compensation (BusinessTech, 2019). Collison (2018) iterates that while women want ownership of land they agree that land expropriation might prove to be

a disordered process however, they are in agreement that if land is to be expropriated, black women should be the first to receive this land as they are the largest demographic.

Furthermore, the Ingonyama Trust Board (ITB) is being investigated for mismanagement of land. The matter is being investigated to determine whether the funds that were paid for communities living on land that is controlled by them, has actually benefitted them (Harper, 2019).

2.5 Agricultural market access

Ngqangweni *et al.* (2016) define agricultural market access in the context of smallholder farmers as the ability of these smallholder farmers to seize available agricultural market opportunities to sell their produce. This ability to access available agricultural market opportunities might incentivise farmers to increase their production in turn contributing to an increase in food security and supplement their household income. Access to beneficial agricultural markets is one of the key factors that contributes to the success of smallholder farmers however this requires systems such as market information, good organisation on the part of the farmer and market intelligence (Jari and Fraser, 2012; Ngqangweni *et al.*, 2016).

Renkow *et al.* (2004) indicate that there has been proof of an increase in the income of those who adopt the use of improved and resilient seeds, fertilisers, and other new agricultural innovations however, the poor are not able to access these products. Maponya *et al.* (2016) iterates that rural farmers have a comparative advantage when it comes accessing agricultural markets however they need to realise what produce is in demand within these markets and only then can they participate in the production of such crops.

In developing countries, smallholder farmers find it difficult to participate in markets due to a variety of constraints and barriers that they face (Jari and Fraser, 2012; Maponya *et al.*, 2016; Ngqangweni *et al.*, 2016). These will be discussed in the following sub-section.

2.5.1 Barriers to market access

Maponya *et al.* (2016) state that access to agricultural markets for smallholder agricultural farmers will not only sustain the agricultural sector but also contribute to improving the livelihoods of rural farmers through economic development and growth.

Rural smallholder farmers lack access to agricultural markets due to constraints that exist on multiple levels (Maponya *et al.*, 2016; Ngqangweni *et al.*, 2016). Poor infrastructure such as roads, communication networks and storage facilities pose a challenge for smallholder farmers

(Ngqangweni *et al.*, 2016). It is important to note that in this study the four rural communities do not have infrastructure pertaining to water which hinders their ability to produce surplus of crops. The proximity to markets where availability of inputs required for crop production also poses a problem for smallholder farmers. Additionally, high transport costs create a barrier for smallholder farmers who would rather spend that money on necessities within their households (Jari and Fraser, 2012; Ngqangweni *et al.*, 2016). Additionally, farmers within rural areas lack access to information regarding agricultural markets, crop production, finances, the environment and environmental degradation. Extension officers are not present in every rural community thus these farmers also lack sources of information such as extension officers.

Smallholder farmers can also be described as a group of people who are resource poor as they do not have the correct resources or skills to improve their crop production abilities. Maponya *et al.* (2016) indicates that smallholder farmers are the key to rural food security however they are constrained by the lack of resources that are available within their community. The inability of these farmers to keep up with technological advancements and adapt to these advancements technology can also be considered a barrier to market access (Maponya *et al.*, 2014).

Additionally, smallholder farmers face barriers in the form of high transactional costs, proximity from markets, the poor quality of their crop yields and the lack of crop storage facilities. Low levels of education and skills training among farmers, lack of financial support and access to adequate finance as well as inadequate rights to property within their community, and inaccessible market infrastructure further hinder these farmers ability to access markets (Magxingxa and Kamara, 2003; Ngqangweni *et al.*, 2016; Maponya *et al.*, 2016). Furthermore, the inefficient provision of extension services can also hinder a farmer's ability to access markets, thus the focus of this study.

2.5.1.1 Agricultural market access in female-headed households

A female-headed household refers to a household in which a man does not permanently live and the women provides most of the financial and social support for her family (Budlender, 2003). Additionally, they are households that are economically supported by women (Budlender, 2003; European Institute for Gender Equality, n.d). Women around the world can be considered to be marginalised group, as their status within society is not equal to that of a man (Tibesigwa and Visser, 2016b). This is especially prevalent in rural setting where women are considered the poorest of the poor and are perceived as a disadvantaged and vulnerable

group due to their lack of access to resources, stemming from cultural and policy barriers (Schmitt *et al.*, 2002; Schatz *et al.*, 2011; UN Women, 2013; Tibesigwa and Visser, 2016b).

Globally rural women contribute significantly to smallholder farming (Nyamota, 2016). Thus, women can be considered to be the foundation of the agricultural sector. Allowing women to become financially empowered is imperative for sustainable poverty reduction in rural areas therefore the agricultural sector with assistance from development agencies need to find a means to integrate women into agricultural markets as producers, employees, suppliers and consumers (Nyamota, 2016).

Although women may face the same barriers to market access as men do within their communities, one has to also consider the additional roles that women play within their households and within their communities. In many instances, women are unpaid for the farming work that they do and are additionally burdened with the entire range of farming tasks such as preparing the land, sowing the seeds, weeding the beds, harvesting the produce and processing the crops in order to provide food for their families (Kevane, 2004; Nyamota, 2016; FAO, 2017; Poole, 2017). In addition to these roles, women are tasked with looking after children and the elderly, preparing and providing food for their families, as well as in some instances, being the sole breadwinner (Mitchell, 2002; FAO, 2017).

In instances where food is limited, women are the last to eat and often do not fulfil their nutritional needs, contributing to their food insecurity (Nyamota, 2016). Women fulfil multiples roles within their households and according to Barnett (2004) and Van Willigen (2014) these multiple roles increase the responsibilities of the women within the house, causing them to become more stressed. This has the ability to affect their physical and mental health. Nyamota (2016) further indicates that these additional tasks place time constraints on women, which act as a barrier to accessing agricultural markets.

Female smallholder farmers have fewer opportunities for accessing agricultural markets when compared to men (FAO, 2017). This can be attributed to the constant pressure that is placed on women to only farm for subsistence production, not being paid for their labour and unequal access and benefit from resources used for production such as technology, finances in the form of loans, education, skills development and limited influence over the decision-making process within their communities (Nyamota, 2016; FAO, 2017). In order to sustainably and effectively curb hunger and poverty within rural areas, the needs of women need to be recognised and addressed in accordance with the specific set of barriers that they face (Nyamota, 2016).

2.6 The role of Non-Governmental Organisations in agricultural market access

Bingen and Mpyisi (2001) state that NGOs play an imperative role in a country's agricultural resources. NGOs contribute towards sustainable community development and community empowerment through capacity building within a community leading to the development of human and social capital (Nikkhah and Redzuan, 2010; Mazibuko, 2013).

Mazibuko (2000: 1) and United Republic of Tanzania (2001: 76) defines NGOs as

A voluntary group of individuals or organisations, which is autonomous and not-for-profit sharing; organised locally at the grassroots level, nationally or internationally for the purpose of enhancing the legitimate economic, social and cultural development, lobbying, or advocating on issues of public interest or interest of a group of individuals or organisations.

Matthews-Njoku *et al.* (2002) and Ndungu *et al.* (2005) indicate several factors that resulted in the evolution of NGOs. Firstly, the formation of NGOs indicates dissatisfaction with government initiatives for agricultural reformation and the inability of governments to raise the standards of living among the poor. Secondly, in the late 1980s governments of developing worlds were forced to adopt Structural Adjustment Policies (SAPs) as a condition for receiving aid. This resulted in a decrease of extension services budgets. Thirdly, corruption and mismanagement of funds by the government led to distrust among donors. This resulted in their interest shifting to NGOs for the management of funds and implementation of projects. Finally, NGOs are perceived to have a better understanding of specific local environments and are able to provide sustainable solutions. NGOs are in contact with marginalised groups that government departments might not be able to reach, such as the rural poor. This has provided NGOs with the opportunity to interact with and represent poor rural communities (Matthews-Njoku *et al.*, 2002; Ndungu *et al.*, 2005; Binder Dijker Otte, 2016). NGOs have the ability to contribute towards changes in government policies and can also play an important role in public awareness (Kimaro, 2013).

In the South African context NGOs were formed in the apartheid era as a response to racial discrimination (Mazibuko, 2000). The Natives Land Act of 1913 created segregation between African and Europeans as it allocated a minority of agricultural land to Africans. This led to many Africans being forced to become farm labourers in farms owned by Europeans and created an almost servant and master relationship between the employee and employer. Furthermore, the apartheid government withheld service provision for black people thus exacerbating their poverty and increasing discrimination (Mazibuko, 2000). Civil society felt

sympathy for these groups of marginalised people and formed groups known as NGOs to assist with the injustices of apartheid. Post-apartheid negotiations between NGOs and government departments can only be initiated if there is a friendly relationship between these two stakeholders and the government wishes to impart tasks upon NGOs which it sees as urgent but does not have the capacity to handle at that particular time (Mazibuko, 2000; Matthews-Njoku *et al.*, 2002). The South African government has been viewed as incapable as the poorest within rural communities still do not benefit from a democratic government thus making the appointment of NGOs very pertinent as they have a close bond with rural communities (Mazibuko, 2000; Ndungu *et al.*, 2005). Funding for these NGOs has decreased over the past decade as many countries face financial crises (Matthew and Nqaba, 2016). Additionally, the transition to democracy in South Africa has created uncertainty and changes around donor funding within the country (Matthews and Nqaba, 2016). Presently, NGOs in South Africa receive funding from government, donors and the private sector (Matthews and Nqaba, 2016). To address the wrongs of the apartheid regime for small-scale farmers, the South African government has set land reform, marketing and finance policies in place to assist small-scale farmers within the agricultural sector. Firstly, policies have been put into place to address land restitution and aims to return land that was lost due to the Natives Land Act of 1913 (Hanekom, 1998). Secondly, controlled agricultural markets have been deregulated with the implementation of the Marketing of Agricultural Products Act (Act No. 47 of 1996) which abolished market control boards and made way for many small to medium enterprises to enter the market 1913 (Hanekom, 1998). Lastly, the South African government has implemented measures, such as NGOs to reform rural agricultural financial markets using a bottom up approach (Hanekom, 1998). The culmination of these acts and the implementation of post-apartheid policies such as the constitution has led to the rise of NGOs who attempt to assist the government to achieve these commitments (Hanekom, 1998; Mazibuko, 2000).

2.6.1 The LIMA Rural Development Foundation's Abalimi Phambili Farmer Support Programme

Kimaro (2013) explains that traditionally, NGOs provide farmers with agricultural support in order to enable them to increase their agricultural production however farmers are facing challenges in terms of accessing agricultural markets. Many of these farmers are expected to produce crop yields to supply markets however they lack access to reliable markets. LIMA Rural Development Foundation with the support of the South African government has pledged R4 363 868.76 to provide support to 800 smallholder farmers within the Ubuhlebezwe Local

Municipality through their APP (IDP 2017). LIMA (n.d) states that they have implemented the APP in order to provide support to rural smallholder farmers through a comprehensive programme. The APP has been in operation within the Ubuhlebezwe Local Municipality since 2016, and intends on running for a period of approximately four years.

The programme aims to integrate smallholder farmers into the agri-business industry by providing them with links to suppliers for their farm inputs and sales markets as well as providing access to credit, technical support and mechanisation technologies. The programme positions their teams strategically within communities, allowing the communities to access agricultural facilitators, extension offices and experienced farmers (LIMA. n.d). It supports farming activities such as dryland cropping, irrigated cropping, small livestock production, poultry production, piggeries, broiler production and deciduous fruit production. For the purposes of this study, some farmers within the communities utilised in this research were supported by LIMA for dryland cropping and broiler production. The farmers are provided with high quality inputs such hybrid vegetable seedlings, day old chicks and potato seed. The farmers are also provided with access to interest free finance in the form of micro-loans. This allows them to further invest in their farm infrastructure, thus allowing them to expand their production and increase their income.

Microcredit and microloans are an idea that was conceived to allow the rural poor to escape from poverty through the provision of loans with a small interest rate thus allowing them to establish activities that will generate income (Kirsten, 2011; Bateman, 2014). Recipients of microfinance include those who cannot access finance from commercial banks due to their lack of collateral such as female-headed households (Busingye *et al.*, 2018). South Africa quickly adopted this strategy for poverty reduction as it utilised a bottom up approach. Microloans were also viewed as the solution for the empowerment of rural women (Kirsten, 2011). A study conducted by Kirsten (2011) indicates that microfinance provides the ability for rural households to improve their livelihoods and allows women to grow their portfolio of assets. Bateman (2014) disagrees with this statement, explaining that while microfinance was intended to support income generation, it has instead become a mechanism for supporting simple consumption needs leading to many rural households falling further into debt. Furthermore, Busingye *et al.* (2018) argue that microloans for income generating activities alone are not sufficient enough to break women out of poverty, as change in one dimension of her poverty will not be enough to free her from the poverty cycle. Women are partial to the poverty cycle

due to institutionalised patriarchal systems which they need to be freed from before breaking free from the cycle of poverty.

2.6.1.1 A case against non-governmental organisations

While NGOs have assumed a key role in responding to inequality, social injustices and poverty, some argue that they are not the appropriate actors needed to improve people's lives (Matthews, 2017). Matthews (2017) argues that neo-liberal policies enforced by The World Bank and International Monetary Fund have forced many states to reduce their expenditure on public services such as health care and extension support. This has hindered the states abilities to act for the people however this has been of benefit to NGOs. NGOs receive funding from donors thus are forced to push their donor's agenda through their intervention. Additionally, NGOs are criticised for their ability to provide solutions to an underlying issue but do not address this issue appropriately. Matthews (2017) provides an example stating that NGOs provide water tanks for rural communities who do not have water, but do not address the power struggles that led to that community not having water. Additionally, many South African NGOs provide jobs to privileged South Africans such as those who have studied rural development rather than affording these job opportunities to local residents who know their communities. While the above points are relevant and important, the role of NGOs cannot be absolutely discarded. It is true that NGOs improve lives on various scales however they are unable to address or change the power dynamics that exist (Matthews, 2017).

2.7 The role of infrastructure in market access

There is a direct link between the availability of physical infrastructure and poverty (Pouliquen, 2000; Ogun, 2010). Poverty is multidimensional and is comprised of risk, vulnerability and powerlessness (Ogun, 2010). Gnade (2013) iterates this point, stating that in order for all members of society to actively contribute to the economy as well as reach their social development goals, they need to have access to basic infrastructure services. All signatories of the UN, including South Africa, adopted the 2030 Agenda for Sustainable Development. The Agenda was brought into action in 2016 following the expiry of the Millennium Development Goals (MDGs). The Agenda comprises of 17 Sustainable Development Goals (SDGs). These goals recognise that the reduction of poverty and other social ills must go hand in hand with improving education, reducing inequalities and encouraging economic growth, while taking the environment and climate change into consideration (UN, 2015).

Access to basic infrastructure is considered a basic human right, regardless of where a person resides, their age, gender, race or income (Gnade, 2013). The three tiers of the South African Government are mandated by the Constitution to provide the people of South Africa with basic infrastructure, health, education and security (Gnade, 2013). South Africa's National Development Plan 2030 intends to eliminate poverty, reduce inequality within the country by the year 2030 and provide all South Africans with a decent standard of living. This includes housing, water electricity and sanitation (National Planning Commission, 2011). This has been achieved, albeit unequally in its distribution, through some of the programmes initiated by the government, namely: The Reconstruction and Development Programme (RDP), the Growth, Employment and Redistribution (GEAR) strategy and the Accelerated and Shared Growth Initiative of South Africa (ASGISA) (SA Government, 2019).

A study conducted by the National Planning Commission (NPC) states that the rate of inequality within the country in terms of urban and rural areas as it is indicated that rural areas have lower rates of access to water, sanitation and electricity when compared to urban areas (Gnade, 2013; Mlambo, 2018). This study was conducted in 2011 and did not consider the role of telecommunications. Over the years, telecommunications have become an important part of development (Mazibuko, 2013).

Infrastructure plays an imperative role in rural development, especially in areas where agriculture is the primary form of income (Chirwa, 2004; O'Neil, 2011; Mazibuko, 2013). Physical or built capital assets influence the rate of economic development. Capital assets such as roads are imperative for market access (Mazibuko, 2013). Additionally, the lack of a safe water supply and appropriate housing entails that rural residents have to allocate time for water collection which reduces the time that they spend on production.

The eMazabekweni, KwaNokweja, Hopewell and Carisbrooke utilised for this study do not have access to formal roads. Formal roads refer to roads that are gravelled, paved or tarred roads whereas informal roads refer to roads that are not gravelled, paved or tarred (Porter, 2002). O'Neil (2011) states that road networks within rural communities are mostly comprised of gravel or dirt roads even though these roads act as a lifeline for these communities. However, there has been proof of a direct correlation between improved roads and increased produce among farmers. The delayed development of road infrastructure in Africa can be attributed to a history of colonialism and SAPs (Porter, 2002; Sewell and Desai, 2016). In South Africa, the relocation of black people to homelands was characterised by the lack of services such as water, electricity and roads. Lack of access to formal roads serves as a barrier to service provision

within rural communities. Residents of communities in areas without access to formal roads can be considered off road communities. These communities often lack access to the outside world and these communities often become invisible to the outside world (Porter, 2002).

The remoteness of these communities increases the costs of services for the respective communities further burdening these communities and making them vulnerable to poverty and gender inequality (Sewell and Desai, 2016). Roads play an important role in decreasing the transactional costs of accessing resources (Porter, 2002; Porter *et al.*, 2013). The availability of roads also creates access to markets that were not previously available and facilitates the movement of farmers between a range of places in search of improved income opportunities. In the absence of communication infrastructure, roads can also play a role in the transmission of knowledge (Porter, 2002). Accessing agricultural markets proves to be an arduous task for women who are living off road and lack of access to formal roads increases the burdens of women (Porter, 2002; Sewell and Desai, 2016).

Informal roads also affect agricultural markets in rural communities as produce farmers are unwilling to travel to off road communities within rural areas to access goods (Porter, 2002; Porter *et al.*, 2013). Additionally, rural farmers find it difficult to access towns and markets due to the high transport costs. Taxis do not want to access these communities due to the poor conditions of informal roads therefore residents of the community are forced to walk to access transport routes (Porter, 2002).

The literature above indicates that road infrastructure is one of the most influential barriers to market access.

2.8 Conclusion

This chapter discussed literature specific to agriculture and agricultural market access among rural communities. The literature focused on female smallholder farmers and the barriers that prevent them from participating in smallholder farming and access to agricultural markets. There are various socioeconomic issues at play concerning women's participation in agricultural markets that have to be considered. Case studies were utilised to provide clearer insight into these socioeconomic issues. It is imperative to understand that South Africa's past colonial regimes still present obstacles within rural areas. This has been a theme throughout this literature review.

Chapter 3: Conceptual frameworks

3.1 Introduction

According to Grant and Osanloo (2014) a conceptual or theoretical framework is one of the most important phases of the research process. It can be described as the blueprint of any research project and has been described as the most difficult aspect of the research process. A conceptual framework stands to be applied throughout the research project, often becoming a bit confusing for researchers. This chapter will discuss the approaches and conceptual theories supporting the research undertaken within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities. This research project focuses on the effectiveness of NGOs in providing assistance to female smallholder farmers to increase access to agricultural markets as a poverty alleviation strategy.

This chapter will examine political ecology theory, urban bias theory, the sustainable livelihoods approach and the feminisation of poverty. Each of these frameworks will be put into the context of the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities. These frameworks provide an explanation for the lack of development within rural communities, the poverty faced by residents of rural areas, the biases that women within rural settings face as well as the integration and interaction of stakeholders within these communities.

3.2 Political ecology

Political ecology can be defined as the study of the connections between social, political and economic factors that affect environmental issues as well as the impacts on livelihoods and changes within the environment (Adams, 2001; Bassett and Peimer, 2015). This theory investigates matters such as land degradation, ostracism, environmental conflict, conservation and social movements. It then contextualises them within the larger political economy (Bassett and Peimer, 2015). Anthropologist Eric Wolf and environmentalist Grahame Beakhurst are thought to have defined the concept of political ecology, stating that it is the study of the relationship between political ecology and economy in terms of environmental changes (Khan, 2013; Benjaminsen and Robbins, 2015).

Political ecology reiterates the link between humans and the environment. It is a concept that is multidisciplinary as it makes use of a variety of methods to investigate how nature and the environment are observed and managed in terms of accessing and having control over natural

resources (Watts and Scales, 2015). Political ecology is also characterised by its objective to achieve environmental justice as it aims to not only analyse environmental challenges but also to put them into context, especially in terms of environmental issues (Peet and Watts, 1996; Watts and Scales, 2015).

Greenburg and Park (1994) elaborate on political ecology stating that the concepts of political economy and ecological analysis has influenced the evolution of the political ecology framework. Political economy decrees that productivity is dependent upon power distribution, whilst only considering social constructs and excluding anything that is not human. Ecological analysis incorporates relationships within the environment however, political ecology combines both of these concepts. Political ecology considers non-human elements of the environment as well as social influences (Greenburg and Park, 1994; Watts and Scales, 2015).

Political ecology is a social theory that emerged in the late 1970s, having being preceded by cultural ecology (Kalipeni and Oppong, 1998; Walker, 2005). Political ecology is a social theory framework that entails the social theory around three elements namely context and scale, historical backgrounds and structural relationship thus allowing this theory to examine the relationship between humans and their environments (Kalipeni and Oppong, 1998; Walker, 2005). Firstly, context and scale refer to the notion that phenomena should be analysed at a broader scale whilst considering the social, economic and environmental contexts on a local to global scale. Political economic forces play a large role on these phenomena and there are two-way linkages between humans and their environments (Kalipeni and Oppong, 1998). Secondly, these interactions between society and the environment are put into the framework of the: local historical background as well as the ecology allowing for an in depth understanding of human-environment interactions. This is a lengthy process and will take some time to display results such as land degradation, the erosion of biodiversity and other global changes within the environment. The last element refers to the human agencies that are central to the changes seen within the complex webs of interaction that characterise this environment. These human agencies are defined as the role-players that cause changes within the environment such as directors of industrial companies, managers of logging businesses and farmers whose actions are channelled by society rather than by choice (Kalipeni and Oppong, 1998; Mathevet *et al.*, 2015).

Elaborating on the point above, Adams (2001) indicates that the poor are often blamed for their role in environmental degradation however they are also the victims of environmental degradation. Furthermore, there is a link between environmental degradation and poverty as

those who are poor might further degrade the environment because their poverty forces them to do so. This is especially relevant in the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, as they are situated in rural areas that are rife with poverty. These communities are also situated in mountainous areas where the quality of the soil is poor and farming becomes difficult due to unfavourable environmental conditions. Furthermore, these communities are characterised by the previous injustices of apartheid, which affects their livelihoods (IDP 2017). Rural residents from the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities are smallholder farmers thus are reliant on their land to meet their household needs. However, over farming to meet their needs will cause environmental degradation thus exacerbating their condition. This makes escaping from the poverty cycle increasingly difficult.

Political ecology has become one of the most established fields within the human – environmental sector of research in the discipline of geography, and is continually being used as part of the language for environmental justice (Walker, 2005; Walker, 2012). This theory investigates the conflict that results from the unequal distribution of power and resources, thus exploring the social relations of power within the context of an ever changing and degraded environment as well as how politics influences the use of resources (Walker, 2005).

After decades of promises regarding women and the environment or women and development, it has become a concern that women and the environment are still being addressed as two separate issues thus causing the creation of two separate plans of action to combat the issues faced by both females and the environment (Rocheleau, 1995; Sachs, 2018). Within rural communities around the world, women are held responsible for reproduction in order to contribute to the workforce, they are expected to contribute towards daily tasks and chores as well as produce for their family's daily subsistence (Rocheleau, 1995; Raidimi, 2013; Sachs, 2018).

Women play multiple roles within their households however most of these women, especially those who reside in rural areas do not have legal access or rights to the land which they tend, as well as not being recognised as part of the formal workforce (Rocheleau, 1995; Moletsane and Ntombela, 2010; Sachs, 2018). Most of the work that women do within their households is not appreciated or accounted for when considering a country's productivity. Women's lack of access to land ownership contradicts the SDGs as the ownership of land and ability to work on the land will allow rural women to achieve the no poverty, zero hunger and gender equality

goals. Additionally, women will eventually be able to achieve the other SDGs through the trickle-down effect of land ownership (UN Women, 2016).

The rural-urban migration of men has caused gender roles, rights and responsibilities within a household to shift. Women are becoming accountable for the use of land, the changes in their rural landscapes as well as the variety of plant and animal life that they maintain. Over time women have become the farmers, herders, market vendors and guardians of their surrounding environments even though they lack rights to the land and do not have access to resources that are imperative for them so that they may fulfil their ever-increasing list of responsibilities (Rocheleau, 1995; Barnett, 2004; Van Willigen, 2014).

A majority of poor people reside in rural areas, where they mostly rely on farming as their source of livelihoods. Residents of rural communities have been subjected to a degraded environment that is of no benefit to them or their livelihoods therefore perpetuating the poverty cycle and enforcing impoverishment within rural communities (Holmes and Jones, 2011; Raidimi, 2014). In the context of this study, the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities are placed within areas that were previously isolated during the apartheid regime. The degraded environment that surrounds these communities perpetuated their lack of access to resources and their inability to sustain themselves through the utilisation of their land (Khunou, 2009; IDP, 2017).

Gender inequalities are evident within rural communities in terms of people's access to assets and services that are necessary for them to escape poverty (Holmes and Jones, 2011; Raidimi, 2014). The lack of access to assets and resources amongst women promotes their inability to participate in markets causing these women and their families to live in poverty. This affects their daily lives and their standards of living (Schmitt *et al.*, 2002; UN Women, 2013).

In the case of this research the four communities, eMazabekweni, KwaNokweja, Hopewell and Carisbrooke are situated in mountainous terrain with large areas of soil erosion as well as a lack of access to basic infrastructure such as water and roads. Poverty and environmental degradation creates a trap from which there is very little chance of escape. Often, due to the lack of appropriate knowledge and skills, rural farmers are not able to improve themselves or their practices causing further degradation of their environment as well as causing their living conditions to deteriorate (Adams, 2001). The lack of access to resources and inability to attain environmental knowledge and skills results in land continually being used in an unsustainable manner, leading to decreased crop yields, which many farmers sell to sustain their livelihoods

(Adams, 2001; Holmes and Jones, 2011). Additionally, the HIV/ AIDS burden has caused a change to food production systems. Many families do not have the labour force that is necessary to carry out their farming tasks due to high rates of HIV/ AIDS infections (Gabrielsson and Ramasar, 2013).

Derman and Ferguson (2003) reiterate that changes in our environment affect cultures and societies in different ways, often affecting one group more than the other. An example of this would be more resources being allocated to stakeholders within a community who have more authority, thus leaving the minority without access to resources. This includes those communities that are based in rural areas, and especially women who are the heads of their households. These women are given no recognition or authority and often suffer without access to basic services and infrastructure. They also do not have rights to land therefore cannot maintain their livelihoods. These rural women are represented by women from the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities which are the focus of this research study.

3.2.1 Feminist political ecology

Elmhirst (2011) introduces feminist political ecology by questioning the gender dimensions of environmental challenges and how these are linked with the objectives and strategies of feminists. This sub-field arose in the 1990s, with the intention of linking feminist and political ecology at a ground level, by examining the links between environmental issues, government policies and women (Rocheleau, 1996; Elmhirst, 2011). Dianne Rocheleau can be seen as one of the founders of feminist political ecology as she encouraged political ecologists to include gender relations to their analysis of power as well as consider household and community scales in their analysis (Rocheleau, 1996; Elmhirst, 2011). Rocheleau believes that the allocation of resources as well as the ability to access these resources is heavily dependent on gender followed by class, caste, race, culture, and ethnicity which all influence ecological changes as well as the ability to practice sustainable development (Elmhirst, 2011; Sundberg, 2016).

Feminist political ecology intends to bridge the gap between sectors such as academics, policy-makers and NGOs on different scales of the environment that are usually kept apart, providing an in depth understanding of the political and economic processes within our society (Sundberg, 2016). This is particularly relevant to this research as rural women are considered key role players in terms of development within their communities. Rural women play a catalytic role in sustainable development which can be defined as development that meets the

needs of the current generation without compromising the ability of future generations to meet their needs (Borowy, 2013). Rural women are often denied access or have limited access to ownership of land, health care, credit and educational resources, further exacerbated by food shortages, economic crises and changes in our climate (UN Women, 2013). This inhibits their ability to adapt and develop in a sustainable manner.

3.2 Urban Bias Theory

The theory of urban bias has played an influential role in development studies within countries over time (Varshney, 1993; Dy, 2015). An increase in knowledge of rural life within developing countries can be attributed to Michael Lipton and Robert Bates both of whom contributed greatly to the urban bias theory. Lipton first introduced the urban bias theory in 1977 arguing that rural and urban areas within developing countries are in a constant state of conflict, with urban areas often having the upper hand due to the increased amounts of power and wealth within these areas (Jones and Corbridge, 2010). Varshney (1993) and Dy (2015) reiterate this point stating that the process of development within the third world is systematically prejudiced against rural areas and this prejudice stems from the political structures of these countries as urban groups have more power to influence the decisions that are made. Policies created by those in power allocate most resources to urban areas allowing an increase in the rate of urbanisation within urban cities (Varshney, 1993; Knox and McCarthy, 2005). This hinders the rate of development within rural areas causing uneven rates of development resulting in a further shift of the power dynamics between these two areas (Knox and McCarthy, 2005).

Jones and Corbridge (2010) state that the decreased rate of development within rural communities is exacerbated by the high prices of goods and services imposed on rural residents by the government and other parastatal companies. These high prices apply to goods that are brought into rural areas from urban areas and are sold at exorbitant prices. However, goods that are exported from rural areas to urban areas are sold at relatively lower prices than the goods priced at the market norm. This is known as the price-twist (Jones and Corbridge, 2010). In addition to the high prices that are imposed by the government, there is very little funding spent on improving the skills and education of rural people, causing the inability of rural communities to uplift themselves. In most cases, rural residents who seek further development and training must move to cities, therefore the cycle of poverty is intensified by rural-urban migration and urban-bias (Jones and Corbridge, 2010; Jedwab *et al.*, 2015)

Studies conducted by Bezemer and Heady (2008) have indicated that investments into agriculture, rural infrastructure, education and health made by developing countries will result in the growth and further development of these countries. However, in the past three decades, there has been a decreased rate of resource allocation to rural communities, caused by a systematic bias against investments in agriculture and the rural economy in favour of investments into infrastructure in urban areas (Lipton, 1977; Bezemer and Heady, 2008). However, implementation of government policies in developing countries popularise urban biases in an attempt to promote industrialisation within urban settings (Pierskalla, 2016).

Pierskalla (2016) reiterates Lipton's (1977) theory which states that in order to generate pro-poor development within developing countries, more resources need to be allocated to rural areas. Ideally, resources should initially be allocated towards the rural agricultural sector, especially small-scale agriculture, in order to grow farm productivity and increase incomes at a swifter rate. This will eventually lead to development within other sectors and is effective because rural activities generally require less input capital when compared to urban industries. Rural initiatives should be provided with better access to loans and markets in order to generate investments. Additionally, the public needs to be encouraged to work in rural areas especially those from the education and healthcare sectors.

In an ideal world Lipton's suggestion would be effective at reducing urban biases but within developing countries, market failures and past colonial activities hinder agricultural development that is market led (Bezemer and Heady, 2008). The importance of agricultural development has often been pointed out however, aid agencies have decreased their investments as well as research regarding agriculture and its benefits (Bezemer and Heady, 2008). Thus, Lipton's conclusion that urban biases are the largest impediment to growth and poverty alleviation within developing countries is still relevant today.

This theory is important for this research, as the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke rural communities that have been chosen are severely lacking infrastructure and the delivery of services such as roads and water even though they are in close proximity to Ixopo which is a large city within their municipality. These four rural communities, eMazabekweni, KwaNokweja, Hopewell and Carisbrooke do not have the resources to develop their agricultural skills and often resort to migration to urban areas as a way of sustaining their livelihoods. This reiterates the point made by StatsSA (2019a) which states that service delivery is one of the most important building blocks for a good quality of life. The non-delivery of these services proves to be detrimental to the performance and development of a

municipality. The urban bias theory will aid in understanding the results of the study by providing a rationale for the underdevelopment of the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities. This underdevelopment plays an integral role in the background of this study.

3.3 The Sustainable Livelihoods Approach

Sustainable development is an idea that was first introduced by the Brundtland Commission on Environment and Development, and was then expanded on at the 1992 United Nations Conference on Environment and Development, who stated that poverty can be eradicated if sustainable livelihoods could be achieved (Krantz, 2001). Chambers and Conway (1992) and Serrat (2017) define a livelihood as the abilities, resources and actions that are necessary as a means of living. The purpose of the Sustainable Livelihoods Framework (SLF) is to serve as a means for policies to address issues such as poverty eradication, sustainable development and the management of resources in a sustainable manner in order to initiate change (Krantz, 2001).

Most discussions regarding sustainable livelihoods have focused on rural areas as most residents of rural communities rely on farming or other forms of primary production as their means of livelihoods. Krantz (2001) emphasises that livelihoods should be examined at a household level within a community however it is important to recognise that each household varies in levels of wellbeing and the ability to access resources. Globalisation and Livelihood Opportunities for People living in Poverty (GLOPP) (2008: 2) defines a livelihood as:

A livelihood comprises the capabilities, assets and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.

According to Carney (2003) the adoption of a Sustainable Livelihoods Approach (SLA) should be used to reduce poverty in rural areas. One of the main points of the SLA is that each household has access to different livelihood assets and each of these assets is organised by its ability to either enhance or hinder livelihood opportunities (Serrat, 2017). However, Scoones (1998) states that defining a sustainable livelihood proves to be a difficult task, as sustainable living has a variety of meanings to different people. The SLA has encouraged development agencies to interpret and apply the approach in a variety of ways in order to reduce poverty. Although, it must be noted that during the creation of poverty alleviation strategies, a sustainable livelihood must be defined and is followed by plans which allow a sustainable

livelihood to be achieved (Krantz, 2001; Mazibuko, 2013) . The indicators of a sustainable livelihood will be defined below.

3.3.1 The Principles of a Sustainable Livelihood

The SLA is defined by the principles used to guide the policy making process in order to alleviate poverty and create sustainable development. Policies should promote development that adheres to the principles of a sustainable livelihood. The sustainable principles as referred to (Krantz, 2001: 18; Mazibuko, 2013: 178-179; Serrat, 2017: 15) are as follows:

3.3.1.1 People – centred

In order for poverty to be eliminated in a sustainable manner, policies and programmes need to focus on and understand what is important referring to who they are targeting, the relationship between different groups of stakeholders and opinions of these people. These strategies need to be compatible with the target’s current livelihood strategy, their social environment and their ability to adjust.

3.3.1.2 Responsive and participatory

Livelihood priorities must be identified and addressed by poor people themselves and these people should play a key role in the process. Poor people need to be facilitators of the process, allowing their input to be heard and responded to, instead of being dictated to them by outsiders. This ensures that solutions are drawn up in line with these people’s circumstances instead of using an approach that is one-fits-all approach.

3.3.1.3 Multi – level

The only way to reduce and eliminate poverty is to enforce a multi – level approach to poverty alleviation. This is in line with the SDGs that were set out by the UN member states in 2015. The SDGs are a global call for action and recognises that poverty alleviation and relief from other forms of deprivation must go hand in hand with strategies and policies. These strategies and policies should aim to improve health, increase education levels, spur economic growth and reduce inequality around the world, while always taking into consideration our environment and the rapid changes that are occurring (Scoones, 1998; Krantz, 2001; Mazibuko, 2013; Serrat, 2017). The SDGs need to be enforced at macro-levels through binding the South African government to international agreements and expecting these agreements to be adhered to through national policies (Mazibuko, 2013). Participation at a micro-level such as LIMA

and other NGOs operating within communities needs to inform the development of policies in order to create a positive working environment thus allowing growth at a macro – level ensuring that people are then able to support themselves according to their own strengths.

3.3.1.4 Partnerships

Stakeholders at different levels of the development process work together, thus creating vital partnerships. Local rural communities, such as the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities utilised in this research, need to be involved with the public and private sector so that knowledge, especially indigenous knowledge which local communities gain through knowledge passed down from generation to generation can be shared. In this manner, local communities can share their knowledge with other stakeholders and vice versa. This partnership can be mutually beneficial for poverty alleviation as well as sustainable development. Sustainable development is defined by the UN (1987: 39) as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

Incorporation of sustainable development is imperative to policies and programmes that are developed for rural upliftment, such as the programme designed for rural communities by LIMA. LIMA has to provide training and skills development workshops to farmers, while incorporating and educating these farmers about the consequences of their farming actions on the environment to create awareness about the conservation of resources for future generations.

3.3.1.5 Sustainable

A livelihood is a means through which people earn a living and can be considered sustainable when it fulfils and finds a balance between the five key dimensions of sustainability, namely: economic, institutional, social, cultural and environmental. Economic sustainability will support economic growth for the future without having negative environmental, social or cultural impacts. Institutional sustainability is aimed towards the purpose of compliance, as well as to ensure justice and participation (Spangenberg, 2002). Social sustainability promotes the wellbeing of community members, ensuring that a healthy community is maintained for future generations. Cultural sustainability aims to ensure that traditional beliefs, practices and heritage are not altered and will be able to be passed on to future generations. Environmental sustainability is an underlying concept among all dimensions of sustainability. Environmental

sustainability entails utilising resources effectively thus ensuring that these resources are available and viable for present and future generations.

3.3.1.6 Dynamic

External support systems need to be aware of the dynamic nature of livelihood strategies and the need for these strategies to constantly adapt to the stresses and shocks that poor people experience. Policies and development plans need to be created in a manner that is flexible enough to support these changes in livelihood strategies, as well as develop policies and plans accordingly so that long-term support can be given to poor people.

Many of the principles that have been outlined above can be applied to the farmer support programmes that are in place within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities that were used for the research purposes of this study. This programme aims to uplift these communities by teaching them vital skills and including them in the decision-making process. This programme's key theme is sustainability and allows various stakeholders within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities as well as the NGOs operating in the area who interact with the respective communities. These partnerships are beneficial and have a feedback mechanism which enable the community to voice their concerns or thoughts concerning the programme.

The concept of sustainable livelihoods has inspired development agencies to apply an approach that has become known as the SLA to poverty alleviation (Krantz, 2001). This approach has been introduced to contrast orthodox approaches to poverty alleviation and is able to identify opportunities for new programmes or initiatives to be introduced for poverty alleviation or can be used to re-evaluate existing programmes.

The SLA has been applied to poverty alleviation strategies for three reasons, as explained by Krantz (2001: 2-3):

1. Whilst economic growth remains important for poverty alleviation, there is no automatic link between the two as the ability to take advantage of economic opportunities and expansion relies solely upon the poor person. Thus, it is necessary to find out what constraints poor people face so that policies and the following activities can be designed to support them as much as possible.
2. Poverty is multi-dimensional and does not only apply to those who fall within the low-income category. It can also include bad health, lack of social services and

infrastructure as well as the lack of skills. Therefore, it has become evident to policy makers that an improvement in one dimension of poverty have a positive effect on the other dimensions, thus reducing their vulnerability.

3. Indigenous knowledge is vital and poor people often know what is the best for themselves and the circumstances in which they find themselves, therefore they must be a part of the planning and policy creation process. If they are included in the planning process they will be more committed to implementation, thus participation improves the project itself.

The SLA is a guide for policy makers, which helps them to understand the circumstances of poor communities and thereafter develop plans according to their needs. NGOs within this study's research communities have not sufficiently utilised the SLA as the community on a ground level was not taken into account when developing their intervention plan.

3.3.2 The Sustainable Livelihoods Framework

The Sustainable Livelihoods Framework (SLF) can be referred to as a multiple capital approach as it considers sustainability in terms of what forms of capital are available, as well as the context of vulnerability within which these assets exist (Morse *et al.*, 2009, Serrat, 2017). This framework also assesses the livelihood strategies, policies, institutions and practices that are in place within a community (Brockelsby and Fisher, 2003; Serrat, 2017). The SLF is a tool that can be used to aid the implementation of the SLA and there are five principal forms of capital that are represented by the pentagon model. Individuals within a community make use of five capital assets which contribute to their livelihoods. These assets are cited in Scoones (1998: 4), Morse *et al.* (2009: 23-30) and Mazibuko (2013: 179 - 180) and are expanded on below:

Financial capital: This refers to the cash, loans, savings and debit or credit facilities that are available to poor people in order for them to be able to pursue a livelihood strategy. In the case of this research, financial capital largely refers to grants such as pension funds and child grants, sales of crops that are grown or remittances.

Social capital: This refers to the social networks and relations that are built within a community, and can be relied upon during times when actions need to be coordinated in order to pursue a livelihood strategy. For the purpose of this research, this refers to the relationships and bonds of trust that are established within the community members, neighbours, friends, family members and the programme facilitators whom the community has built a strong bond with and who assists the community tremendously.

Natural capital: This refers to the natural resources as well as environmental services that are available and can be used to derive livelihoods. Within this research study natural capital is used in the community's daily lives. Streams are used to water crops, firewood is used as a form of energy and the land itself plays a fundamental role in the creation of a daily source of income.

Physical capital: This refers to methods of transportation, communication, technology and production infrastructure that is possessed by an individual. Within the communities that were researched in this study, the possession of these forms of physical capital is very limited and not every household possesses these forms of capital. The eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities do not have formal roads and most households do not own a motor vehicle. Households that own a motor vehicle are male-headed and have large areas of land for crop production. None of the respondents who participated in this study own a car as they are all female and do not have access to the resources that will enable them to purchase a car.

Human capital: This refers to the indigenous knowledge systems and skills that are passed on from one generation to the next. Good health and the physical capabilities of an individual can also be considered when discussing human capital. Human capital can be seen in all four communities that were researched, as each community has learnt over the years which crop to plant, where and when to plant these crops as well as the use of indigenous coping mechanisms when tackling certain environmental issues such as lack of water due to drought conditions.

Cooper *et al.* (2008) maintain that all the capital assets mentioned above form the foundation upon which the livelihood of communities is built. However, Scoones (1998) states that although the forms of capital listed above are quite comprehensive this is not a complete list and other forms of capital can be acknowledged. People are able to create a livelihood when they combine the forms of capital that they have been endowed with, have access to and have power over however, it must be noted that livelihoods are very complex and that each activity has many different role players. A community's vulnerability to shocks is decreased when they have a wider variety of assets that are available to them. This allows them to adapt to shocks faster (GLOPP, 2008).

3.3.4 The advantages and disadvantages of the Sustainable Livelihoods Approach

3.3.4.1 Advantages

According to Krantz (2001) the SLA exhibits the various combinations of actions that people carry out in order to earn a living. Especially referring to poor people, who rely on several economic activities for their livelihoods with each activity contributing equally to their total livelihood. This approach is strength based and focuses on the assets and skills that people possess, instead of focusing on what people do not have and what they still require (Mazibuko, 2013). The main advantages of the SLA are that it encourages people to build on what they already have instead of focusing on the things that they do not possess. This is fundamental for rural people, as they are constrained with regards to what resources they have access to.

The SLA also makes use of a holistic viewpoint instead of focusing on a sectoral approach. A sectoral approach encourages focus on only one area of economic development such as forestry or fisheries, addressing only one aspect of people's livelihoods and this aspect might not even be relevant to poor people. Therefore, a holistic view is utilised when considering the combination of resources that poor people use for their livelihoods (Krantz, 2001; Serrat, 2017).

Additionally, the SLA tries to understand the underlying causes of poverty at different levels and whether these causes affect poor people's access to resources which they depend on for their livelihoods (Krantz, 2001). Furthermore, the SLA comprehends the linkages between the strategies that people use to sustain their livelihoods, the assets and forms of capital that they possess and the variety of natural resources that they have access to. This allows a holistic overview of the issues that the poor face, and provides a sustainable solution for development at a local level (Krantz, 2011). Various stakeholders at multiple levels are taken into consideration within this approach. It allows for learning at multiple levels in order to create growth within a community (Krantz, 2011).

3.3.4.2 Disadvantages

The SLA raises some methodological and practical issues which will be discussed below.

Firstly, the definition of poverty is problematic. The reason being that poverty is a multi-dimensional phenomenon and needs to be defined before this approach is utilised (Krantz, 2001). Additionally, the cycle of poverty must be taken into consideration. One has to take into

consideration the power dynamics and social networks that exist at macro and micro levels, as this influences the way in which poor people access resources (Serrat, 2017). The SLA places a great emphasis on transforming structures and changing processes so that they may benefit the poor and improve their livelihoods, however this is a complicated course of development.

There are also inequalities that exist in the access to resources between males and females (Kokotsi Moeng, 2011). This relates to the power dynamics that exist within a rural community. Considerations of these power dynamics within genders is minimally covered within this approach. Women are often not considered when creating solutions to problems. They are considered in policy but not at grassroots level. This is evident within the eMzabekweni, KwaNokweja, Hopewell and Carisbrooke communities as there are no specific organisations who are tasked with aiding women only, as NGOs such as LIMA who operate within these communities' target both males and females.

Rural livelihoods require a plan or framework that is flexible and this is not the case when it comes to the SLA. The planning of development projects rarely begins with a clean slate and in most cases these programmes make use of previous policies. Most of these policies are from other first world countries and use a cookie cutter approach which assumes that all communities are equal (Krantz, 2001; Morse *et al.*, 2009). Adjusting these policies spans over a period of years as the vetting process takes place making the policy very rigid and not as flexible as it needs to be (Krantz, 2001; Morse *et al.*, 2009). Furthermore, this approach is very demanding and requires large analytical capacity and availability of information, thus running the risk of the programme becoming monopolised by the donor organisation and their employees. Therefore, it is suggested that in order to control the programme, clear demarcations of duties and capacities need to be in place (Krantz, 2001).

3.4 Feminisation of poverty

The concept of the feminisation of poverty in the developing world has three distinct meanings. Firstly, poverty occurs at a higher rate amongst woman than men. Secondly, a woman's poverty is more severe than the poverty experienced by a male and lastly, the incidence of poverty amongst women is constantly increasing when compared to the poverty rates amongst men (Wennerholm, 2002: 9).

Factors leading to the feminisation of poverty can be linked to gender inequalities in terms of rights, abilities and privileges. Neo-liberal restructuring and the erosion of social networks due to migration also play a role in the feminisation of poverty, but according to UN Women (2000)

and Chant (2003) the prevalence of female-headed households is one of the main attributors to poverty among females. A female-headed household often comprises of a mother who has to maintain her family's livelihood on one salary, thus her salary does not only affect her, but also affects her children. In effect, this has led to single motherhood becoming synonymous with poverty (Chant, 2003; Chant, 2014).

Awareness of the vulnerability of female-headed households began in the 1970's, causing alarm amongst researchers and advocates. In the 1980's at the height of awareness regarding female poverty, the impact of SAPs was brought to light. SAPs are enforced by the Western world and utilise a one-fits-all approach to address the inequalities of poverty however have led to the exacerbation of poverty in developing countries (Dadzie, 2008). This has made the developing world reliant on developed countries as they accrue debt over time (Dadzie, 2008; Shah, 2013).

The impact of these policies on women have remained a concern, as they possess the ability to increase the load of the already heavy poverty burden that women face (Wennerholm, 2002). The one-fits-all approach does not take the needs of local people into account, let alone the needs of rural women. In the 1990's, the definition of poverty began to change and many researchers began including the variety and complexity of factors that affect the differing situations within which men and women find themselves. The complex link between gender and poverty began to gain emphasis as research began to focus on gender and not just women.

3.5 Conclusion

This chapter discussed conceptual theories and approaches that are related to the effectiveness of NGOs farmer support programmes in increasing agricultural market access and decreasing poverty amongst female smallholder farmers. The political ecology theory focused on the link between society and the environment, as well as the power dynamics amongst stakeholders within a community, ultimately affecting the design and implementation of policies within that community. Furthermore, the current state of the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities are added into the context of the political ecology where their past can be traced back to the history of colonialism and apartheid in South Africa.

As explained in the literature review, the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities fall within the homeland areas. This has influenced their ability to access resources such as water, electricity, healthcare and roads. These communities are still trying to overcome the injustices of the apartheid regime. The urban bias theory reiterates this

point as these communities' lack access to basic resources such as water due to inadequate service provision within their community, while their counterparts in the town of Ixopo have access to running water.

This chapter then moves on to explain the SLA and, focuses on the principles of this approach and the importance of making use of the resources that poor people already possess. This is then applied within the four communities. This chapter then concludes with the feminisation of poverty, as it is evident that female-headed households are among the most impoverished houses within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities.

Chapter 4: Research methodology

4.1 Introduction

This chapter will describe the research methodologies utilised in this study which examines the effectiveness of assistance provided by NGOs to female smallholder farmers in order to increase access to agricultural markets as a poverty alleviation strategy. This research utilised triangulation in its approach, therefore quantitative and qualitative data was collected. This chapter will explain the instruments used for the research. The primary and secondary data sources will be elaborated, a description of the study areas will be provided, followed by an explanation of the quantitative and qualitative methods of data collection that were used in this study. The process used to capture and analyse the collected data will be explained and the fieldwork experiences will be discussed. This research examined the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke Communities within the Ubuhlebezwe Local Municipality, KwaZulu-Natal, South Africa as case studies.

4.2 Background of the study areas

KwaZulu-Natal can be classified as the third smallest province within South Africa (Tibane, 2016). This province traditionally receives summer rainfall and experiences a subtropical climate. KwaZulu-Natal plays a strong role in the agricultural sector as well as the manufacturing industry, with an area of 94 361 km² and a population of approximately 11 289 086 (StatsSA, 2019b). The principal language of KwaZulu-Natal is isiZulu, with half the population residing in impoverished former homeland areas (Provincial Review, 2016). KwaZulu-Natal is known for its array of natural resources, as well as its agricultural potential stemming from its vast areas of land that are suitable for agricultural practices. Four communities were chosen for this study namely eMazabekweni, KwaNokweja, Hopewell and Carisbrooke all of which are situated within the Ubuhlebezwe Local Municipality, KwaZulu-Natal, South Africa.

4.2.1 Integrated Development Plan

After the apartheid era in South Africa, the Democratic government made it compulsory for every municipality within the country to have a five-year plan for the development of their municipality, due to the consequences of colonialism and apartheid. (Malefane and Mashakoe, 2008; De Beer, 2018). This five-year plan is known as an Integrated Development Plan (IDP).

It aims to use resources within the municipality to achieve long-term development goals and provides a framework for the municipality's development, aiming to align the goals of local and other spheres of government. The goals of multiple governmental stakeholders should be aligned in order to improve living conditions within the municipality, however the document is reviewed regularly within the five-year period (Malefane and Mashakoe, 2008; De Beer, 2018). For the purpose of this research, the Harry Gwala District Municipality's IDP was reviewed, as well as the Ubuhlebezwe Local Municipality's IDP as all four communities fall within their borders.

4.2.1.1 Harry Gwala District Municipality Integrated Development Plan (2017 – 2022)

The Harry Gwala District Municipality is located towards the South West of KwaZulu-Natal, covering an area of 11 127.888 km². Its population is sparsely spread out within the municipality and due to its position with regards to neighbouring districts, any action for development taken within the Harry Gwala District will affect its neighbouring districts and vice versa (IDP, 2017). This land is zoned as commercial agriculture, plantation forests and human settlements.

The Harry Gwala District's IDP was formulated to be the principal IDP, which analysed the socio-economic, infrastructural and developmental challenges within the municipality. The municipality has found that many rural areas within the district are rife with poverty, as they are positioned in mountainous areas thus making service delivery more difficult in comparison to areas within the urban sphere (IDP, 2017). Some of the key issues faced by the municipality include lack of access water resources that are safe to consume and utilise, investment is lacking for economic growth and service infrastructure has not been upgraded or maintained. In addition, pit latrines pose a key issue that has been faced within municipalities as they pose a risk to the environment and the well-being of communities. The drought has also proved to be a problem for water provision by the municipality and lack of funding for infrastructure does not allow the municipality to fulfil the legislative rights of the residents (IDP, 2017).

The IDP has identified HIV/AIDS, youth unemployment, poverty, crime and stock theft as the main challenges facing communities within the Harry Gwala District. The short-term goals for development within this municipality includes the provision of potable water with an uninterrupted supply. Middle term goals include growing the tourism and agriculture sectors to increase employment, and the long-term goals of the municipality include socio-economic stability and good welfare of communities within the municipality (IDP, 2017).

The Harry Gwala District Municipality has developed a Spatial Development Framework (SDF) to spatially represent future developments within the municipality. Land use patterns are described within the SDF as it also provides guidelines for future developments should the municipality wish to undertake any development projects. These future developments will aim to resolve the challenges faced within the municipality. According to the IDP (2017) the SDF proposes the introduction of bulk water infrastructure projects over the next five years. They also intend to market the district as a tourist destination therefore encouraging small businesses to participate in the tourism market. Development programmes will be supported as long as they intend to decrease drug abuse, crime and teenage pregnancy within the district. Human capital within municipal departments and communities will be utilised in order to ensure that basic needs are fulfilled and service delivery is efficient within the district (IDP, 2017).

4.2.1.2 Ubuhlebezwe Local Municipality Integrated Development Plan (2017/2018)

The Ubuhlebezwe Local Municipality is one of five municipalities within the Harry Gwala District Municipality. This municipality can be classified as predominantly rural with its main centre being the town of Ixopo, which lies 85km away from the city of Pietermaritzburg, the capital of KwaZulu – Natal (IDP, 2017/2018). Ixopo is described as a development node for the municipality as it provides education and health centres for surrounding communities thus paving the way for future socioeconomic development.

The Ubuhlebezwe Local Municipality comprises of agricultural plantations, forest plantations and land which belongs to the tribal authority (IDP, 2017/2018). This municipality has a population of 118 346 people, most of whom reside in rural areas (IDP, 2017/2018: 8). The population comprises of Africans with children aged one to fourteen years of age constituting 40.4% of the total population and pensioners, who range from sixty-five years and above, constituting 6.8% of the population (IDP, 2017/2018: 30). This creates a high dependency rate thus exacerbating the cycle of poverty. This municipality is economically driven by agriculture, followed by mining and tourism. However, unemployment rates remain high and this is believed to be a major contributor to poverty within the municipality as many residents live below the poverty line (IDP, 2017/2018).

Statistics have shown that only 4% of households within the municipality have access to piped water within their dwelling, most of these households are located within towns (IDP, 2017/2018: 34). Eighty eight percent of residents lack basic sanitation in the form of flush toilets that connect to the sewer system (IDP, 2017/2018: 34). Health statistics have shown that

19.4% of deaths within the municipality are caused by HIV/AIDS (IDP, 2017/2018: 31). The female population is dominant within the community, indicating the absence of males due to rural-urban migration (IDP, 2017/2018). Statistics have also shown that education within the municipality is poor, with many residents receiving no formal education. Those who do receive a formal education, do not go further than matric (IDP, 2017/2018). Education contributes to the overall wellbeing of a community and high education levels has been linked to socioeconomic growth, development and an enlightened community (Chandra, 2014).

The municipality has identified the lack of service delivery as its main challenge, as well as the migration of skilled labourers to cities where they will earn a higher wage. Absence of investment opportunities has also presented a challenge, hindering the municipality's overall growth. In order to overcome these challenges, the municipality has opted to improve its tourism industry, intending to create hiking paths, biking routes as well as highlight areas of historical significance.

4.2.1.2.1 The Abalimi Phambili Farmer Support Programme by the LIMA Rural Development Foundation

One of the projects that was highlighted as a catalytic project by the municipality is the LIMA Abalimi Phambili Farmer Support Programme, which was approved in 2016, and has received funding to the value of R4 363 861.76 (IDP, 2017/2018). This programme is intended to be implemented within the municipality for a period of four years. This project intends to provide farmer support to smallholder farmers who have been historically disadvantaged. Through the course of this programme smallholder farmers are going to be provided with access to credit, inputs, agricultural training, advice and will be provided with linkages to agricultural markets. This project intends to improve job creation, increase produce yields as well as close the gap between stakeholders such as farmers, markets and service providers. This project aims to improve the agricultural sector as well as strengthen local farming within the municipality, creating a sustainable solution and encourage future sustainable development (IDP, 2017/2018).

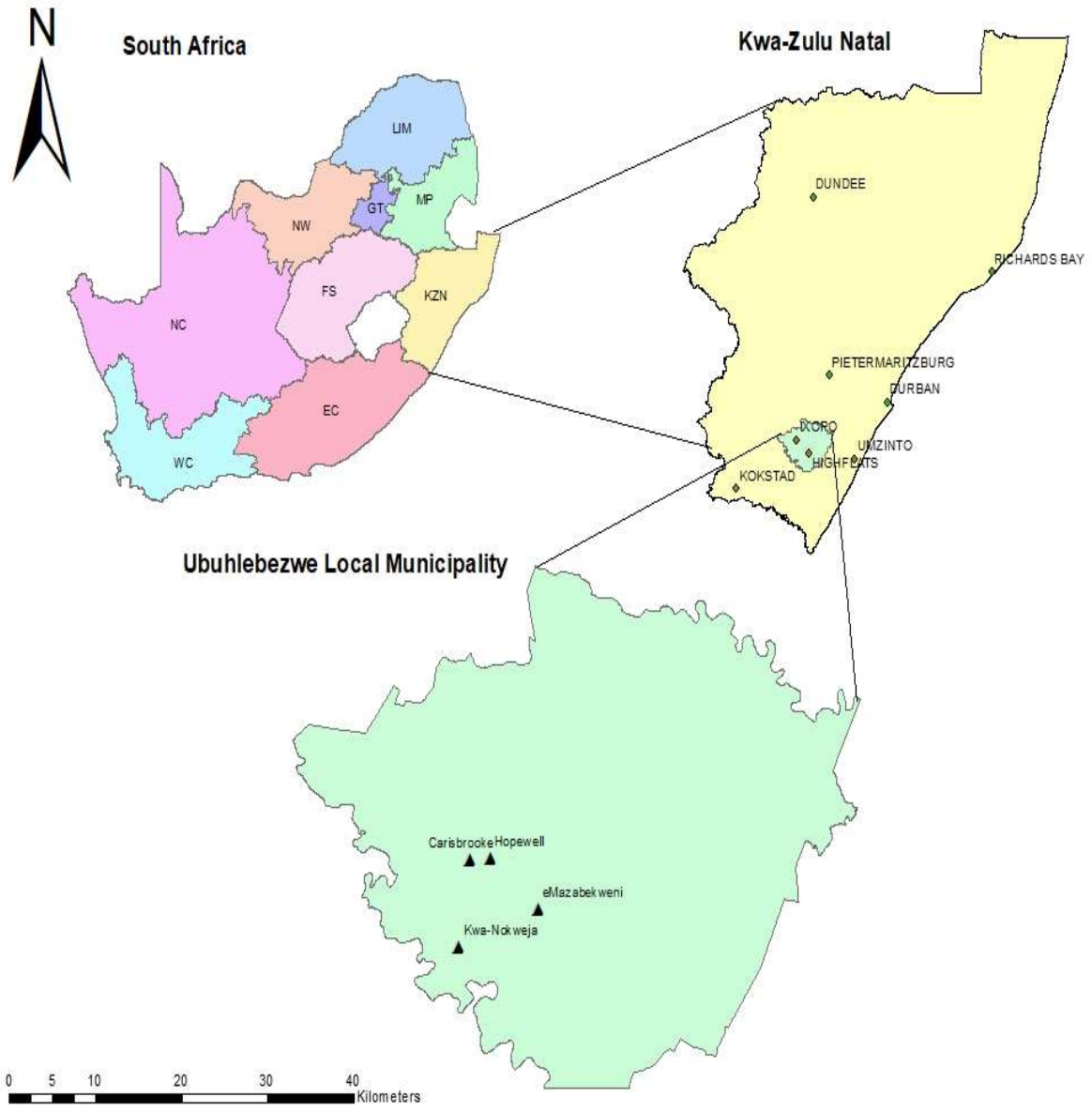


Figure 4. 1: Map illustrating the location of the Ubhlebezwe Local Municipality within KwaZulu-Natal

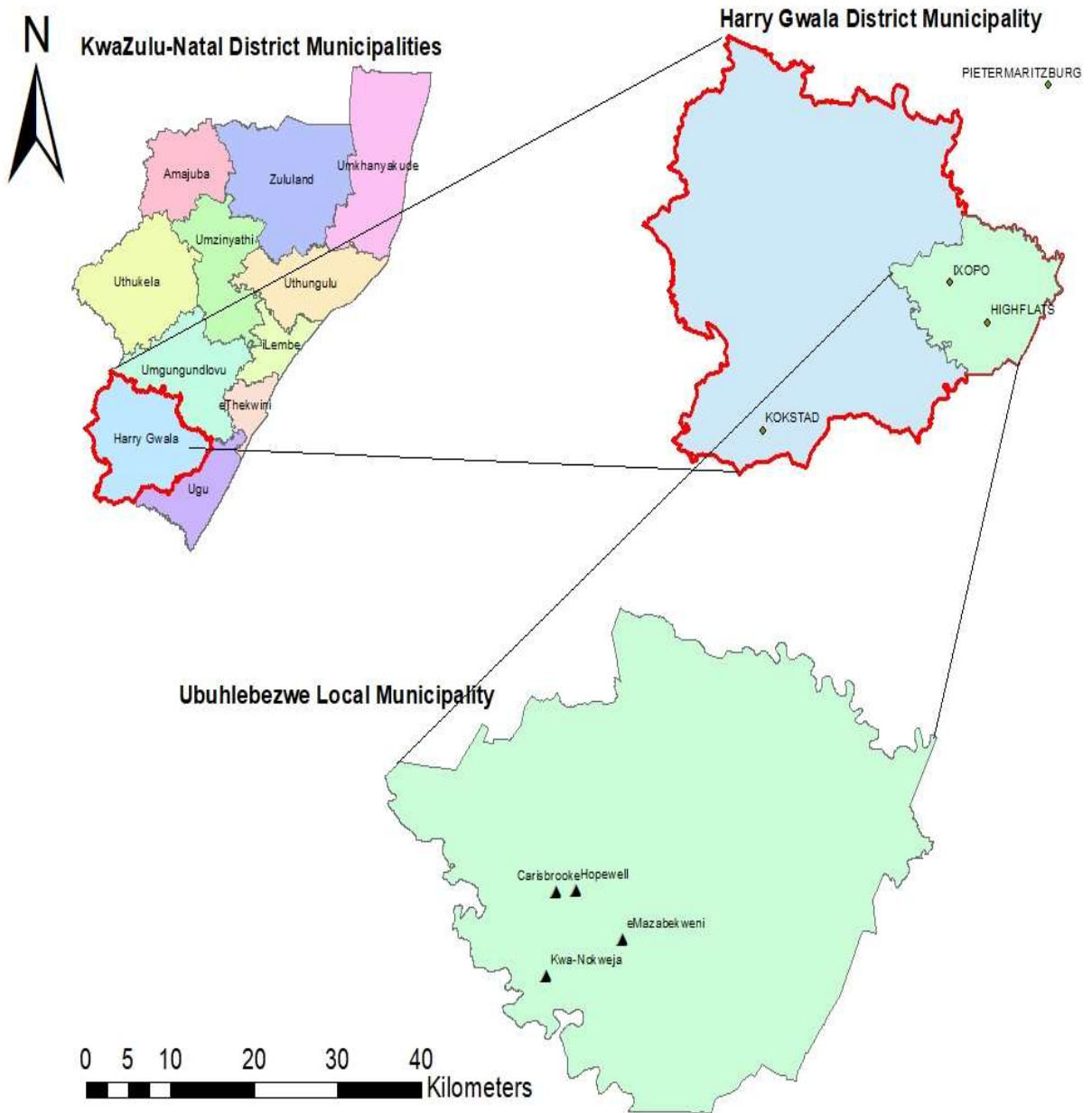


Figure 4. 2: Map illustrating the location of the Ubuhlebezwe Local Municipality with the Harry Gwala District Municipality

4.3 Research instruments

Olsen (2012) states that research entails more than simply gathering data. Research can be described as a more rigorous study, which begins by acquiring and analysing the information. This is followed by carefully curating the results. In order to reach results, data needs to be obtained and this data is obtained through the utilisation of research instruments. These instruments determine the methods in which the data is collected, measured and recorded (Colton and Covert, 2007; Olsen, 2012). In social research, instruments such as questionnaires, interviews and participatory exercises may be utilised as a means of data collection. In this study, both primary and secondary data was used.

4.3.1 Primary data

According to Hox and Boeije (2005) and Ajayi (2017) primary data can be defined as data that is specifically collected for a research problem, using research instruments that best suit the problem. The researcher physically collects primary data in order to address the research problem. This data can be collected by the researcher through interviews, questionnaires and observations thus making the researcher the first person to encounter the raw data (Bhattacharjee, 2012). The data that is collected is made available to the public, adding to the existing knowledge base, consequently making it secondary data (Hox and Boeije, 2005, Bhattacharjee, 2012). Primary data is advantageous as it is directly relevant to the research questions. It is also current data and can be collected in a number of direct ways. However, data collection is very time consuming, study sites are spread out, it is expensive and there are ethical concerns especially in situations where people are involved (Hox and Boeije, 2005; Adams *et al.*, 2007; Salkind, 2010). The research instruments utilised for collecting primary data in this study included open and closed ended questionnaire surveys, focus group discussions and observations.

During the fieldwork, illiteracy amongst community members was a barrier to communication. The language barrier also proved to be a challenge as most people in the community converse in isiZulu. For this purpose, translators had to be taken into the field in order to assist the researcher by translating the questionnaires into isiZulu, as well as providing a method of communication between the researcher and the participants. In order to comply with the ethical standards of the University of KwaZulu-Natal, each participant had to sign a letter of consent, which was also translated into isiZulu. The researcher had to provide the study's aim, objectives, methods and conceptual frameworks as well as personal details in order to attain

ethical clearance from the University of KwaZulu-Natal. In order to make use of the observations taken during the data collection process, the relevant information had to be filtered and selected. The information was then sorted according to theme and category so that the results would become more transparent and comparisons could be made between the communities. Initially questionnaires were carried out followed by the researcher and field workers engaging with participatory exercises. The participatory exercises provided a more in-depth insight into the challenges facing the various communities.

4.3.2 Secondary data

Secondary data can be defined as data that is not collected specifically for the research problem, instead it has been collected, organised or stored by another researcher, thus making it secondary (Hox and Boeije, 2005). For the purpose of this research, secondary data sources such as documents published by the government, journals, books and statistical reports were utilised. The inclusion of these sources was imperative for contextualising this research study in order to address the objectives. Secondary data collection methods are less time consuming, they are easier to access and are more cost effective when compared to primary data collection. However, the data can be inaccurate and may not be of appropriate quality (Lopez, 2013)

4.4 Methodological approaches

4.4.1 Triangulation

For this research a triangulation methodological approach was utilised, as quantitative and qualitative data had to be collected. Quantitative data can be defined as data that can be converted into statistics, in order to display patterns and facts within a data set (Wyse, 2011). Qualitative data can be defined as data that is collected in order to understand reasoning behind actions, sentiments and provide a motivation for alleged actions (Wyse, 2011). Within social science research, triangulation can be described as the mixing of methods in order to diversify viewpoints, as well as to avoid the weaknesses of quantitative and qualitative data if they were to be used in isolation (Olsen, 2004). Bryman (2015) states that triangulation considers the opinions and prior knowledge of human beings thus allowing a better understanding of the research. Neuman (1997) reiterates that triangulation encourages the observation of social research from more than one viewpoint in order to integrate it into the research. This decreases the risk of errors associated with using only one method, as well as reduces the possibility of biases associated with quantitative and qualitative data. In order to attain the research results

that are of high quality, one has to understand which research tool needs to be employed as quantitative and qualitative data collection methods can be used together or independently. This tool that will be utilised for data collection will depend on the aim and objectives of the study as well as the community that is being examined for research purposes. This research study made use of both quantitative and qualitative data collection methods.

4.4.2 Quantitative methods

4.4.2.1 Questionnaire survey

A questionnaire survey can be described as an effective way to collect data from a large sample within a specific area (Hox and Boeije, 2005). Typically, a large number of standard questions are asked and the responses are coded according to category. Bernard and Bernard (2012) indicate that survey research is one of the most important methods of collecting data throughout the world. This tool is effective in collecting demographic as well as realistic information regarding the targeted population and serves as a representative sample of the population allowing the researcher to reinforce their observations by means of the data collected in the questionnaire.

Bernard and Bernard (2012) and Bryman (2015) note that questionnaire surveys are an important tool for gathering information that is related to a research topic. Face-to-face questionnaires which were used in this study, provide the advantage of being able to be administered to participants who would ordinarily not be able to answer due to them being illiterate, old, disabled or are prevented from answering due to the language barrier. A questionnaire can contain open and closed ended questions, with Bernard and Bernard (2012) stating that personal questions should be given in the form of closed ended questions as respondents find this easier to answer because they are hesitant to divulge information regarding their personal lives.

When conducting questionnaire surveys, one should do so ethically, keeping in mind the respondents right to anonymity, as well as providing information to the respondent regarding what the study is about, what will be done with the information and what the research aims to achieve (Bernard and Bernard, 2012; Olsen, 2012). For this purpose, the University of KwaZulu – Natal's ethical process was adhered to and a consent form was provided in isiZulu for respondents to sign before attempting to answer the questionnaire. The field workers

explained to the respondents in isiZulu, that they would remain anonymous and that they have the right to withdraw from the study at any time during the questionnaire survey.

When planning questionnaire surveys, design plays an important role in ensuring that the analysing process remains simple. Questions should be clear and easy to understand or the researcher might face ambiguity when processing the data. The advantages of face-to-face questionnaire surveys include the ability to probe for answers should the respondent be hesitant to provide information. One can also use visual aids to encourage the respondent, as well as only allowing respondents to view questions one at a time, therefore they cannot skip questions (Bernard and Bernard, 2012). However, questionnaires do have disadvantages namely they are considered to be intrusive and very personal. They are costly as they take up a lot of time and money, especially if one has to continuously travel to access the study site. In addition, respondents understanding of the questions may differ or field workers may explain questions to respondents differently, thus creating inconsistent responses. Respondents may also provide answers that they think are socially acceptable instead of providing truthful answers causing results to be biased (Harris and Brown, 2010; Bernard and Bernard, 2012).

For the purposes of this research, the questionnaires were structured and used as a tool to gain insight into the feelings, thoughts and experiences of the participants with regards to their ability to gain access to agricultural markets to improve their livelihoods. Research assistants utilised the questionnaire to interview respondents during data collection, however this method of collecting data was time consuming. Within the course of this research study, two hundred questionnaires were administered, fifty to each of the four communities. The questionnaires contained open and closed ended questions. A template of the questionnaire can be viewed in the attached appendix 1.

4.5 Selection of samples

According to Guest *et al.* (2013) when conducting research, one needs to carefully consider whom to include in your study. The research participants were defined by your research objectives, and were chosen in order for them to provide a more holistic view of the research topic. The eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities are situated in rural areas, where houses are dispersed and scattered. A purposive sampling approach was used as the researcher has chosen 100 households (eMazabekweni and KwaNokweja communities) that received assistance from the NGOs which in this case is LIMA and another 100 households (Hopewell and Carisbrooke communities) who have minimal intervention

from NGOs. Thereafter, only female-headed households who were practicing agriculture within the communities were targeted to answer the questionnaire. Therefore, a purposive sampling approach was utilised.

4.5.1 Purposive sampling approach

Palinkas *et al.* (2015) state that purposive sampling is a widely used tool used to select respondents that will provide rich information that is appropriate to the research topic. Tongco (2007) reiterate that appropriate data collection is very important, therefore participants of the research need to be chosen with prejudice as no amount of analysing the data will substitute incorrectly collected data. These participants allow the research objectives to be achieved whilst adding value to the study. Purposive sampling can also be referred to as judgement sampling as the informant is specifically chosen according to the qualities and knowledge that they possess (Tongco, 2007). In the instance of this research, 50 households respectively from the eMazabekweni and KwaNokweja communities were approached to participate in the research. These communities were purposively chosen due to the presence of NGOs namely LIMA within the community (IDP, 2017/2018). An additional 50 households respectively from the Hopewell and Caribrooke communities were chosen to participate in this research. These communities were purposively chosen due to the absence or very intermittent presence of NGOs within their community. Bernard (2002) reiterates that the researcher decides what information is needed and chooses respondents who have the knowledge and skills available to provide the information that is needed. Thus, fifty households were sampled from each community as the study took place in rural communities that were sparsely populated and many households did not practice agriculture. Only female-headed households who practice agriculture were targeted for this research however, there was a variance in age.

When conducting participatory research, the respondent has to be willing to participate, however every respondent that is approached will not be willing to participate in the survey, therefore a purposive technique is applied in order to attain a representative sample of the community. In addition to willingness, the respondent has to be available and able to relay their experiences in an articulate and expressive manner (Palinkas *et al.*, 2015). In the context of this research, a purposive sampling technique was utilised to identify and engage only females who practiced agriculture within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities. An age range was not specified, thus women of all ages were engaged. This

provided a spectrum of responses and allowed the researcher to attain insight from various age groups.

Purposive sampling was utilised within the four chosen communities. The eMazabekweni and KwaNokweja communities that were chosen practiced smallholder agriculture and received assistance from LIMA while the Hopewell and Caribrooke communities do not receive any NGOs assistance. The eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities are situated in rural areas, where houses are dispersed and scattered. Thus, only female-headed households who were practicing smallholder agriculture were chosen to answer the questionnaire. Hence a purposive sampling approach was utilised.

One hundred questionnaires were administered to the eMazabekweni and KwaNokweja communities who receive NGOs assistance namely from LIMA. An additional one hundred questionnaires were administered to the Hopewell and Carisbrooke communities who do not receive any NGOs intervention. These communities are predominantly populated by isiZulu speaking residents, therefore four translators were hired by the researcher to assist with relaying the information required in the questionnaire. All the translators were students from the University of KwaZulu-Natal. Therefore, they were familiar with the content in the questionnaire and what is expected when disseminating the questionnaire. Each questionnaire took approximately 30 minutes to complete.

4.6 Qualitative Research

Qualitative research methods are used to retrieve information that will allow a deeper understanding of the context and viewpoints of the study population with regards to the research topic (Hox and Boeije, 2005; Hennik *et al.*, 2011). Qualitative research is imperative for the understanding of behaviour, people's beliefs, cultures and the functioning of society, often asking the question of why. Guest *et al.* (2013) reinforce that qualitative research attempts to understand the way in which people make sense of their world and their experiences. The data collected in this research does not specify ordinal values, and makes use of various methods of data collection such as observations and case studies. For the purpose of this research, observations and participatory exercises were employed in order to attain additional information, which was not collected by the questionnaire.

4.6.1 Participatory Rural Appraisal

In the late 1990's, a method of rural development known as Rapid Rural Appraisal (RRA) began to emerge and was considered very successful. RRA was developed on the basis of biases against rural areas, leading to their underdevelopment, however in the 1980's the word participation began entering the vocabulary of RRA. Participatory RRA encouraged community awareness, facilitated by outsiders (Chambers, 1995). This method was employed in Kenya and India exhibiting positive results, leading to the acceptance of Participatory RRA, which would come to be known as Participatory Rural Appraisal (PRA) (Chambers, 1995).

According to Binns *et al.* (1997) rural development strategies that make use of a top-down approach have not managed to improve the living conditions amongst poor people within rural areas. The needs, skills, understanding and indigenous knowledge of the people whom these programmes aim to help are often overlooked, thus failing to assist them in any way. Previously, development programmes promoted the trickle-down theory, which maintained that rural development and poverty reduction would occur when development began in developed regions, then trickled down to less developed regions and eventually to rural communities. Presently, many rural communities have still not benefitted from the trickle-down theory and remain underdeveloped (Binns *et al.*, 1997)

It has been noted that these methods of development have been unsuccessful as they have failed to incorporate the population that is situated in rural areas, especially those that are more remotely situated (Binns *et al.*, 1997). One of the most important reasons for this failure is the inability of rural development schemes to completely understand the dynamics of rural life, the indigenous knowledge systems that exist and the intricacy of socio-economic relationships with many of these schemes failing to implement a holistic and inclusive approach to development.

However, in recent years there has been a shift in rural development from a top-down biased approach to a more bottom-up strategy. These bottom-up strategies intend to promote development at a grass roots level, working from the community level (Binns *et al.*, 1997; Chandra, 2010). Participatory development stems from the idea that it is imperative to detect and build upon strengths that are already present within communities. Development programmes need to allow people to help themselves in order for them to be successful and sustainable (Chandra, 2010). Participatory approaches endeavour to facilitate the development of vulnerable groups in society by providing them with skill sets and allowing the sharing of

knowledge, thus enabling them to use their indigenous knowledge to be used at the forefront of decision-making (Chandra, 2010).

PRA has been referred to as a method used to learn about rural conditions from, with and by rural residents, therefore enabling rural people to share, increase and evaluate their knowledge of their lives and surroundings encouraging planning and acting on these plans (Chambers, 1995). Pretty and Vodouhê (1997) state that the most important aspect of PRA is that the outsider needs to be considered the facilitator, allowing the community to speak, think and participate among themselves, allowing them to share their knowledge. Methods of PRA include (Binns *et al.*, 1997: 4):

- *Observations and transect walks*: this includes a walk through the community with key informants, allowing the researcher to ask questions, observe daily routines, attain information regarding changes within the community over the past few years, listening to problems and seeking solutions.
- *Mental maps*: this allows community members to indicate what they think their community looks like, as well as how they would like their community to look in terms of resources, housing and infrastructure. This method is useful as language is not a barrier and individuals are allowed to capture their responses diagrammatically.
- *Venn and network diagrams*: this method involves the use of circles that are drawn on paper to represent people, groups and institutions. Thus indicating how all the stakeholders will interact within the community. If the circles overlap, it indicates the flow of information within the community however if they are far apart there is no information being passed between these stakeholders.
- *Matrix scoring*: this allows participants of a focus group to list, rank and score their problems, enabling the researcher to validate issues mentioned in transect walks or a questionnaire survey.

The above methods allow the community to physically represent their feelings and qualms, expressing a holistic view of the community and their issues (Pretty and Vodouhê, 1997). In this research, all the methods listed above were utilised within all four communities.

4.6.1.1 Focus group discussions

A focus group discussion is an interactive discussion between six to eight participants who are pre-selected (Hennik *et al.*, 2011; Olsen, 2012). This focus group is then encouraged by a moderator or facilitator, namely the researcher, to focus on a set of issues or a predetermined

topic. The facilitator creates an environment in which the participants feel comfortable enough to discuss issues that they face in their communities as well as their perspective on these issues. Olsen (2012) comments that data collection from a focus group is an effective method of strengthening studies, especially those that are based on other methods such as interviews and surveys.

A focus group has the ability to add depth to a study as it allows participants to share their perspectives pertaining to the issues at hand, as well as to allow different aspects of these issues to come to light (Hennik *et al.*, 2011; Olsen, 2012). The most important aspect of a focus group is its ability to encourage the flow of the discussion. Focus groups allow societal norms and behaviours to be identified as many respondents would be hesitant to reveal extremist views. This method can be used for exploratory and explanatory research as well as research that wishes to evaluate a phenomenon however, this type of exercise does not represent individual views and perspectives, but instead is the product of a conversation between a group of people (Hennik *et al.*, 2011; Olsen, 2012; Guest *et al.*, 2013).

Focus groups can be useful to gather information regarding the behaviour, opinions and beliefs of humans however they are considered time consuming as discussions might go on for extended periods. Participants may also be biased during discussions in hopes that they will be rewarded with assistance based on their needs in return for their time. This is especially relevant where there are development programmes involved. In addition, participants might not voice their true concerns due to cultural restrictions or in fear of being reprimanded (Guest *et al.*, 2013).

For the purpose of this research focus group exercises took place in all four communities respectively. The groups consisted of 10 females ranging in age per community. During these focus group exercises, participants voiced their concerns and problems as well as provided the researcher with further insight into their daily lives within the community. The groups participated in a problem ranking matrix, Venn diagram and mental map exercise. These focus group exercises provided the researcher with further insight and perspective into the community's daily lives. Additionally, the collected data contextualised and reinforced the data that was collected through the questionnaires.

4.7.1.1.1 Observations

Hannik *et al.* (2011) explain that observations allow researchers to observe and record people's behaviour, activities and interactions. This allows the researcher to access information

regarding their participant's behaviour in terms of the social context or current events. The act of observation seems to be a simple task, however one has to be methodically observing, listening, and questioning people's behaviour and interactions within their social settings, followed by recording details about your observations (Hennik *et al.*, 2011).

The focus of one's observations are guided by the research question at hand thus deciding whom one needs to observe and how the observations need to be recorded. Guest *et al.* (2013) state that almost any setting can be used for observations, as every setting has complex interactions amongst people, objects and the physical environment. In order to carry out participant observation one has to insert themselves into the social setting, becoming part of the people's daily lives and routines. Guest *et al.* (2013: 75-76) list three key elements that they consider crucial to participant observation, namely:

1. Conducting your participant observation in a relevant setting, which will allow you to access the information that you need.
2. Presenting yourself in such a way that you allow the people that you wish to observe to accept you and continue their daily lives in front of you. Essentially, your participants need to trust you enough to act as if you were not there.
3. Spend enough time amongst your chosen participants in order to observe a variety of behaviours and experiences. One has to allow enough time to build rapport and be able to conduct observations.

Observation needs to be selective with regards to the information that is chosen. The amount of information that is available makes this a tedious task, as only the relevant information needs to be chosen (Bryman, 2015). Observations need to be done in a manner that is sensitive to the situation as there are ethical concerns regarding observations. Hennik *et al.* (2011) reiterate that observations may be considered obtrusive and an invasion of privacy therefore one needs to have patience and understanding when carrying out observations in order to adhere to ethical standards.

Observations were carried out in the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities by engaging with respondents of these communities respectively. This allowed the researcher to gain an in depth understanding of the community, their daily lives, behaviours and routines. Observations allowed the researcher to understand some of the answers provided in the questionnaire and provided a deeper insight into the community.

4.6.2.1.2 Problem ranking matrix

Gay *et al.* (2016) indicate that a matrix ranking is a tool that is used to evaluate and rank information. It is often used in decision-making within groups, allowing them to facilitate discussions that will lead to the best course of action. This activity is carried out in a group setting with a facilitator to encourage discussion. The participants of these focus groups are specifically chosen and the participants should be diverse so that a variety of opinions can be discussed (Gay *et al.*, 2016). The topic of interest is predetermined by the facilitator or could be determined through the discussion. There are several scoring techniques, namely, differential ranking, summated ranking and cumulative ranking. These methods give participants a choice between two or more variables, which are then ranked (Gay *et al.*, 2016).

The pairwise ranking system allows various options to be compared, by comparing the options in pairs. Participants will be asked for their options, these will then be added to the matrix table. Each item is then compared to its pair on the opposite axis. The number of times this option has been chosen will then be summed up and the item with the highest sum will be deemed the most important (Gay *et al.*, 2016; Mahesh *et al.*, 2017).

The same group of respondents were used throughout all the PRA exercises while conducting data collection. The groups consisted of approximately ten women per community and a range of ages. The group demographics were dependent on who was available within the community however, the range of ages provided the researcher with insight into various perspectives and views. The researcher encouraged the participants to voice their concerns over the issues that they face within their community. The group stated a number of problems that they faced within their respective areas, these were put into a ranking matrix and each problem was weighted against the other. The problems that were identified were listed, scored and ranked with each community expressing different concerns. Once the problems were listed, each one was given an acronym and written vertically and horizontally within the matrix on a large piece of paper. This paper was displayed to the group as if it were a poster and each problem was weighted against the other to decipher which problem was the most pertinent. Thereafter, the problems were scored and ranked according to their scores. The highest rank was awarded to the problem that scored the highest, the second highest rank was awarded to the problem that scored the second highest and so on, resulting in a table that showed problems within the community from the most critical to the least critical.

4.6.2.1.3 Mental maps

Mental maps can also be referred to as resource maps. This map allows the researcher to learn more about the community and the resources that are found within the community (Gay *et al.*, 2016; Mahesh *et al.*, 2017). The objective of this map is not to gain an accurate representation of the community, but to gain a better understanding of how the local community perceive their resources and how these resources are used within the community. These maps are used to depict infrastructure, natural resources, buildings and cropping patterns within a community (Cavestro, 2003; Paul, 2013).

Participants of focus groups within these communities were requested to map their communities as they currently perceive it. They were then asked to map the resources that they would like to have within their communities.

4.6.2.1.4 Venn diagrams on institutions

The Venn diagram on institutions display stakeholders at multiple levels within the community and how they interact with each other, as well as how the residents perceive their importance within the community (Gay *et al.*, 2016; Mahesh *et al.*, 2017). The Venn diagram is a useful tool for gaining insight into the strengths and weaknesses between groups as well as potential conflicts between various groups and stakeholders within the community (Cavestro, 2003; Paul, 2013).

Participants of focus groups were requested to draw circles showing the relationships between who they think is important within their community. Separation between these circles indicates disparities within these groups while circles that are interlinked indicate interaction.

4.7 Procedure for analysis of data

4.7.1 Statistical Package for Social Sciences (SPSS)

In order to reach the objectives of this study both quantitative and qualitative methods of data collection had to be utilised. Muijs (2010) states that in current times, statistical software packages are used on computers to analyse data rather than analysing this data manually. These statistical packages allow the researcher to create graphs and tabulate collected data, thus allowing the researcher to present the data.

In order to capture the large dataset, SPSS was used as it allows descriptive statistics to be used to analyse the data. Descriptive statistics allows the collected data to be summarised by carrying

out tests and calculations thereafter converting the results into tables and graphs (Greasly, 2008). Interval or ratio, ordinal and categorical or nominal are three types of data sets that are imperative to statistical analysis. Interval or ratio data entails data that goes according to scale from lowest to highest in equal intervals, an example of which would be height or age. Ordinal data is data that can be put into a systematic sequence, for example the rank order of cyclists in a race, however this type of data does not provide any other information such as who was faster; lastly, categorical or nominal data is data that can be organised according to category instead of scale such as gender. The distinction between these types of data is significant as the type of analysis that can be conducted from the questionnaire depends on the type of data (Greasly, 2008; Muijs, 2010).

For the purpose of this research the descriptive statistics function of Statistical Package for Social Sciences (SPSS) version 25 was utilised to analyse the data that was obtained. Descriptive statistics allows data that is obtained from questionnaire to be easily summarised as the programme performs tests and calculations to form tables and graphs. The use of this programme was imperative to this study as it allowed large sets of data to be easily summarised (Greasly, 2008). Before the data was captured, a template of the complete questionnaire had to be created as a template. Thereafter, each participant's response was coded and frequency tables were created. These frequency tables were copied into Microsoft Excel and used to create graphs. Microsoft Excel was used to create graphs as the graphs are visually more appealing.

4.8 Fieldwork experiences

Before the researcher could commence fieldwork the ethical clearance process had to be undertaken. The process was lengthy and included many application forms as well as a pilot study. A gatekeeper's letter from the Chief had to be signed for the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities. In order to obtain signatures on these letters, a trip to each of the communities had to be undertaken. The ethical clearance forms included the questionnaire, indemnity forms, and consent forms. Data collection could only commence once ethical clearance had been granted and this was issued on the 25th April 2018 (appendix 2). Experiences from the data collection in each community is highlighted below.

4.8.1 The eMazabekweni and KwaNokweja Communities

The eMazabekweni and KwaNokweja communities are subsidised by the LIMA farmer support programme, therefore the researcher had to be accompanied by a LIMA site facilitator for all

visits. Both of these sites were recommended by LIMA as they had a good network within the community and it would be easier for the researcher to access these communities. The researcher was familiar with the eMazabekweni community, as the site had been used for data collection during honours year of study which focused on the effects of drought on female-headed households. The Chief of the eMazabekweni community still remembered the researcher and promptly gave permission for research to be conducted within the community.

Before data collection started, a preliminary visit was made to both these communities to ensure that these communities were ideal for this study. The data collection process proved to be an arduous task as only female-headed farmers had to be interviewed. Another challenge was the language barrier as the researcher's first language is English, whereas the respondents were only able to communicate in isiZulu. In order to overcome this challenge, four research assistants who were fluent in isiZulu had to be hired so that they could translate for the researcher. The availability of the research assistants prolonged the process of data collection, as all four assistants were university students and were busy with examinations. The questionnaire took approximately 30 minutes to answer per household and many respondents complained that the questionnaire was too long and time consuming, as they had to get back to their chores. Some respondents were also a bit sceptical about the researcher and the volunteers therefore refused to answer the questionnaire. In addition, households within both of these communities were sparsely distributed due to the mountainous terrain thus walking from one house to another was quite a distance and also very time consuming. This was not feasible as the questionnaires needed to be completed. Many respondents refused to sign the consent forms, as they were afraid that they would get into trouble for telling the truth, therefore the researcher and research assistants had to move on to the next household.

The eMazabekweni and KwaNokweja communities are accessed via Ixopo, which is situated approximately 85.5 km away from Pietermaritzburg and is accessed via the R56. On arriving at the eMazabekweni community, the researcher discovered that the main road leading into the community had been tarred since their last visit to the community. Upon enquiry, community residents stated that the road was tarred as an official from the ruling party lived in the area. The communities are then respectively a further 21.8 km and 18.4 km away from Ixopo and most of this road is informal gravel road. Transport posed a challenge as the researcher did not have access to a double cab or a van with a canopy and therefore could not carry passengers in a van. It was then decided to take the researchers car, although there were times when a car was not the most suitable vehicle for informal roads and the mountainous terrain.

In KwaNokweja, stray dogs were rife and posed a challenge to the researcher and the research assistants. Many people also kept dogs as pets and research assistants were afraid, therefore they could not enter the respondent's yard. One of the research assistants was bitten by a dog and had to be rushed to the community's clinic for aid and a rabies injection was administered. Residents of the communities had also been striking due to lack of service delivery and water infrastructure before the data collection began therefore there was a lot of anger and resentment surrounding these communities in terms of service delivery.



Plate 4. 1 Newly tarred roads en route to the eMazabekweni community

Although there were many challenges in the data collection process, it must be noted that most of the respondents were welcoming, hospitable and willing to assist, especially for focus group exercises. Some even offered the researchers the fruit that they had grown as well as a glass of cold drink. The humility of these communities will always be fondly remembered.



Plate 4. 2 A resident from the eMazabekweni community offering the researcher bananas from her garden



Plate 4. 3 The eMazabekweni community



Plate 4. 4 Mountainous terrain in the KwaNokweja community

4.9.2 The Hopewell and Carisbrooke Communities

The Hopewell and Carisbrooke communities are not subsidised by LIMA and receive little to no assistance from other NGOs. The researcher had to conduct a preliminary visit to the Ixopo area to search for communities that fit the criteria of this research. The researcher's co-supervisor, who lives in the area, assisted the researcher in finding communities and was present during the preliminary visit. This made it easier to find the Chief and obtain permission to conduct research in these communities.

The Hopewell and Carisbrooke communities are respectively 5.6 km and 9.9 km away from Ixopo on the R56, which is a main road. In order to reach the actual communities' there is an additional inward distance to travel on informal gravel roads. There was a vast contrast between the Hopewell and Carisbrooke communities and the eMazabekweni and KwaNokweja communities. The houses in Hopewell and Carisbrooke are much smaller and more dilapidated. The communities have small yards with barely any crops and the communities' themselves are much smaller. The language barrier and transportation still posed a challenge, however due to the communities being much smaller, the houses were closer together and easier to access. When conducting the questionnaires, it was found that many residents of the communities were not at home because they had gone to collect water, were at work or gone to town. Therefore finding people who were at home and willing to participate was a challenge.



Plate 4. 5 The Hopewell community



Plate 4.6 The Carisbrooke community

4.10 Conclusion

This chapter discussed the research methods and instruments used for this study. A background of the study was given thereafter the local and district municipality's IDPs were examined, followed by an explanation of the Abalimi Phambili Farmer Support Programme by LIMA Rural Development Foundation. The instruments used in this study were then discussed, including the types of data that would be utilised in this study, namely primary and secondary data. Primary data for quantitative data collection comprised of the questionnaire, whilst qualitative data collection comprised of observations, focus group discussion and PRA methods. Secondary data comprised of information gathered from books and journals. Thereafter the methodological approaches were discussed, sampling methods used to collect data were described and the method of data analyses was explained. Additionally, the fieldwork experiences of each community and the challenges faced by the researcher.

Chapter 5: Data presentation, analysis and discussion

5.1 Introduction

This research study investigated the effectiveness of NGOs in increasing access to agricultural markets amongst female-headed smallholder farms as a poverty alleviation strategy within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities in the Ubuhlebezwe Local Municipality, KwaZulu-Natal. The data in this chapter was captured and analysed using Statistical Package for Social Science (SPSS) version 25. The results that were obtained are presented, analysed and discussed in this chapter. SPSS and Microsoft Excel were utilised to formulate the frequency tables and graphs. In addition, PRA methods were used to examine the qualitative data that was collected. This chapter will be divided according to the following themes:

1. Demographic and personal information
2. Crop and livestock production
3. Broiler production
4. Food security
5. Infrastructure and market access
6. Market participation
7. Extension services
8. Participatory exercise findings

5.2 Demographic and personal information

A purposive sampling strategy was utilised in this study, therefore 50 participants were engaged within the eMazabekwei, KwaNokweja, Hopewell and Carisbrooke communities respectively. Fifty participants were approached for this study as the study took place in rural communities which were sparsely populated. Furthermore, only female-headed households who practice smallholder farming were targeted thus fifty participants per community were chosen as they were easy to reach. The researcher continued to interview fifty participants per community to keep the sample size consistent throughout the study. This resulted in a total of 200 questionnaire surveys. This section will reveal the personal details of respondents as well as provide background information about their households which is an imperative part of a study as it allows the researcher to determine whether the participants of a study provide an appropriate representative sample of the target population (Salkind, 2010; Hammer, 2011).

Table 5. 1 Head of the household (%)

Head of household	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Me	86%	86%	80%	78%	82.5%
Mother	14%	8%	8%	-	7.5%
Sister	-	2%	-	-	0.5%
Grandmother	-	4%	-	22%	6.5%
Aunty	-	-	12%	-	3%

Due to the purposive sampling strategy utilised in this study, all the respondents within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities were female and African. According to the Ubhlebezwe Local Municipality’s IDP 2017/2018, the majority of residents within the municipality are African. This can be attributed to apartheid laws in South Africa, which banished Africans to rural areas that had poor land quality and were far away from cities thus hindering the development of rural areas (Posel, 2004; Reed, 2013). The Group Areas Act of 1950, which was also enforced by the apartheid government, reinforced the separation of races within South Africa, as it allocated specific geographical areas to each race group (South African History Online, 2011). The four communities that were utilised in this research are located within the Midlands area of KwaZulu-Natal, which is predominantly populated by black South Africans (Sineke, 2012).

Table 5.1 indicates that while 86%, 80% and 78% of respondents within the eMazabekweni, KwaNokweja, Hopewell and Caribrooke communities respectively were the heads of their households, there was a significant number of households that were headed by other female custodians such as the respondent’s mother, sister, grandmother and aunt. The community with the highest number of alternate female figures as the heads of their households was Caribrooke, who is headed by grandmothers.

The prevalence of female-headed households can be attributed to the increase in rural-urban migration rates amongst males within the community, as well as the migration of young people to urban areas in search of a better quality of life (Thet, 2012). Push and pull factors play a role in the migration of men and youth to urban areas, with push factors such as the lack of infrastructure, lack of basic services, lack of job opportunities and opportunities for furthering

their education causing the movement to urban areas. Urban areas are perceived to have better opportunities also known as pull factors however, many of these opportunities might be temporary (Thet, 2012, Reed, 2013). These pull factors include the attraction of city lights, new technology, higher wages, educational facilities and the provision of basic services (Thet, 2012; Jedwab *et al.*, 2015). The escalating number of elder females can also be attributed to deaths of the younger generation, which is primarily caused by the increased spread of HIV/AIDS within rural communities (Drimie, 2002; Yang, 2014). The prevalence of HIV/AIDS and other STIs can be linked to the increased rates of urban migration amongst men who have multiple partners in urban areas (Drimie, 2002; Yang, 2014).

Table 5. 2 Age of respondents (%)

Age of respondent (in years)	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
18 – 25	12%	4%	2%	-	4.5%
26 – 35	12%	4%	18%	12%	11.5%
36 – 45	18%	26%	-	20%	16%
46 – 55	24%	18%	12%	20%	18.5%
56 – 65	22%	30%	64%	28%	36%
> 65	12%	18%	4%	20%	13.5%

Table 5.2 depicts the age of respondents within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, respectively. In respect to the eMazabekweni community it is evident that 24% of the respondents fall within the age of 56 to 65 years and 18% of the respondents fall within the age of 36 to 45 years. Twelve percent of respondents fall within the 18 to 25, 26 to 35 and older than 65 age category respectively. Thirty percent of respondents from the KwaNokweja community fall within the age of 56 to 65 years, followed by 26% of the respondents belonging to the age comprising of 36 to 45, 18% of the respondents fall in the age category of 46 to 55 years as well as in the category of older than 65 years and 4% of the respondents fall in the 18 to 25 and 26 to 35 age categories.

More than a half (64%) of the respondents from Hopewell falls within the age of 56 to 65 years, followed by 18% of the respondents fall in the 26 to 35 age category, 12% of the respondents fall within the age of 46 to 55 years and 26 to 35 year age category and 4% of the respondents fall within age category of older than 65 years.

These results contradict the Ubuhlebezwe municipalities IDP 2017/2018. This IDP for 2017/2018 indicates that the age category with the highest population was children from 1 to 14 years in age. This study was purposive and only interviewed respondents who were above the legal age in South Africa which is eighteen years and older thus, not taking child-headed households into account. The data in the IDP was also collected in 2016 and could be outdated alternatively those in younger age categories could have been employed. The results above can again be attributed to rural-urban migration. According to Zhang (2015) rural-urban migration changes the population structure in rural areas. As more youth migrate to cities in search of better opportunities, more of the older generation are left behind and entrusted to caring after their grandchildren, thus creating a wide age gap in the community (Zhang, 2015).

The HIV/AIDS burden also plays a role in the absence of men and youth within these communities. World Health Organisation (2014) states that over more than a quarter of all new HIV/AIDS contractions occur among youth aged 15 to 25 years old, considering those that are born with HIV/AIDS.

Table 5. 3 Number of people living within the respondent's household (%)

Number of people living within respondent's household	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
1	-	4%	16%	-	5%
2	4%	8%	12%	6%	7.5%
3	16%	10%	12%	6%	11%
4	16%	12%	-	8%	9%
5	28%	18%	12%	10%	17%
6	12%	14%	-	32%	14.5%
7	8%	16%	-	10%	8.5%
8	8%	6%	12%	-	6.5%
9	-	4%	-	-	1%
10	-	2%	8%	6%	4%
>10	8%	6%	28%	22%	16%

Table 5.3 indicates that 28% of respondents from the eMazabekweni community and 18% of the respondents from the KwaNokweja community have 5 people living in their household. Twenty-eight percent of respondents from the Hopewell community have more than 10 people residing within their households and 32% of respondents from the Carisbrooke community

have 6 people living in their home. Many respondents from each of the communities mentioned that they are old and have to look after their grandchildren who go to school during the day and cannot assist them with household or farming chores. This indicates that although there are many people living within a household, elders do not receive the assistance that they need to carry out chores.

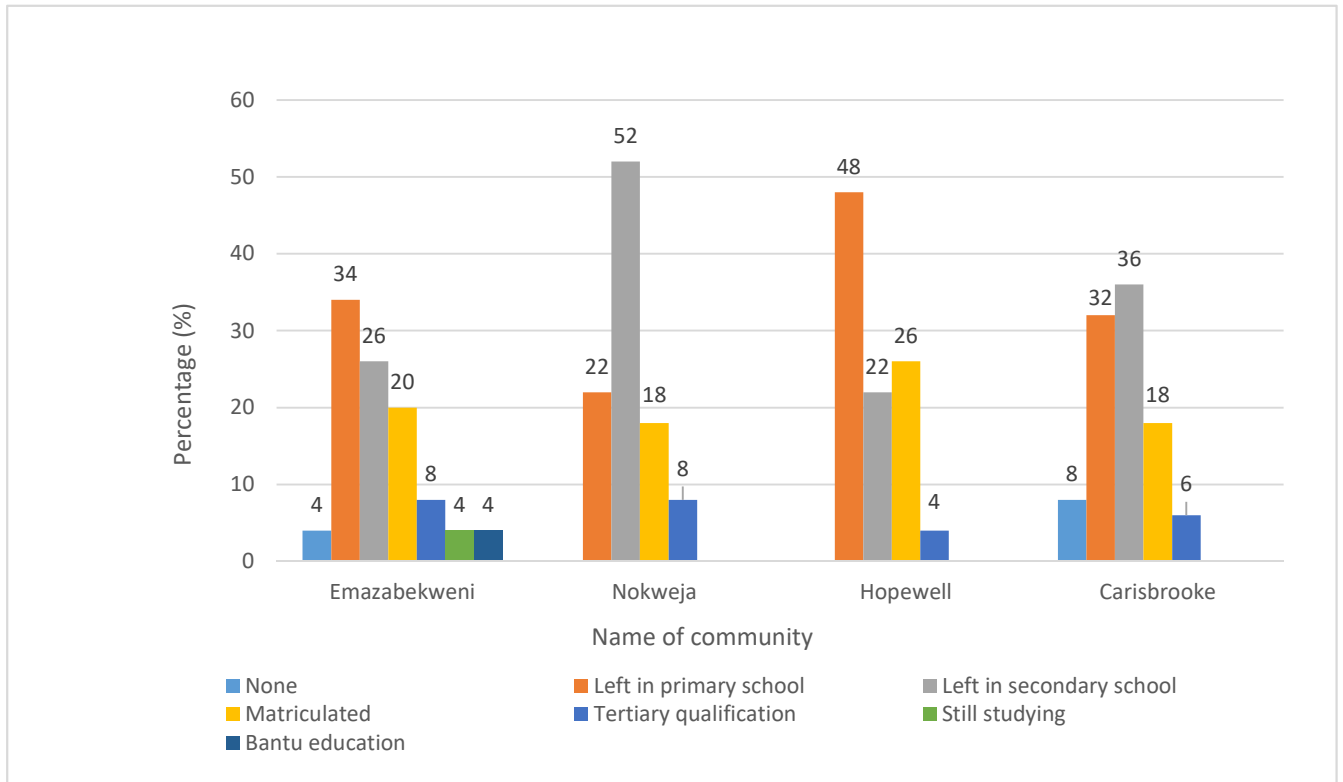


Figure 5. 1: Level of education received by respondents in % (n = 50 per community)

Figure 5.1 above indicates that majority (34%) of respondents in eMazabekweni left school in primary school whilst majority (52%) of respondents in KwaNokweja left school in secondary school. Forty eight percent of respondents in the Hopewell community left in primary school, while 36% of respondents in Carisbrooke left in secondary school. It is interesting to note that 4% of respondents in eMazabekweni and Hopewell as well as 6% of respondents in Carisbrooke received Bantu education, whilst 4% of respondents in eMazabekweni received no education at all. These respondents were from the older generation who were subjected to the Bantu Education Act of 1953, which aimed to direct black or non-white youth to the unskilled labour market (Feldman, 2018).

Bleese and Condy (2014) state whilst poverty is still rife within rural communities, the poor education system fails to alleviate the poverty levels within the community. Nelson Mandela

Foundation (2005) and Teixeira (2017) iterates that the lack of basic daily services affects every aspect of daily lives within communities. Educational infrastructure are imperative elements of the learning environments however, the lack of this infrastructure in developing countries places school children at a disadvantage. It is also important to note that teachers in rural areas are not adequately trained nor do they have the resources to increase the quality of education that they provide to the learners that they teach (Nelson Mandela Foundation, 2005).

Nelson Mandela Foundation (2005) attributes low education rates to the barriers to education that children face. Some of these barriers include physical barriers such as the lack of schools and the lack of infrastructure as previously mentioned, however, these barriers could also be related to a child's life circumstances such as the financial condition of their family, which forces them to drop out of school. The lack of workforce in the household may also attribute to the school dropout rates as children are often forced into child labour within their households. This is especially applicable to girls, who are forced to do household chores while their families prefer to send the male children to school. This leaves girl children educationally and economically unpowered (Dlodlo, 2009).

A study that was conducted by Muhwava *et al.* (2010) indicates that individuals with a higher education level are more likely to migrate to urban areas in search of employment opportunities or to further their education. This correlates with statements made by residents in all four communities who voiced their desire for some form of tertiary education institution to be established in their area so that they may further their education, even if it means acquiring a skill in order to become an artisan. Residents of the KwaNokweja community informed the researchers that the Department of Education in the area had recently constructed a library within the community.



Plate 5. 1 A Department of Education's public library within the KwaNokweja community

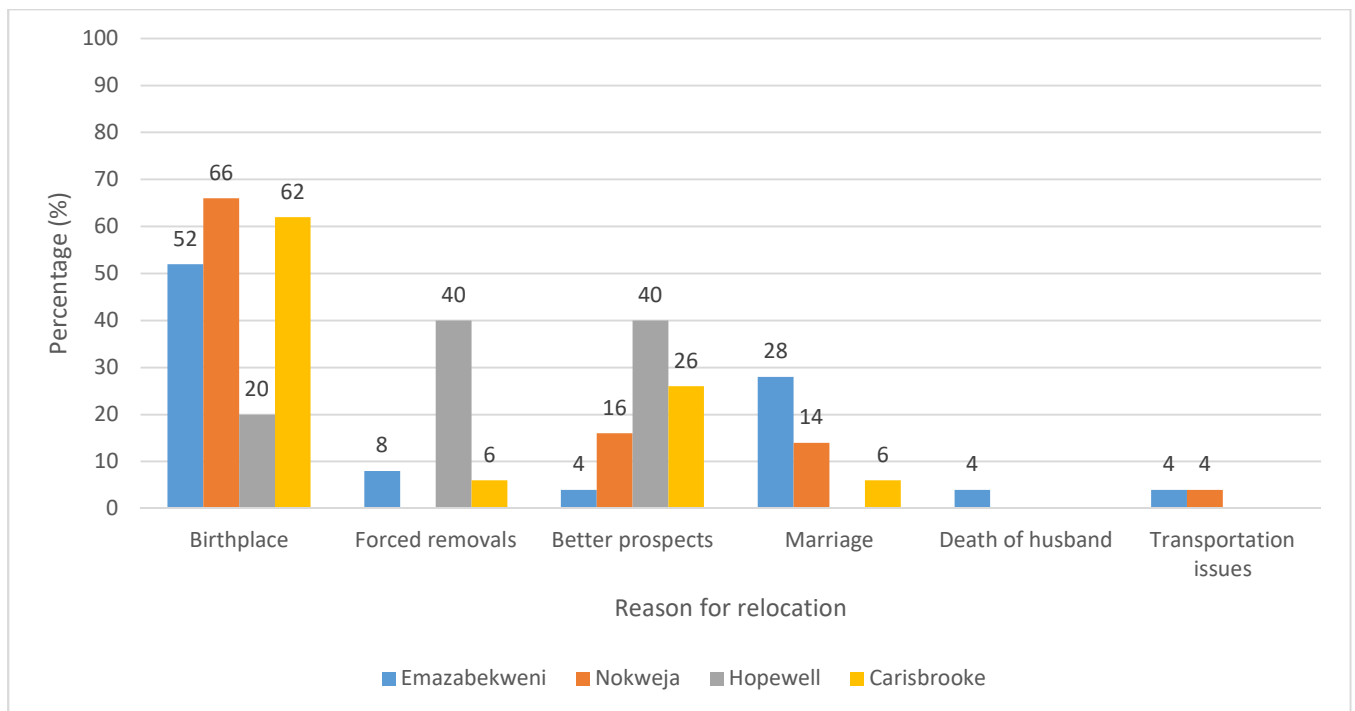


Figure 5. 2: Reasons why respondents have relocated in % (n = 50 per community)

Figure 5.2 depicts respondents who have lived elsewhere and their reason for relocation. In the eMazabekweni community, 28% of respondents relocated due to marriage. Sixteen percent of respondents from the KwaNokweja community, 40% of respondents from the Hopewell community and 28% of respondents from the Caribrooke community relocated in search of better prospects.

It is interesting to note that 40% of respondents from Hopewell were forcefully removed from their community of origin. During conversations with the researcher, respondents stated that they were forcefully removed by paper companies such as Mondi as well as by the apartheid regime. Fabricius and de Wet (2002) and Abel (2015) state that those who were relocated during apartheid were relocated to rural homelands in an attempt to separate them from central cities. Those who were removed were those with poor or limited education and limited access to infrastructure due to the underdevelopment of infrastructure within their communities. This forced removal would have a major impact on their lifestyle and sustainable livelihood strategies.

Table 5. 4 Marital status of respondents and respondents whose spouse is a migrant labourer (%)

Marital status of respondents	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Married	32%	22%	12%	12%	19.5%
Single	26%	36%	48%	48%	39.5%
Widowed	42%	42%	40%	40%	41%
Respondent's whose spouse is a migrant labourer	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	24%	22%	12%	12%	17.5%
No	76%	78%	88%	88%	82.5%

Table 5.4 demonstrates that that in the eMazabekweni community majority (42%) of the respondents were widowed, 32% of the respondents married while 26% remain single. In the KwaNokweja community majority (42%) of the respondents were widowed, 36% of the respondents remained single and 22% of the respondents were married. Majority (48%) of the respondents residing in Hopewell were single, 40% of the respondents were widowed and 12% of the respondents were married. Majority (48%) of the respondents in Carisbrooke were married, 40% of the respondents were widowed and 12% of the respondents remained single.

The Table 5.4 reveals that 24%, 22%, 12% and 12% of respondents from the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities respectively had a spouse who was a migrant labourer. This intensifies the effects of rural-urban migration as men migrate to cities for better employment opportunities. This increases the number of female-headed households and adds to the burden of women in female-headed households as women become responsible for fulfilling multiple roles.

Table 5.4 indicates that within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities respectively, the age of majority of respondents who belong to the age category of 56 to 65 years has resulted in most respondents being widowed. Those who are single have stated that they find it very difficult to find a prospective groom within their communities due to males migrating to urban areas in search of better opportunities.

Further to the issue of widows as well as lack of males within the four rural communities, the HIV/AIDS burden is still a challenge within rural communities and is one of the factors that

plays a role in the absence of men as men die after becoming infected (Linganiso and Gwegweni, 2016).

Table 5. 5 Respondents whose family members have relocated and reasons for relocation (%)

Respondents whose family members have relocated	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	62%	74%	40%	30%	51.5%
No	38%	26%	60%	70%	48.5%
Reasons for relocation	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Did not relocate	38%	26%	60%	70%	48.5%
Better job opportunities	22%	60%	36%	24%	35.5%
Increase family's income	40%	14%	4%	6%	16%

Table 5.5 indicates that 62% of respondents from the eMazabekweni community, 74% of respondents from the KwaNokweja community, 40% of respondents from the Hopewell community and 30% of respondents from the Carisbrooke community have family members who work in another town. These towns include Ixopo, Pietermaritzburg, Durban, Johannesburg and Kokstad.

Within the eMazabekweni community, 40% of respondent's family members moved to another town in order to increase the family's income. Sixty percent of respondents in the KwaNokweja community, 36% in the Hopewell community and 24% in the Carisbrooke community have family members who moved to towns in search of better opportunities. Respondents have stated that job opportunities are scarce within their community.

The statement made by respondents correlates with the research done by Thet (2012) and Reed (2013) who suggests that migration from rural areas to urban areas could be caused by push factors such as lack of infrastructure and services such as running water, roads, healthcare and schools, as well as lack of employment opportunities. Remittances from migrant labourers are then sent home to sustain their families who reside in rural areas. Respondents whose family members did not migrate to another town in search of work have stated that these family members work nearby in areas such as Highflats and Umzimkhulu.

Table 5. 6 Respondent's main source of monthly income (%)

Main sources of monthly income	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Selling farm harvests	26%	4%	-	-	7.5%
Pensions	18%	38%	28%	-	21%
Remittances	-	-	-	-	-
Wages	24%	-	-	24%	12%
Informal income	-	-	-	-	-
Broiler sales at the market	-	-	-	-	-
Disability grants	-	4%	-	-	1%
Salary of migrant labourer	4%	10%	-	-	3.5%
Child grant	4%	16%	12%	4%	9%
Selling farm harvests and wages	8%	-	-	-	2%
Informal income and child grant	4%	-	-	6%	2.5%
Selling farm harvests and pension	12%	10%	16%	34%	18%
Broiler sales and pension	-	2%	-	-	0.5%
Pension and informal income	-	4%	24%	22%	12.5%
Remittances and selling farm harvests	-	8%	-	4%	3%
Broiler sales and farm harvests	-	4%	-	-	1%
Wages and child grant	-	-	20%	-	5%
Informal income and pension	-	-	-	6%	1.5%

Table 5.6 indicates that 26% of respondents from the eMazabekweni community sell their farm harvests as a source of monthly income. Thirty eight percent of respondents within the KwaNokweja community and 28% of respondents from the Hopewell community rely on pensions as a source of their monthly income, whereas 34% of respondents from the Carisbrooke community rely on selling their farm harvests and receiving pensions as a source of income.

There are a high number of respondents that are reliant on pensions as a source of monthly income. This reiterates the age category in Table 5.2 and reinforces that most respondents fall into the age category (56 to 65 years) thus enabling them to receive the pension provided by the South African government.

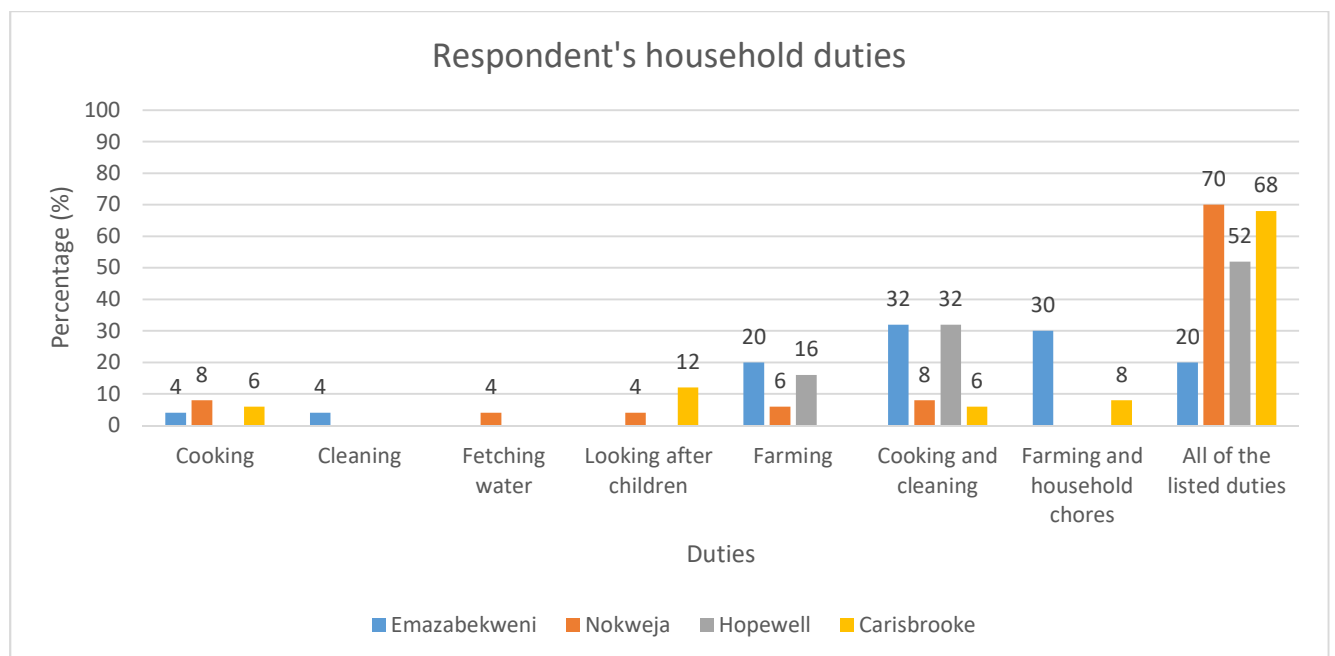


Figure 5. 3: Household duties of respondents in % (n = 50 per community)

Figure 5.3 above indicates that majority (32%) of respondents from eMazabekweni were tasked with cooking and cleaning, while 70% of respondents from KwaNokweja, 52% of respondents from Hopewell and 68% of respondents from Carisbrooke were tasked with all the duties. Many of these respondents loudly proclaimed “everything!” when asked what their duties were within the household. Many of them stated that the other residents of their household were all school going and could not help with chores during the day. Many respondents stated that they could not manage with all the chores and became very tired. Some would ask their neighbours or friends from the community for help, while others would simply not be able to complete their daily tasks. When conducting the research, women proclaimed that they were exhausted

and could not manage often showing the researcher their arthritis, places where their body ached and complained of high blood pressure.

Barnett (2004) and Van Willigen (2014) state that the multiple roles that women play within society increases their responsibilities. An abundance of tasks sometimes even poses as a health risk for women as it has the ability to affect their overall mental and physical health however, the wide range of tasks that are performed by these women are what allows their families to continue with their daily lives (Goldstein and Reibolt, 2004).



Plate 5. 2 A woman from the Carisbrooke community collecting water from a public tap within the community

Table 5. 7 Respondents who rely on small-scale farming as a primary source of income (%)

Small-scale farming as a primary source of income	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	58%	32%	28%	42%	40%
No	42%	68%	72%	58%	60%

Table 5.7 indicates that in the eMazabekweni community 58% of respondents rely on small-scale farming as their primary source of income, while 42% of respondents rely on other forms of income. In the KwaNokweja community 32% of respondents rely on small-scale farming for their income, however majority of respondents (68%) rely on alternate sources of income. In the Hopewell community, 28% of respondents rely on small-scale farming and 72% of respondents turn to other forms of income. Forty two percent of respondents from the Carisbrooke community rely on small-scale farming while 58% of respondents turn to alternate forms of employment.

Rahman *et al.* (2007) state that there often exist unequal opportunities concerning small-scale farming. Most small-scale farmers live below the poverty line, with many of them owning very small plots of land and in the case of women, not owning the land at all. There is a lack of resources which would allow them to increase productivity and they are highly vulnerable to changes in our climate as they often do not have the means or the capability to adapt to these changes (Gneiting and Sonenshine, 2018). In the case of this study, many respondents fall within the elder age categories, with many of them not having the capacity to participate in small-scale farming due to ill health.



Plate 5. 3 A female smallholder farmer's crops in her homestead garden in the eMazabekweni community

Table 5. 8 Employment held by respondent (%)

Employment held by respondent	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Small-scale farming	42%	28%	28%	20%	29.5%
Unemployed	14%	26%	40%	20%	25%
Domestic	4%	4%	2%	-	2.5%
Labourer	24%	-	8%	12%	11%
Business owner	-	-	2%	-	0.5%
Technician	-	-	-	-	-
Manager	-	-	2%	-	0.5%
Artisan	-	-	2%	-	0.5%
Professional	-	-	4%	12%	4%
Grant holder	16%	42%	12%	36%	26.5%

Table 5.8 indicates that within the eMazabekweni community majority (42%) of respondents stated that they are small-scale farmers. Twenty four percent stated that they are labourers. In KwaNokweja, most (42%) respondents were grant holders with many of them receiving child grants or pensions. In Hopewell 40% of respondents were unemployed whilst 36% of

respondents in Carisbrooke were grant holders, also relying on child grants from their grandchildren and pensions.

The high rates of unemployment in all the listed communities, especially Hopewell can be attributed to the high number of respondents who fall into the elder age categories. The IDP (2017) indicates that there is a high dependency ratio within the Ubuhlebezwe Municipality, as a high number of the population is dependent on the working population however, unemployment numbers remain high thus escalating poverty.

5.2.1 Food security

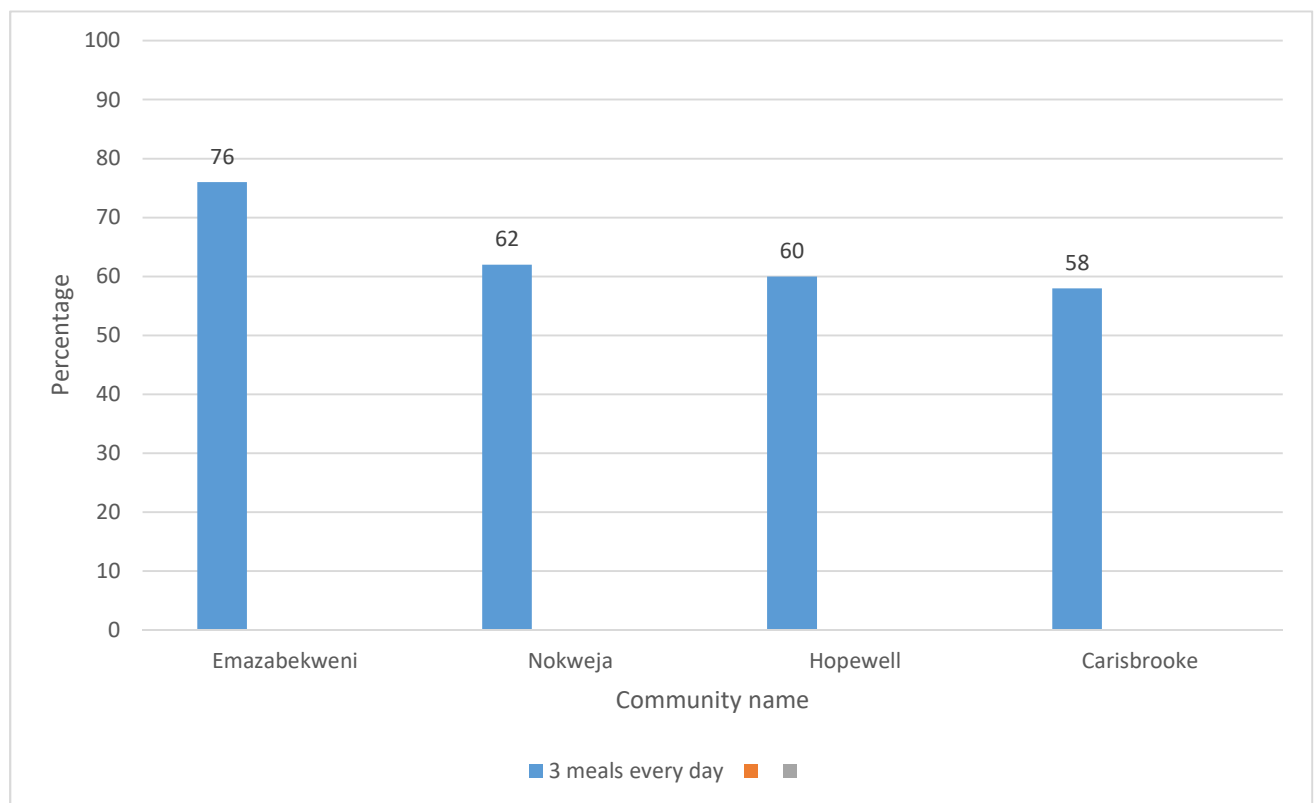


Figure 5. 4: Number of meals eaten within respondents household per day in % (n=50 per community)

The Figure 5.4 above indicates that within eMazabekweni, majority (76%) of respondents eat three meals per day. Within KwaNokweja, 62% of respondents eat three meals per day. In Hopewell, 60% of respondents eat three meals per day and in Carisbrooke, 58% of respondents eat three meals per day. In KwaNokweja, Hopewell and Carisbrooke, 4%, 12% and 20% of respondents respectively, eat only one meal per day. Altman *et al.* (2009) express that food security is vital for overall wellbeing and human development. One of the most serious problems that rural households face is the imminent rise in the prices of staple foods such as maize and wheat. Problems with food insecurity per household can be attributed to the chronic

unemployment and poverty that plagues majority of rural South African households (Altman *et al.*, 2009).

Labadorios *et al.* (2011) conducted a research study that found that in poorer households across South Africa, women feed their children meals that are not nutritious enough, or the women would skip meals so that their children could eat. Diversity of foods was also lacking in these households as they could not afford to purchase a variety of foods (Labadorios *et al.*, 2011). The researcher observed that households that responded with only eating one meal per day were those households that were extremely poor had a large number of people residing within their households and were female headed (this implies that no elder males were residing within the household). This is reinforced by research that was conducted by Chinnakali *et al.* (2014) who found that households that were female-headed were food insecure due to the large size of their families, lack of education of those maintaining the house as well as lack of financial security within the household.

Table 5. 9 Respondents main source of food (%)

Respondents main source of food	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Grown by household	12%	16%	-	-	7%
Purchased from shops	16%	16%	20%	40%	23%
Exchanged with neighbours	2%	6%	-	-	2%
Grown by household and purchased from shops	70%	48%	52%	6%	44%
Bought from other local households	-	6%	-	12%	4.5%
Grown by household, purchased from shops and exchanged with neighbours	-	8%	28%	28%	16%
Grown by household and	-	-	-	14%	3.5%

purchased from neighbours					
---------------------------	--	--	--	--	--

Table 5.9 indicates that indicates that 70% of the respondents from eMazabekweni, 48% of respondents from KwaNokweja and 52% of respondents from Hopewell consume a combination of foods that are grown by their households as well as foods that are purchased from shops. In Carisbrooke, 40% of respondents purchase all their foods from shops.

Baipheti and Jacobs (2009) indicate that in the past, rural households relied on smallholder farming for production of their own staple foods. Currently, rural residents have become more reliant on food purchased from markets, thus causing food security within their households to become unstable as these practices are not sustainable.

During the interview process, the researcher was informed that respondents have noticed a change in their food supply over the past three years. Some respondents have stated that their crop yields decreased so they were forced to purchase food. Some respondents stated that they used to rely on pensions, but the pensioner has now passed on and their food budget has been significantly cut down. Respondents also stated that there was a shortage of food within their households during planting seasons, and this would last for approximately three months. Respondents stated that they sometimes cannot afford to purchase food. This is reinforced by Head (2018) who states that essentials such as eggs, milk, potatoes and onions have doubled in price due to hikes in electricity, fuel and the 15% increase in Value Added Tax (VAT).

5.3 Access to land and services

Table 5. 10 Land ownership among respondents (%)

Respondents who own land	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	22%	22%	12%	12%	17%
No	78%	78%	88%	88%	83%

Table 5.10 indicates that majority (78%) of the respondents in the eMazabekweni community and the KwaNokweja community respectively do not own any land. As well as, 88% of the respondents in the Hopewell and Carisbrooke communities do not own any land as well. Mehta (2018) indicates that women constitute 42% of the agricultural labour workforce, yet they own less than 2% of the agricultural land. Doss *et al.* (2015) reinforce that there is a growing body

of evidence, which suggests that securing women’s rights to property results in decreased rates of poverty and vulnerability as well as encourages investment into the future generations.

The respondents of this study from the eMazabekweni and KwaNokweja communities have indicated that most of their land is owned by the Chief, who does not charge the respondents a rate for residing on or using this land (Sineke, 2012). In the KwaNokweja community (one of the larger communities) it was mentioned to the researcher that there are different Chiefs within the community, and they do not get along with each other, causing conflict within the community itself. Respondents in the Hopewell and Carisbrooke community mentioned that they rent land from farmers and the Roman Catholic Church. The respondents who have stated that they own the land claim that they have inherited or have bought it off over the years, however no proof of purchase or documentation of ownership was provided to the researcher. The unavailability of title deeds has financial implications for female smallholder farmers as they are not able to access loans for their businesses due to lack of collateral.

Table 5. 11 Respondents who have access to land for crop cultivation (%)

Respondents who have access to land for crop cultivation	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	94%	96%	100%	96%	96.5%
No	6%	4%	-	4%	3.5%

Table 5.11 indicates that 94% of respondents in eMazabekweni, 96% of respondents in KwaNokweja, all of the respondents in Hopewell and 96% of respondents in Carisbrooke have access to land for crop cultivation. Although many respondents do have access to land for cultivation of crops, many do not have the inputs or implements to begin farming to maintain their crop yields (Cousins, 2018). The lack of ownership of land further prevents female smallholder farmers from accessing loans to purchase the required inputs or implements as they do not own any collateral to offer the bank. Access to water also poses as a constraint for farmers who intend on practicing small-scale farming. Additionally, due to the old age of respondents and members of the community, many of them do not have the assistance needed to participate in small-scale farming.

Table 5. 12 Respondents who have immediate access to water, their main source of domestic water and main source of water used for irrigation (%)

Respondents who have immediate access to water	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	-	-	-	-	-
No	100%	100%	100%	100%	100%
Respondents main source of domestic water	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Public tap	24%	64%	60%	70%	54.5%
Communal borehole	10%	16%	30%	12%	17%
Rainwater tanks	8%	10%	4%	6%	7%
Flowing river	58%	10%	6%	12%	21.5%
Respondents main source of water used for irrigation	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Public tap	-	44%	48%	74%	41.5%
Rainwater tanks	4%	4%	-	6%	3.5%
Flowing streams	42%	24%	22%	6%	23.5%
Dam	16%	-	-	-	4%
Rain water	34%	28%	30%	14%	26.5%
Communal borehole	4%	-	-	-	1%

Table 5.12 indicates that all of the respondents from each community do not have immediate access to water within their households. Due to the lack of water infrastructure within these communities, all households have a pit latrine sanitation system however President Cyril Ramaphosa has launched a new sanitation appropriate for education (SAFE) initiative that is a collaboration between the government and the private sector in an attempt to eradicate pit

latrines in schools (Kubheka, 2018). This initiative was implemented due to the dangers of pit latrines as three school children died by falling into a pit latrine (Kubheka, 2018).

The Table 5.12 above indicates that 58% of residents from eMazabekweni use the river that flows through their community as their main source of water. Sixty four percent of respondents from KwaNokweja, 60% from Hopewell and 70% from Carisbrooke make use of public taps as their main source of domestic water. The IDP 2017/2018 indicates that communities in this ward do not have access to piped water. The Ubhlebezwe municipality has a backlog in terms of installing the pipes, leaving more than 70 834 people in 2016 without piped water. During the data collection period, the researcher had to delay the data collection process due to protests by community residents (especially in eMazabekweni and KwaNokweja) as these residents were protesting their lack of piped water and lack of access to basic services.

Johnson (2017) has explained that audits undertaken by the auditor-general indicate that delays in projects, underperformance on the behalf of contractors and the lack of capacity within municipalities are some of the challenges the Department of Water and Sanitation faces in the implementation of piped water and sanitation.

The Table 5.12 indicates that within the eMazabekweni Community, 42% of respondents use the river that flows through their community as a source of irrigation for their crops. Forty four percent of respondents from the KwaNokweja community, 48% from the Hopewell community and 74% from the Carisbrooke community make use of the public tap as a source for irrigating crops.



Plate 5. 4 A makeshift public tap within the eMazabekweni community

Table 5. 13 Distance walked by respondents to access water (%)

Distance respondent walked to access water	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
<0.5 km	28%	20%	20%	10%	19.5%
0-1 km	10%	22%	12%	30%	18.5%
2-5 km	44%	44%	28%	60%	44%
6-10 km	10%	14%	40%	-	16%
11-15 km	8%	-	-	-	2%
16-20 km	-	-	-	-	-

Table 5.13 indicates that 44% of respondents from eMazabekweni and KwaNokweja have to walk 2-5 km to access water. Forty percent of respondents from Hopewell have to walk between 6-10 km to access water, while 60% of respondents from Carisbrooke have to walk 2-5 km to access water. Porter *et al.* (2007) and Porter *et al.* (2013) indicate that there are many health risks associated with head loading, some of these include backache, headaches, chest pains, as well as premature births in those women who are pregnant.



Plate 5. 5 Women from the eMazabekweni community head loading water containers in order to walk back to their homes

Table 5. 14 Respondents who feel that walking further to acquire water puts them at a greater risk of being attacked (%)

Respondents who feel that walking further to fetch water puts them at higher risk	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	50%	36%	80%	56%	55.5%
No	50%	64%	20%	44%	44.5%

Table 5.14 indicates the level of risk involved with walking further to acquire water. Half of the respondents from eMazabekweni felt that walking further to acquire water places them at greater risk. Eighty percent of respondents from Hopewell and 56% of respondents from Carisbrooke felt that this places them at a greater risk of being attacked. However, 36% of respondents from KwaNokweja felt that walking a further distance to collect water did not put them at risk.

Most respondents from these communities have to walk quite a distance to access water. Many of them return with the water in various buckets, some of which are placed into wheelbarrows. Respondents do not have access to cars and have to walk on the bumpy, donga-filled, informal roads within their communities to access water. Many respondents complained of long lines at access water points such as public taps, which often delays their daily chores by up to 4 hours (Porter *et al.*, 2013). These respondents then load buckets onto their heads while carrying some in their hands.

Respondents who stated that they felt at risk of being attacked when walking to collect their water have stated that they fear sexual predators as well as being robbed and abused, especially those who are awake early in the morning so they do not have stand in the long queues at the water access points. Caruso (2016) who points out that women might face conflict at water access points or be at the risk of physical and sexual assault reinforces this point. However, respondents have also stated that they prefer walking with their neighbours, friends or children to avoid being in such situations. Little *et al.* (2005) reiterate this sentiment by stating that women and men experience fear differently especially fear of sexual harassment. This fear affects women in their daily life choices.

Table 5. 15 Main sources of energy within respondent’s household (%)

Main source of energy within respondents household	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Electricity from public supply	88%	12%	24%	48%	43%
Electricity and wood	4%	62%	48%	22%	34%
Electricity, wood and candles	4%	8%	-	24%	9%
Electricity, wood, gas and candles	4%	2%	-	-	1.5%
Electricity, paraffin, wood and candles	-	4%	-	-	1%
Electricity, gas and wood	-	12%	28%	6%	11.5%

Table 5.15 indicates that majority (88%) of respondents from eMazabekweni and 48% of respondents from Carisbrooke rely on electricity from public supply as their main source of

energy. This electricity is in the form of a prepaid meter that they need to recharge once their electricity voucher is extinguished. Many respondents stated that they could not afford to keep buying electricity, as they have to travel into towns to purchase the vouchers and the transport costs were too high. Respondents also stated that they sometimes stayed for days without electricity until it was time for them to go into town. This hindered their ability to carry out daily chores, as they were not able to cook or store food, leading to food wastage. Louw *et al.* (2008) explain that access to energy is a facet of development as access to energy allows households to meet the requirements of their basic needs such as cooking. A lack of infrastructure within these communities does not allow them to access electricity as needed as there are no power lines that are present within the community.

Sixty two percent of respondents from KwaNokweja and 48% of respondents from Hopewell use electricity and wood as a form of energy within their households. Many respondents stated that in order to reduce their electricity usage, they use wood as a form of energy however they have to walk a distance to gather wood and have to carry it back to their homes. The action of gathering wood is very similar to that of collecting water the reason being, it is often perceived that the females that have to do it. Girl children are often excluded from school in order for them to collect wood and water while many women practice head-loading to carry their wood, which poses multiple threats to their health and takes a tremendous amount of energy (Porter *et al.*, 2013; Caruso, 2016). The collection of firewood also causes environmental degradation, as it is an unsustainable method of energy creation (Cerutti *et al.*, 2015).

In addition to electricity and wood, some respondents from each community also use candles, however many of them have stated that this poses a fire hazard and they would prefer not to use it but they do not have a choice.

5.4 Crop and livestock production

Table 5. 16 Respondents primary participation in crop production or livestock production (%)

Respondents participation in crop or livestock production	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Crop production	98%	80%	100%	74%	88%
Livestock production	2%	20%	-	26%	12%

Table 5.16 indicates that 98% of respondents in the eMazabekweni community participate in crop production, whilst 80% of respondents from KwaNokweja participate in crop production. All of the respondents from Hopewell participate in crop production and 74% of respondents from Carisbrooke participate in crop production. Some respondents from these communities did not participate in crop production as they participated in livestock production instead. Broiler production forms part of livestock production.

Table 5. 17 Location of crops that are grown by the respondent (%)

Location of crops	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Homestead garden	92%	86%	100%	100%	94.5%
Keyhole garden	-	-	-	-	-
Community garden	-	4%	-	-	1%
Fields	8%	6%	-	-	3.5%
Do not practice farming	-	4%	-	-	1%

Table 5.17 indicates that 92% of respondents from eMazabekweni, 86% of respondents from KwaNokweja and all of the respondents from Hopewell and Carisbrooke grow their crops in homestead gardens. Residents from KwaNokweja also make use of community gardens (4%), fields (6%) and not applicable applies to those who do not participate in crop production instead they participate in livestock production. Six percent of respondents from eMazabekweni also use fields to grow their crops.

Nagai (2012) describes community gardens as meaning different things to different communities however, it plays an important role in the overall wellbeing of the community as well as the food security of houses within the community. In the KwaNokweja community where community gardening is practiced, participants stated that they all share the workload and the crop yields from these spaces. In other communities such as eMazabekweni, the researcher observed that although respondents did not share the garden with their community at large, they shared it with their family members who stay in the same community, as well as their neighbours.



Plate 5. 6 Crops grown in a respondent's back yard within the eMazabekweni community

Table 5. 18 Crops that are grown by respondents in each community (%)

Crop	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Beans, potatoes, cabbage, butternut, spinach, tomato, green pepper	4%	-	-	-	1%
Beans, potatoes, cabbage, spinach	4%	-	-	14%	4.5%
Yams	-	-	12%	-	3%
Maize	20%	8%	-	10%	9.5%
Maize and beans	8%	6%	-	-	3.5%
Maize and potatoes	12%	2%	-	-	3.5%
Maize, beans, cabbage, carrots and green pepper	4%	4%	-	-	2%
Maize, beans, potatoes	14%	28%	8%	12%	15.5%
Maize, beans, potatoes and butternut	8%	4%	-	-	3%
Maize, beans, potatoes and cabbage	4%	4%	-	-	2%
Maize, beans, potatoes, cabbage, beetroot	-	4%	-	-	1%
Maize, beans, spinach and cabbage	12%	16%	-	32%	15%
Maize, cabbage and spinach	-	8%	-	-	2%
Maize, potatoes and yams	-	-	16%	-	4%
Maize, potatoes, cabbage	4%	-	36%	12%	13%
Maize, potatoes, spinach	-	-	12%	-	3%
Maize, wheat, cabbage	-	4%	-	-	1%
Potatoes and butternut	4%	8%	-	-	3%
Potatoes and cabbage	-	-	16%	-	4%
Maize and spinach	-	-	-	6%	1.5%
Cabbage, onions, chillies and spinach	-	-	-	6%	1.5%

Potatoes, cabbage and peppers	-	-	-	8%	2%
Do not farm	2%	4%	-	-	1.5%

Table 5.18 indicates that respondents within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities cultivated crops that are considered staple crops. FAO (2012) and National Geographic (2014) indicate that a staple crop makes up the majority of a population's consumption. The FAO (2012) states that food security is dependent on the availability of small crops, which in reality is made up of a small number of plant species.

The type of crops that were grown by the community reinforces the above information. This includes maize, beans and potatoes, which are staple foods for many households around the world (FAO, 2012). Respondents within all four communities claimed that they grew these crops because they are easy to grow and grow well within their communities. Some respondents also grew fruits such as bananas, peaches, and oranges however, some respondents also remarked that they only grew the crops listed above because they were the only seeds that were available to them.



Plate 5. 7 Farmers from the eMazabekweni community packing their potatoes

Table 5. 19 Challenges with crop farming within the communities (%)

Challenges with crop farming	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Theft	54%	50%	16%	30%	37.5%
No challenges	46%	50%	84%	70%	62.5%

Table 5.19 indicates that within the eMazabekweni and KwaNokweja communities, majority (54% and 50% respectively) of respondents' crops are stolen. However, in the Hopewell and KwaNokweja communities a minority (16% and 30%) of crops are stolen respectively. Luymes (2017) has indicated that crop theft has always been a problem for farmers however, recently the problem has been exacerbated. Farmers already face many challenges and crop theft makes it worse for them.

Respondents who stated that their crops are stolen have stated that subsequently they do not have enough crops left to feed their families and to sell. The concern related to stolen crops has caused anxiety among many respondents causing high blood pressure and loss of sleep. Respondents who stated that their crops are not stolen have stated that it does not really affect them much. The IDP 2017/2018 indicates that crime is exceedingly high within this municipality however, the municipality has begun implementing community policing forums to assist with crime rates

5.5 Extension support

Table 5. 20 Respondents who are assisted by LIMA (%)

Do you have any form of assistance?	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	24%	32%	-	-	14%
No	76%	68%	100%	100%	86%

Table 5.20 indicates that within eMazabekweni 24% of respondents receive assistance from NGOs such as LIMA while 32% of respondents from KwaNokweja receive assistance. Within the Hopewell and Carisbrooke communities, all of the respondents have not received any assistance from NGOs.

The information from this table indicates that although there exists extension support within the eMazabekweni and KwaNokweja communities, a minority of respondents is receiving this assistance. Respondents from Hopewell and Carisbrooke do not receive any support services.

Table 5. 21 Respondents who use fertiliser and what fertiliser they use (%)

Respondents who use fertiliser in their fields	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	84%	84%	100%	90%	89.5%
No	16%	16%	-	10%	10.5%
Type of fertiliser used	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Do not use fertiliser	16%	16%	-	10%	10.5%
Home-made	52%	66%	62%	74%	63.5%
Store bought	32%	18%	38%	16%	26%

Table 5.22 indicates that 84% of respondents from eMazabekweni and KwaNokweja fertilise their fields, as well as all of the respondents from Hopewell and 90% of respondents from Carisbrooke.

Of the 84% of respondents from eMazabekweni that do use fertiliser, 52% use home-made fertiliser and 32% use fertiliser that is purchased from the store. In KwaNokweja, 66% of respondents use home-made fertiliser, while 18% of respondents use fertiliser that is purchased from the store. In Hopewell, of all the respondents, 62% use manure while 38% use fertiliser that is purchased from the store. In Carisbrooke, of the 90% of respondents, 74% use home-made fertiliser while 16% use store purchased fertiliser.

Respondents have stated that they obtain manure from neighbours or from their own cattle to use as manure. Sometimes their neighbours give the manure to them in return for crops and sometimes they purchase the manure from them. Fertiliser that is obtained from the store is purchased in Ixopo.

Table 5. 22 Respondents land preparation technique (%)

Respondents land preparation technique	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Tractor provided by the government	24%	22%	-	-	11.5%
Manually	64%	64%	84%	96%	77%
Using livestock	-	2%	-	-	0.5%
Hire a tractor	12%	-	-	-	3%
Respondent does not prepare their land	-	12%	16%	4%	8%

Table 5.22 indicates that within eMazabekweni, KwaNokweja, Hopewell and Carisbrooke 64%, 84% and 96% of respondents respectively, prepare their land manually. Respondents have stated that this is not only time consuming and exhausting, but they often do not have enough people within their household to assist them as children go to school. This results in respondents having to hire people from the community to assist them however if they cannot afford to pay cash for it, they do not prepare the land at all. Respondents have stated that the tractor that is provided by the government is extremely unreliable, and only comes to their community occasionally. Hiring a tractor is expensive for these residents.

Land preparation plays a crucial role in the establishment of crops. Good land preparation leads to a better establishment of plants, thus leading to a higher crop yield (Mushawevato, 2016). If respondents have a higher crop yield, they will have enough crops for selling and consumption, thus making land preparation a crucial stage of crop production.

Table 5. 23 Respondents who receive inputs, agencies who provide these inputs and what inputs are provided (%)

Respondents who receive inputs	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	32%	36%	52%	40%	40%
No	68%	64%	48%	60%	60%
Agencies through which inputs are provided	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Government	8%	22%	12%	10%	13%
NGOs	16%	10%	-	-	6.5%
Community members	4%	4%	40%	30%	19.5%
Government and community members	4%	-	-	-	1%
No inputs received	68%	64%	48%	60%	60%
Type of input received	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Fertilizer	4%	-	-	-	1%
Fertilizer and livestock for ploughing	4%	-	-	-	1%
Seeds	12%	16%	-	14%	10.5%
Seeds and fertilizer	-	6%	24%	20%	12.5%
Seeds and livestock for ploughing	4%	-	-	-	1%
Seeds, a tractor and manure	8%	4%	-	-	3%

Seeds, fertilizer and small implements	-	10%	28%	6%	11%
Do not receive inputs	68%	64%	48%	60%	60%

Table 5.23 indicates that 68%, 64%, 48% and 60% of respondents from the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities respectively have not received any inputs for their crops. It is interesting to note that although majority of respondents from the eMazabekweni, KwaNokweja and Carisbrooke communities have not received any inputs, 52% of respondents from Hopewell have indicated that they have received inputs.

Of the 32% of respondents from eMazabekweni who stated that they do receive inputs, 8% of these inputs are from the government, 16% is from NGOs, 4% is from fellow community members, 4% is a combination of inputs from the government and community members. Respondents stated that NGOs known as Small Enterprise Development Agency (SEDA) is working within the community. It is an organisation that is an initiative of the Department of Trade and Industry. This organisation began in 2004 with the intention of providing support to small businesses through its national network, targeting areas that are designated to them by the national government (Department of Trade and Industry, n.d).

Of the 36% of respondents from the KwaNokweja community who stated that they do receive inputs, 22% of inputs were received from the government, 10% from NGOs, 4% from community members and 6% from the Department of Agriculture. World Vision is another NGOs who operates within the community. World Vision South Africa is an international organisation that operates in seven of the nine provinces within South Africa. One of its aims is to achieve economic development among men, women and youth in order to develop local economies, thus leading to a sustainable livelihood (World Vision, n.d).

Of the 52% of respondents from the Hopewell community who stated that they do receive inputs, 12% of these inputs were from the government, whilst 40% were from fellow community members. This community did not receive funding from NGOs however, many respondents who did receive inputs stated that the government provides these inputs, but did not specify which department.

Of the 40% of respondents from the Carisbrooke community that stated that they do receive inputs, 10% of respondents stated that these inputs came from the government, whilst 30% of respondents stated that they received inputs from the neighbours. This community faces the same situation as the Hopewell community however, it is important to note that some community members borrow each other implements, but do not own these implements.

Additionally, the Table 5.23 above indicates what type of implements respondents in each community received. In the eMazabekweni and KwaNokweja communities, a tractor is provided by the government in order for community members to prepare their fields however, respondents stated that the tractor did not come often and times that it did come were irregular.

Table 5. 24 Training received by respondents (%)

Training received by respondents	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Crop production	14%	8%	-	-	5.5%
Marketing skills	-	-	-	-	-
Record keeping	-	-	-	-	-
All of the above	12%	14%	-	-	6.5%
Crop production and marketing skills	8%	4%	-	-	3%
Crop production and record keeping	-	2%	-	-	0.5%
No training received	66%	72%	100%	100%	84.5%

Table 5.24 indicates that 34% of respondents from eMazabekweni received training. Of that 34%, 14% of respondents received training pertaining to crop production, whilst 4% of respondents received training pertaining to small business management. Sixteen percent of

respondents received a combination of training. This is further broken down in table 5.24 above.

In KwaNokweja, 8% of respondents received training pertaining to crop production, whilst 2% received training about small business management. Twenty percent of respondents received a combination of training; this is further broken down in table 5.24 above.

All of the respondents from the Hopewell and Caribrooke communities did not receive any training at all. These two communities do not receive any assistance from NGOs.

Table 5. 25 Agencies who provided training to respondents (%)

Agencies who provided training	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Government	-	-	-	-	-
NGOs	30%	24%	-	-	13.5%
Government and community members	4%	4%	-	-	2%
No training received	66%	72%	100%	100%	84.5%

Table 5.25 indicates that in eMazabekweni, 30% of training was provided by NGOs. Four percent of training was provided by the government and community members. In KwaNokweja, 24% of training was provided by NGOs while the government and community members provided 4% of training.

NGOPulse (2018) indicates that the role of NGOs is to pick up service provision in places where the government does not provide them. They are funded by donations and rely on volunteers for their operation, as they are independent of the government.

5.5.1 Livestock production

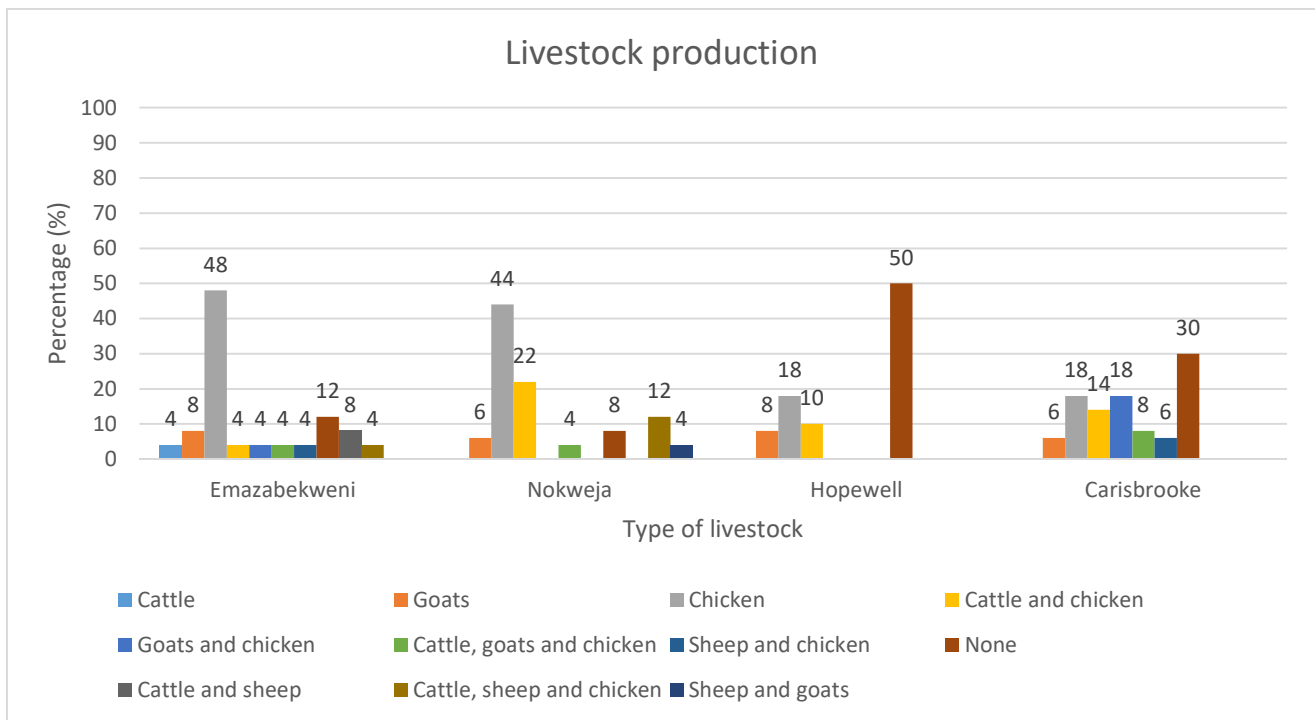


Figure 5. 5: Livestock production within respondent's household (n=50 per community)

Figure 5.5 indicates that within the eMazabekweni community, 48% of respondents own chicken. In the KwaNokweja community 44% of respondents own chicken. In the Hopewell community Half of the respondents do not own any livestock. Thirty percent of respondents from the Carisbrooke community do not own any livestock. Meissner *et al.* (2013) reinforced the value of livestock, stating that it substantially contributes to the level of food security within a household. This is evident in the results, as many respondents who owned chicken and goats stated that they used them to slaughter and feed their families, as well as to trade with community members. Respondents also stated that they used cattle to plough their land as well as for lobola.

5.6 Broiler production

This section was included in the questionnaire, as LIMA has indicated that they technically support farming activities such as broiler production, in addition to crop farming. Correspondence between the researcher and personnel from LIMA indicate that the organisation prefers broiler farmers to have some forms of infrastructure available for them to start broiler production. However, if a start-up would like to join the programme, the organisation would ensure that household items such as feeders and drinkers are used until the

farmer is able to purchase commercial ones. In the case of these communities, many farmers have spare rooms or rondavels where they rear their broilers.

Table 5. 26 Respondents who participate in broiler production (%)

Respondents who participate in broiler production	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	16%	54%	12%	24%	26.5%
No	84%	46%	88%	76%	73.5%

Table 5.26 indicates that in eMazabekweni, Hopewell and Carisbrooke, majority (84%, 88% and 76% respectively) of respondents do not participate in broiler production however, in KwaNokweja, 54% of respondents stated that they did participate in broiler production. During the process of data collection, the researcher observed that within the KwaNokweja community there were many houses with broiler rooms. When interviewing one respondent, the researcher was told that although the respondent participated in broiler production, it was difficult to sell her broilers at the market as people complained that her price was too high.



Plate 5. 8 A broiler farm in the KwaNokweja community

Table 5. 27 Respondents who received inputs for broiler production (%)

Broiler inputs received	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	4%	10%	12%	10%	9%
No	12%	44%	-	22%	19.5%
Do not practice broiler farming	84%	46%	88%	68%	71.5%

Table 5.27 indicates that within eMazabekweni, of the 16% of respondents that participate in broiler production, 4% receive inputs. Within KwaNokweja, of the 54% of respondents that do participate in broiler production, 10% received inputs. Within the Hopewell community, of the 12% of respondents that participate in broiler production, all of them receive inputs for their broiler production. Within Carisbrooke, of the 32% of respondents that participate in broiler production, 10% receive inputs.

The LIMA APP aims to technically support farmers, with a focus on market linkages. Farmers are provided with inputs such as chicks as well as loans that will eventually allow them to grow their business and reinvest in improving their infrastructure. However, it is important to note that not all respondents receive inputs, thus they are not able to grow their businesses.

Table 5. 28 Type of inputs received for broiler farmers (%)

Type of inputs received for broiler farmers	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Feed	-	-	-	12%	3%
Chicks	-	-	-	-	-
Vaccines	4%	-	-	-	1%
Loan	-	-	-	-	-
Feed, chicks, vaccines	-	8%	-	-	2%
Feed and chicks	-	2%	-	-	0.5%
Feed and vaccines			12%	-	3%
No inputs received	96%	90%	88%	88%	90.5%

Table 5.28 indicates that within the eMazabekweni community, 4% of respondents receive vaccines for their broilers. These vaccines protect their broilers from diseases and pests. Eight percent of respondents in the KwaNokweja community receive feed, chicks and vaccines, while 2% receives only feed and chicks. Twelve percent of respondents from the Hopewell community receive feed and vaccines, while 12% of respondents from Carisbrooke receive feed.

Table 5. 29 Respondents who received training for broiler farming (%)

Training received for broiler farmers	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	-	10%	-	-	2.5%
No	100%	90%	100%	100%	97.5%

Table 5.29 indicates that eMazabekweni, KwaNokweja and Carisbrooke did not receive any broiler training however, 10% of respondents from KwaNokweja did receive broiler training.

Table 5. 30 Agencies that provided training for broiler farmers (%)

Agencies who provided training for broiler famers	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Government	-	-	-	-	-
NGOs	4%	10%	-	-	3.5%
Community members	-	-	12%	10%	5.5%
Not applicable	96%	90%	88%	88%	90.5%

Table 5.30 indicates that eMazabekweni (4%) and KwaNokweja (10%) receive training from NGOs however, Hopewell (12%) and Carisbrooke (10%) receive training from their fellow community members. Broiler training is provided by LIMA. Training from community members might pertain to community members who went for training and then circulate the knowledge that they gained, or it might be community members simply sharing their knowledge with each other.

Table 5. 31 Type of training received by respondent for broiler farming (%)

Type of training received for broiler farming	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Broiler life cycle training, marketing skills, record keeping	-	10%	-	-	2.5%
No training received	100%	90%	100%	100%	97.5%

Table 5.31 indicates that 10% of respondents from KwaNokweja received training in the broiler life cycle, marketing and record keeping. All of the respondents from eMazabekweni, Hopewell and Caribrooke did not receive any training. Calderon *et al.* (2013) points out that poor business practices are often due to the lack of basic business skills. This especially applies to poor developing countries, thus prompting many NGOs around the world to provide business training. A study conducted by Calderon *et al.* (2013) has found that the intervention of training programmes, even if they are on a small scale, has shown significant increase in profits among small business owners. These findings reiterate the need for training among small businesses, such as the broiler production mentioned above.

Table 5. 32 Type of structure within which respondent grows their broilers (%)

Structures where broilers are grown	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Within respondents household	16%	22%	-	20%	14.5%
Broiler house built by funder	-	2%	-	-	0.5%
Broiler house built by respondent	-	22%	12%	4%	9.5%
Renting from someone in the community	-	8%	-	-	2%
Do not participate in broiler farming	84%	46%	88%	76%	73.5%

Table 5.32 indicates that within eMazabekweni, 16% of respondents grow their broilers within their households. Within KwaNokweja, 22% of respondents grow their broilers within their households as well as in structures that they built themselves. Two percent of respondents stated that they grow their broilers within a structure that was built by a funder, this funder is most likely LIMA as they provide broiler support within this community.

In Hopewell, 12% of respondents grow their broilers in structures that they built themselves, and in the Carisbrooke community 20% of respondents grow their broilers within their households.



Plate 5. 9 A broiler house in the KwaNokweja community

Table 5. 33 Respondents who sell broilers in the marketplace (%)

Respondents who sell broilers in the marketplace	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	16%	46%	12%	32%	26.5%
No	-	8%	-	-	2%
Do not participate in broiler farming	84%	46%	88%	68%	71.5%

Table 5.33 indicates that of the 16%, 12% and 32% of respondents who participate in broiler production within the eMazabekweni, Hopewell and Carisbrooke respectively, all of them sell their broilers in the marketplace. Within the KwaNokweja community, 46% of respondents sell their broilers in the market while 8% do not. A majority of farmers do not participate in broiler production.

These results indicate that broilers that are sold in the marketplace contribute to the overall income of the respondent. Respondents sell their broilers for approximately R65.00.

5.7 Infrastructure and agricultural market access

Table 5. 34 Methods of communication that respondents have access to (%)

Respondents access to communication channels	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Public communication methods (radio or newspaper)	2%	2%	-	18%	5.5%
Radio and newspaper	-	-	16%	-	4%
Cell phone	-	12%	12%	-	6%
Cell phone and TV without DSTV	42%	8%	-	8%	14.5%
Radio, cell phone, TV with DSTV	24%	16%	40%	30%	27.5%
Radio, cell phone, TV with DSTV	8%	52%	20%	10%	22.5%
Cell phone and TV with DSTV	24%	2%	-	-	6.5%
Cellphone and TV without DSTV	-	8%	-	-	2%
Radio and cell phone	-	-	12%	14%	6.5%
TV without DSTV	-	-	-	4%	1%

Newspaper and TV without DSTV	-	-		16%	4%
-------------------------------	---	---	--	-----	----

Table 5.34 indicates that majority (42%) of respondents in eMazabekweni have access to a cellphone and a television (TV) without Digital Satellite television (DSTV). Fifty two percent of respondents from KwaNokweja have access to a radio, cellphone and TV without DSTV. Forty percent of respondents from Hopewell have access to a radio, cell phone and TV with DSTV. Eighteen percent of respondents from Carisbrooke have access to only a radio or newspaper.

Hattangadi (2014) notes that the dissemination of knowledge and the upkeep of current events is imperative in today's time as it affects all of us, due to our interconnectedness. The advancement of media has made keeping up with current events much easier than it was 20 years ago, due to the emergence and popularity of social media.

Within South Africa, cell phone networks such as Vodacom have made browsing social media networks such as Twitter and Facebook free (Vodacom, n.d). However, respondents within the research communities have stated that they lack the network connectivity thus cannot access these channels. Some respondents, especially those who are older do not have phones that support internet access however, households do have access to a television with DSTV. Respondents have also stated that although they have cell phones, they often do not have network connectivity or they cannot afford data or airtime. Often their DSTV has no signal and it is costly commitment to make monthly.

Table 5. 35 Respondents who own a vehicle (%)

Respondents who own a vehicle	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	20%	12%	-	12%	11%
No	80%	88%	100%	88%	89%

Table 5.35 indicates that 80% of respondents within the eMazabekweni community do not own a vehicle. In the KwaNokweja community, 88% of respondents do not own a vehicle, whereas in the Hopewell community all of the respondents do not own a vehicle eighty eight percent of respondents in the Carisbrooke community do not own a vehicle. Fungo *et al.* (2017) reinforce

that access to transportation within rural areas ensures the supply of agricultural inputs as well as allows the facilitation of delivery of farm yields to agricultural markets. However, respondents who do not have a vehicle have stated that they use public transport but it is very expensive and they cannot afford to use it regularly. This hinders their ability to access agricultural markets.

Table 5. 36 Distance that respondents travel to access the nearest transport route (%)

Distance that respondents travel to access the nearest transport route	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
<500 m	8%	-	-	-	2%
0-1 km	8%	4%	12%	72%	24%
2-5 km	38%	6%	80%	22%	36.5%
6-10 km	24%	40%	8%	6%	19.5%
11-15 km	6%	42%	-	-	12%
16-20 km	12%	-	-	-	3%
>21 km	4%	8%	-	-	3%

Table 5.36 illustrates that 38% of respondents from eMazabekweni travel between 2 to 5 km to access their closest transport route. Forty two percent of respondents within the KwaNokweja community travel between 11 to 15 km to access the nearest transport route. Eighty percent of respondents from Hopewell travel 2 to 5 km to access their nearest transport route. Seventy two percent of respondents from the Carisbrooke community travel 0 to 1 km to access their nearest transport route.

The eMazabekweni community lies deep within forest plantations. To access the community itself, one has to travel along a tar road (it has recently been tarred) thereafter one has to further travel along a dirt road to access the community. This is a long way away from any main road. Within the community, there are no formal roads.

The KwaNokweja community has to be accessed by informal dirt roads. One has to travel a distance on dirt roads in order to access the community. There are no formal roads within the community and the community is situated a long distance away from main roads.

The Hopewell community can be accessed by gravel roads. One has to travel on gravel roads for a while before accessing the community. The community is not in close proximity to a main road and residents of the community have to travel a long distance before accessing the main road.

The Carisbrooke community is accessed by dirt roads however, before reaching the community, one has to pass over a railway line. This damages cars, especially if you have more than three passengers. However, the entrance of Carisbrooke is in close proximity to the main road in comparison to the other three communities

All of the respondents stated that roads within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities respectively were informal. In these communities, there are dirt roads. The turn off to the main road which leads to eMazabekweni has been tarred, as it is a road that joins to Umzimkhulu, however one has to drive further on dirt roads to access the eMazabekweni community itself.

Porter (2002) indicates that within the western world, the term “off-road” often has idealised masculine connotations, including a vehicle that has a four-wheel drive, however within Sub-Saharan Africa, this term refers to those settlements that are situated far away from a formal, gravelled road and are usually difficult to access.

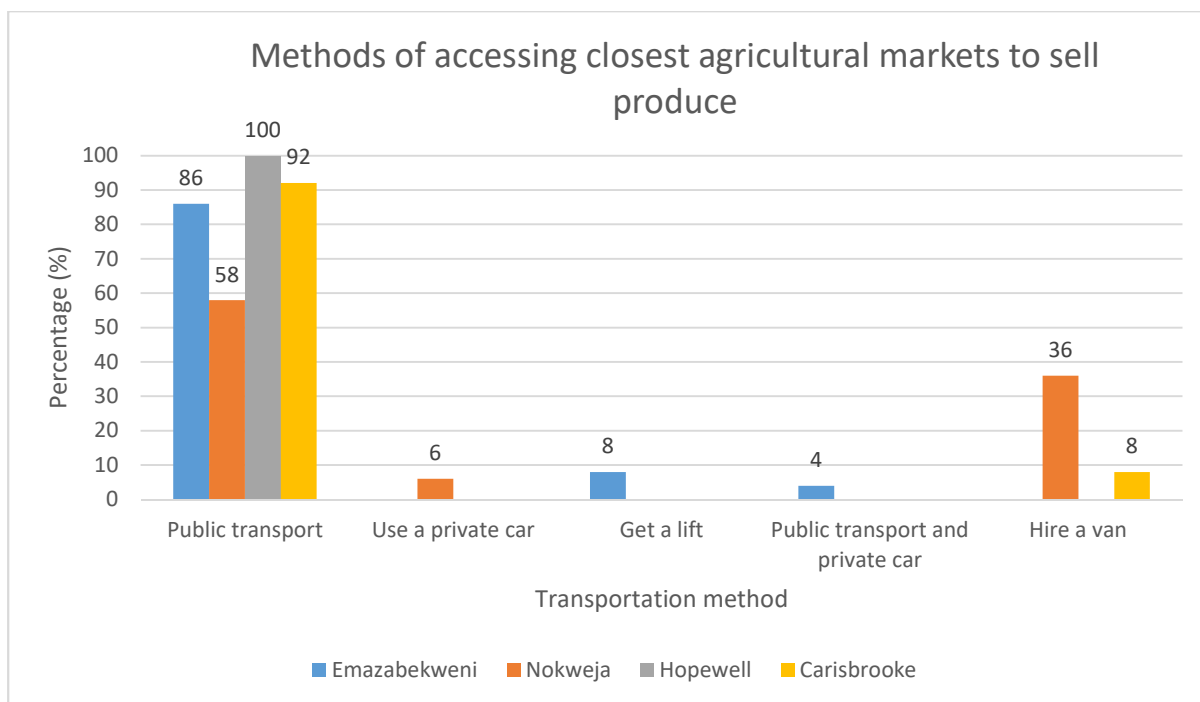


Figure 5. 6: Methods utilised by respondent to access closest agricultural market to sell produce (n=50 per community)

Figure 5.6 indicates that all respondents rely on public transport to access agricultural markets. Public transport in this instance comprises of taxis and busses. Porter (2002) explains that communities that are situated off-road pay higher fees for public transport as many taxis and busses are hesitant to travel into these communities due to bad road conditions. Respondents in these eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities stated that it sometimes costs approximately R45.00 to access markets, especially if they have their merchandise with them. Respondents stated that taxis waited for them at certain points within the community however, depending on the time of the day, some of these taxi stops were not safe. Magingxa *et al.* (2009) state that lack of ownership of a transportation vehicle hinders a farmer's ability to access markets as they have to rely on taxis and other forms of public transport. These farmers are sometimes inaccessible themselves due to the poor road conditions.

Some respondents told the researcher that they caught a lift to main roads with vans that are passing through the community, and the researcher observed that LIMA personnel would assist some community members by taking them in and out of the community, reducing the distance that they would have to walk.



Plate 5. 10 A vandalised bus stop in the Hopewell community

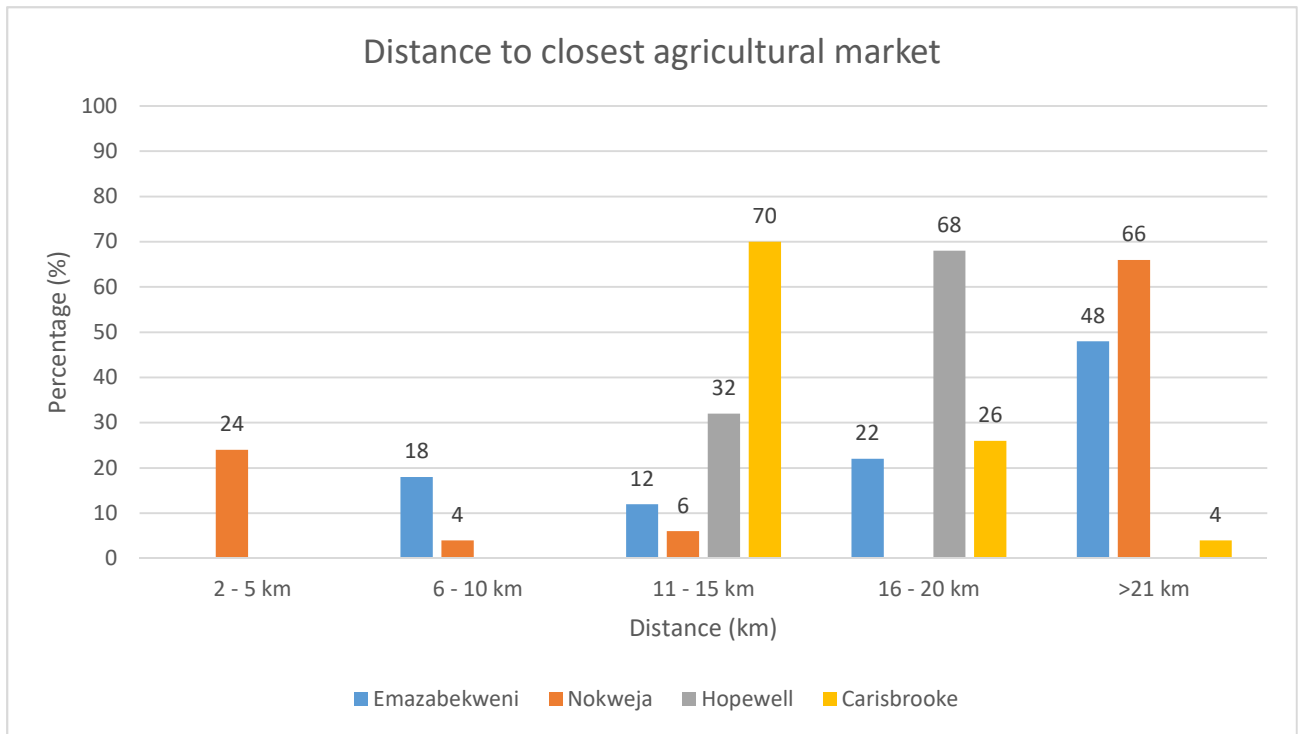


Figure 5. 7: Distance that respondents have to travel to access closest agricultural markets (n=50 per community)

Respondents stated that markets that they have access to include Ixopo, Highflats, Umzimkhulu and Mkondeni Market in Pietermaritzburg. Figure 5.7 indicates that 48% of respondents from eMazabekweni and 66% of respondents from KwaNokweja reside more than 21 km away from their nearest agricultural market. Sixty-eight percent of respondents from Hopewell reside 16 to 20 km away from their nearest agricultural market while 70% of respondents from Carisbrooke reside 11 to 15 km away from their nearest agricultural market.

Magingxa *et al.* (2009) and Maponya *et al.* (2016) note that distance from markets serves as a barrier to market participation, especially among smallholder farmers.

5.8 Agricultural market participation

Table 5. 37 Respondents who have access to agricultural markets in which to sell their crops (%)

Respondents who have access to agricultural markets in which to sell their crops	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	44%	48%	12%	6%	27.5%
No	56%	52%	88%	94%	72.5%

Table 5.37 indicates that 56%, 52%, 88% and 94% of respondents from eMazabekweni, KwaNokweja, Hopewell and Carisbrooke respectively do not have easy access to agricultural markets in which to sell their crops.

From researcher's conversations with the respondents who practice farming, it is evident that the respondents are not able to access agricultural markets due to transport issues. Some of them claim that transport costs are too high, while others state that transport is not easily available to them, as they are too old to walk to taxi stops.

Table 5. 38 Respondents who trade crops at this agricultural market (%)

Respondents who trade crops at this market	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	36%	52%	16%	6%	27.5%
No	64%	48%	84%	94%	72.5%

Table 5.38 indicates that 64%, 48%, 84% and 94% of respondents from eMazabekweni, KwaNokweja, Hopewell and Carisbrooke respectively do not participate in trading crops at the Ixopo, Highflats, Umzimkhulu and Mkondeni agricultural markets.

Respondents stated that they do not have the resources to plant crops or the resources to travel to agricultural markets. They eat what they have planted or they sell or trade with their neighbours.

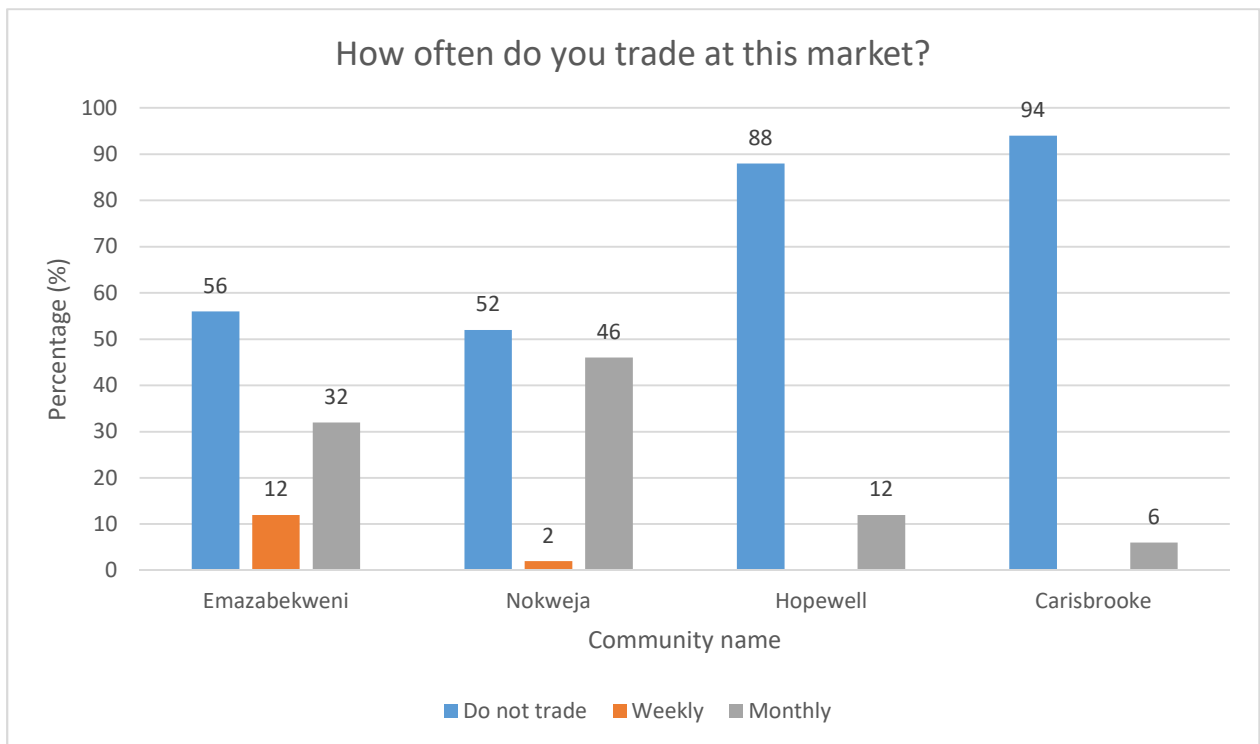


Figure 5. 8: Number of times that respondents trade at agricultural markets (n=50 per community)

Figure 5.8 indicates that 12% of respondents who do have access to agricultural markets and who do trade their crops are able to do so twice a week, while 32% of respondents are only able to trade their crops once a month. Within KwaNokweja, 2% of respondents were able to trade twice a week, while 46% are only able to trade once a month. In Hopewell, 12% of respondents are able to trade once a month. Six percent of respondents from Carisbrooke are able to trade their crops once a month.

Table 5. 39 Respondents ability to make profit from agricultural markets in order to sustain their livelihood (%)

Ability of profit from trading at agricultural markets to sustain respondent's livelihood	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	40%	32%	4%	2%	19.5%
No	4%	16%	8%	4%	8%
Do not trade at markets	56%	52%	88%	94%	72.5%

Table 5.39 above indicates that while a majority of respondents from the eMazabekweni, KwaNowkeja, Hopewell and Carisbrooke communities do not trade at markets, a small portion of those who do are able to make a profit from participating in agricultural markets. Forty percent of respondents from the eMazabekweni community, 32% from the KwaNokweja community, 4% from the Hopewell community and 2% from the Carisbrooke community were able to attain a profit from selling their produce at markets. This enabled them to sustain their livelihoods.

Table 5. 40 Financial capital that respondents use to participate in agricultural markets (%)

Financial capital that allows respondents to participate in markets	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Loans from neighbours	10%	8%	2%	-	5%
Loans from NGOs	16%	16%	-	-	8%
Own income	18%	22%	10%	6%	14%
Loans from NGOs and own savings	-	2%	-	-	0.5%
Do not participate in markets	56%	52%	88%	94%	72.5%

Table 5.40 depicts the financial resources that respondents use to participate in agricultural markets. Sixteen percent, 22%, 10% and 6% of respondents from eMazabekweni, KwaNokweja, Hopewell and Carisbrooke respectively rely on their own income as a form of financial investment that will allow them to sell their produce at markets. This includes the cost of buying seedlings and seeds, manure, labour and transportation costs.

Lack of access to financial resources such as loans constitutes one of the barriers that smallholder farmers face in terms of market access and participation (Maponya *et al.*, 2016). The LIMA APP intends to provide farmers with access to finance by means of providing them with micro-loans that are interest free, thus allowing them to invest in their business more (LIMA, 2015). Sixteen percent of respondents from eMazabekweni and KwaNokweja respectively receive loans from NGOs.

During the data collection, the researcher observed two respondents asking a LIMA community facilitator to deposit their cash into the bank in Ixopo for them. This cash will be credited to their LIMA loan, decreasing the amount that they owe.

5.9 Feedback on extension services

Table 5. 41 Respondents who have received extension support (%)

Respondents who have received extension support	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	32%	32%	12%	-	19%
No	68%	68%	88%	100%	81%

Table 5.41 indicates that within eMazabekweni, 32% of the respondents respectively and 12 % of the respondents from Carisbrooke received some form of form of extension support, training or in terms of a workshop. None of the respondents from Carisbrooke have received any extension support.

These communities have received inputs and training from LIMA, other NGOs and relative government departments. Some respondents answered that they had received training from their neighbours, as their neighbours attended a skills development workshop and then disseminated their knowledge.

Table 5. 42 Respondents who have received extension support from LIMA (%)

Respondents who have received extension support from LIMA	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	12%	28%	-	-	10%
No	20%	4%	12%	-	9%
Have not received any extension support	68%	68%	88%	100%	81%

Table 5.42 indicates that of the 32% of respondents from eMazabekweni who do receive a form of extension support, training or development workshop, 12% of this has been from LIMA. Twenty eight percent of respondents from KwaNokweja who stated that they do receive a form of extension support, training or development workshop, receive this from LIMA. Of the 12% from Hopewell who stated that they received a form of extension support, training or development workshop, none of the respondents received this from LIMA. Carisbrooke did not receive any form of extension support, training or development workshop.

Table 5. 43 Respondents whose household living conditions have improved due to extension support (%)

Respondents whose household living conditions have improved due to extension support	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	24%	28%	-	-	13%
No	8%	4%	12%	-	6%
Have not received extension support	68%	68%	88%	100%	81%

Table 5.43 indicates that of the 32% of respondents from eMazabekweni who received support, 24% felt that its improved living conditions within their household. Of the 32% of respondents from KwaNokweja who receive support, 28% of respondents felt that its improved living conditions within their household. Twelve percent of respondents from Hopewell who receive support did not feel that this support improved the living conditions within their households.

Ijatuyi *et al.* (2017) explain that although in many instances' extension services are set up to improve the livelihoods of those who receive them, improper training of facilitators and inconsistency in implementation proves to be a problem.

Table 5. 44 Respondents who think the NGOs run programmes created jobs within their community (%)

Respondents who think that NGOs run programme created jobs within their community	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	28%	22%	-	-	12.5%
No	72%	78%	100%	100%	87.5%

Table 5.44 indicates that 72% of respondents from eMazabekweni felt that programmes did not create jobs within their community. Seventy eight percent of the respondents from KwaNokweja felt that programmes did not create jobs within their community. All of the respondents from Hopewell and Carisbrooke felt that no jobs were created within their communities however, they were not supported by the programme, therefore this question is not applicable to them.

MacNamara and Bohn (2017) suggest that rural extension programmes should target youth as they form a majority of rural population and face the highest unemployment rates.

Table 5. 45 Type of jobs that NGOs run programmes created (%)

Type of jobs that NGOs run programmes created	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
None	72%	78%	100%	100%	87.5%
Permanent	8%	2%	-	-	2.5%
Seasonal	8%	-	-	-	2%
Temporary	12%	20%	-	-	8%

Table 5.45 indicates that 12% of respondents from eMazabekweni felt that programmes created temporary jobs while 20% of respondents from KwaNokweja felt that programmes created temporary jobs. Hopewell and Carisbrooke are not supported by this programme, therefore this question does not apply to them.

Respondents had told the researcher that they sometimes employ fellow community members to help them when there is nobody else to assist and they cannot manage. Reardon *et al.* (2014) declares temporary jobs and the lack of permanent employment within rural communities one of the push factors that contributes to rural-urban migration. Results from the Table 5.45 above reinforce this as respondent's family member's move to cities in search of better job opportunities.

Table 5. 46 Respondents who notice NGOs personnel visiting their community (%)

Respondents who notice NGOs personnel visiting their community	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	28%	28%	-	-	14%
No	72%	72%	100%	100%	86%

Table 5.46 indicates that 72% of respondents from eMazabekweni and KwaNokweja did not witness any NGOs personnel checking on farmers within their community. This reinforces the point made by Ijatuyi *et al.* (2017) above, who stated that facilitators need more training in order to effectively carry out their jobs.

Table 5. 47 Respondents who think that they have learnt beneficial skills (%)

Respondents who think that they have learnt beneficial skills	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	30%	28%	-	-	14.5%
No	2%	4%	-	-	1.5%
Did not learn any skills	68%	68%	100%	100%	84%

The Table 5.47 above indicates that 30% of respondents from eMazabekweni who have received extension support have found this support to be beneficial. Twenty eight percent of respondents from KwaNokweja who have received extension support have found this to be beneficial. Hopewell and Carisbrooke have not received any extension support thus they are not able to benefit.

Table 5. 48 Respondents who think that their communities have had interventions from NGOs or government departments (%)

Respondents who think that their communities have had interventions from NGOs or government departments	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	58%	54%	8%	16%	34%
No	42%	46%	92%	84%	66%

Table 5.48 attempts to unearth whether these four communities are aware that they have had interventions from LIMA, other NGOs and government departments. Fifty eight percent of respondents from eMazabekweni and 54% of respondents from KwaNokweja have indicated that their community has had interventions from NGOs. This may include LIMA as well as other NGOs such as SEDA and World Vision. Within Hopewell and Carisbrooke, 8% of respondents and 16% respectively have stated that their community has had interventions from NGOs, however it is more likely that these communities have had a minor intervention from The Department of Agriculture.

Table 5. 49 Respondents who perceive assistance that they received has made a positive impact within their community (%)

Respondents who perceive assistance that they received has made a positive impact within their community	eMazabekweni (n=50)	KwaNokweja (n=50)	Hopewell (n=50)	Carisbrooke (n=50)	Average
Yes	50%	42%	-	-	23%
No	50%	58%	100%	100%	77%

Table 5.49 indicates that 50% and 42% of respondents from eMazabekweni and KwaNokweja respectively perceive that these interventions have made a positive difference among their community however, all of the respondents from Hopewell and Carisbrooke perceive that this has not made a different among their community. Many respondents attribute their answers to inconsistent levels of service as well as these interventions not being sustainable.

5.10 Participatory exercise findings

5.10.1 Problem ranking matrix

Table 5. 50 eMazabekweni community's problem ranking matrix

<u>eMazabekweni</u>	IC	LCF	IR	LW	LS	LJO	U	C	DA	TP
IC	•	IC	IR	LW	LS	IC	U	C	DA	TP
LCF	•	•	IR	LW	LCF	LJO	U	C	DA	TP
IR	•	•	•	LW	IR	LJO	U	C	DA	TP
LW	•	•	•	•	LW	LW	LW	LW	LW	LW
LS	•	•	•	•	•	LJO	U	C	DA	TP
LJO	•	•	•	•	•	•	LJO	LJO	LJO	LJO
U	•	•	•	•	•	•	•	C	U	TP
C	•	•	•	•	•	•	•	•	C	TP
DA	•	•	•	•	•	•	•	•	•	TP
TP	•	•	•	•	•	•	•	•	•	•

PROBLEM	SCORING	RANKING
1. Inefficient clinics (IC)	2	8
2. Lack of cattle fences (LCF)	1	9
3. Informal roads (IR)	3	7
4. Lack of water (LW)	9	1
5. Lack of sanitation (LS)	1	9
6. Lack of job opportunities (LJO)	7	2
7. Unemployment (U)	5	4
8. Crime (C)	5	4
9. Drug and alcohol abuse (DA)	4	6
10. Teenage pregnancy (TP)	7	2

The respondents of the eMazabekweni focus group exercise were all female and ranged between the ages of 45 to 60. Younger women from the community were not available at this time as they were employed. This study focused on female-headed households therefore only females were asked to participate in this exercise. The most critical problem within this community was the lack water (1) followed by the lack of job opportunities as well as teenage pregnancy (2). Unemployment and crime (4), drug and alcohol abuse (6), informal roads (7), inefficient clinics (8) and lack of housing (9) followed this.

The respondents perceive a lack of water as one of their most critical problems. When probed, the respondents stated that it is very difficult to carry out their daily tasks without access to water within their households. It is also difficult to plant crops as there is no opportunity for

them to irrigate their crops during dry season. Respondents have to walk far distances to access communal water points. This is time consuming and detrimental to their health. The lack of job opportunities indicates that it is very difficult for residents of eMazabekweni to find jobs within their community therefore residents move out of communities to find jobs in urban areas. Lack of jobs is one of the push factors for rural-urban migration (Thet, 2012).

Teenage pregnancy also poses a problem for this community. The respondents of this focus group stated that the clinic is not doing enough to prevent girls from falling pregnant and many young girls do not want to go to clinics out of fear, as they feel that they will be judged for seeking help. Respondents also stated that there are no further education facilities available in addition to lack of job opportunities, therefore girls fall pregnant and use the child grant money as a form of income. According to the respondents, unemployment and crime, as well as drug and alcohol abuse are all interlinked. When people within the community cannot find jobs, they turn to crime abuse alcohol as well as drugs during their free time, as they are not spending this time doing anything constructive.

Informal roads pose a problem as transport costs become too high. This isolates the community from amenities such as banks, supermarkets, markets as well as farming supplies (Porter, 2002). Clinics are inefficient as they are not well stocked and staff are not efficiently trained. The respondents perceive that the lack of fencing is a concern as cattle often wonder onto their fields and eat their crops, as well as damage them as they are walking through.

It is interesting to note that this community did not mention HIV/AIDS as a problem within the community, but this could be attributed to the stigma surrounding HIV/AIDS, especially among the older generation. However, they did mention the inefficient clinics, maybe this was their way of indirectly indicating that those with HIV/AIDS are being isolated and not being given the proper care and treatment.

Table 5. 51 KwaNokweja community's problem ranking matrix

<u>KwaNokweja</u>	TP	U	DA	C	HFP	LT	LWI	IR	IPS	CF
TP	•	U	DA	C	HFP	TP	LWI	TP	IPS	CF
U	•	•	U	U	U	U	LWI	U	U	CF
DA	•	•	•	DA	HFP	DA	LWI	DA	DA	CF
C	•	•	•	•	HFP	C	LWI	C	C	C
HFP	•	•	•	•	•	HFP	HFP	IR	HFP	HFP
LT	•	•	•	•	•	•	LWI	LT	IPS	CF
LWI	•	•	•	•	•	•	•	LWI	IR	LWI
IR	•	•	•	•	•	•	•	•	IPS	IPS
IPS	•	•	•	•	•	•	•	•	•	IPS
CF	•	•	•	•	•	•	•	•	•	•

PROBLEM	SCORING	RANKING
1. Teenage pregnancy (TP)	2	6
2. Unemployment (U)	7	1
3. Drugs and alcohol abuse (DA)	5	3
4. Crime (C)	5	3
5. High food prices (HFP)	7	1
6. Lack of taxis in communities (LT)	1	7
7. Lack of water infrastructure (LWI)	7	1
8. Informal roads (IR)	2	6
9. Inefficient public services (IPS)	5	3
10. Cattle fences (CF)	4	5

The respondents in the KwaNokweja focus group exercise were all female. Their age ranges from 25 to 68 years of age. The most critical problems for these respondents were unemployment, high food prices and lack of water infrastructure (1). These were followed by drug and alcohol abuse, crime and inefficient public services (3), cattle fences (5), informal roads and teenage pregnancy (6) and lack of taxis within the community (7).

The respondents perceive high rates of unemployment, high food prices and the lack of water infrastructure to be some of the most critical problems within the community. The high rates of unemployment within the community can be a push factor for the younger generation as they move to cities in search of employment. High food prices are also a problem for these respondents as many of them stated that the shops within their community sell groceries at a high price and they are far away from the main city centre therefore transport costs are also too high for them to go into the city to buy food. The lack of water infrastructure also poses a critical problem, as these communities do not have direct access to water. This poses a problem

for crop cultivation as they are not able to irrigate their crops during drier seasons. Respondents stated that if they could water their crops and grow them through the dry seasons, they would not have to spend so much on food.

Drug and alcohol abuse as well as crime poses a problem within the community and can be linked to unemployment (Melick, 2003; Shozi, 2018). Shozi (2018) iterates that an increase in crime in South Africa can be attributed to high rates of unemployment as unemployment often leads to poverty and this causes people to commit crimes in order to provide for themselves. Participants in this exercise also stated that when people are unemployed and enter into poverty, they turn to drugs and alcohol as an escapism for their plight. Common drugs include Whoonga which is an insidious drug, made from heroine, detergent powder, rat poison and antiretroviral drugs.

Respondents stated that public services such as clinics and schools were inefficient because they were under resourced and staff were not properly trained. Inefficient public services can be linked to teenage pregnancy, which was another problem that was highlighted by respondents. Respondents perceive that girls are not being educated enough about contraceptives at school, therefore they fall pregnant. These girls then rely on child grants as a form of income.

The lack of cattle fences poses a problem for those who practice farming as cattle enters their fields and eat their crops as well as damage them by walking through them. Informal roads and the lack of taxis within the community can be associated with public transport vehicles who do not want to enter the KwaNokweja community as the vehicles will need to be maintained due to the dirt roads.

Respondents stated that they had to walk a long distance to access taxis and the costs of transport were very high. The lack of formal roads leads to these communities becoming off-road thus causing them to become invisible as they are difficult to access and they are unable to access amenities such as markets, banks and other services.



Plate 5. 11 Respondents from the KwaNokweja community moving within one of the respondent's households to participate in PRA exercises

Table 5. 52 Hopewell community's problem ranking matrix

<u>Hopewell</u>	LC	LW	TP	LFH	U	IR	C	LFM	LES	LLS
LC	•	LW	LC	LFH	U	IR	C	LC	LES	LLS
LW	•	•	LW	LW	U	LW	C	LW	LW	LLS
TP	•	•	•	LFH	U	TP	C	LFM	LES	LLS
LFH	•	•	•	•	U	LFH	LFH	LFH	LES	LLS
U	•	•	•	•	•	U	U	U	U	U
IR	•	•	•	•	•	•	IR	IR	LES	LLS
C	•	•	•	•	•	•	•	C	C	LLS
LFM	•	•	•	•	•	•	•	•	LES	LLS
LES	•	•	•	•	•	•	•	•	•	LLS
LLS	•	•	•	•	•	•	•	•	•	•

PROBLEM	SCORING	RANKING
1. Lack of clinic (LC)	2	7
2. Lack of water (LW)	6	3
3. Teenage pregnancy (TP)	1	8
4. Lack of formal housing (LFH)	5	4
5. Unemployment (U)	9	1
6. Informal roads (IR)	3	6
7. Crime (C)	5	4
8. Lack of farming machines (LFM)	1	8
9. Lack of extension services (LES)	5	4
10. Lack of local shops (LLS)	8	2

The respondents of the Hopewell focus group exercise were all female and falls within age category of older than 50 years of age. The most critical problem within the KwaNokweja community was the high rates of unemployment (1), lack of local shops (2), lack of water (3), crime (4), lack of extension services (4), informal roads (6), lack of clinics (7) teenage pregnancy (8) and lack of farming machines (8).

The high rates of unemployment within Hopewell as well as within eMazabekweni and KwaNokweja community's and is one of the push factors leading to rural-urban migration. The participants of this study had indicated that the lack of local shops meant that they had to pay for public transport to take them into town, and then carry all their shopping with them with their chosen method of public transport. Sometimes they were restricted in what they bought because they had to consider their return trip. Some participants also stated that there was a

lack of devices such as automated teller machines (ATMs) where they could withdraw money, forcing them to pay high fares to travel into town to gain access to such facilities

Lack of water poses a critical problem for these participants as many of them stated that they have to walk long distances to access water that they use for their daily chores. This takes up a lot of time for them in the day. Irrigation is also an issue among participants of Hopewell as their crops require hydration during the summer months thus they cannot plant in the dry seasons. Changes in our climate also cause unpredictable weather patterns which pose a challenge for farmers. Lack of extension services poses a critical problem for the participants as many of them stated that they would require resources to initiate farming and receive some training in order to develop and enhance their skills. They also agreed that if they received skills training it would decrease the rates of unemployment. Unemployment can also be linked to high crime rates as demonstrated in the communities above.

According to the respondents from Hopewell, informal roads made it difficult for them to access other places within their communities and towns that are in close proximity. Due to the degraded conditions of their roads, taxis and other modes of transport are cautious to enter into the community of Hopewell. As a result the community of Hopewell has to walk long distances to access public transport.

Teenage pregnancy and lack of clinics can be linked as there is no clinic within this community. There is a private doctor who has his surgery within the community, but the rates are quite high and many residents of the community cannot afford his rates. Respondents in the group stated that they were serviced by a mobile clinic but it was under resourced and inconsistent in its visits. The lack of health resources and family planning services increases the number of teenage pregnancies within the community. Participants who were from the elderly age group angrily stated that girls in their family would get pregnant and then use the child grant money as an income source, while others would leave their children with their grandparents (the respondents) and move to cities in search of employment.

This lack of farming machinery is an obstacle for these respondents as they have to perform task manually, which is time consuming and exhausting. In the other communities such as eMazabekweni and KwaNokweja, a government tractor would be sent to aid farmers to till their land however, this does not take place within the Hopewell community. Respondents also stated that they wish they could receive small implements such as tillers and spades to help them.

Table 5. 53 Carisbrooke community's problem ranking matrix

<u>Carisbrooke</u>	LFH	IR	TP	C	HFP	HCPT	LW	LTI	LC	LES
LFH	•	U	TP	LFH	HFP	LFH	LW	LTI	LC	LES
IR	•	•	TP	C	HFP	IR	LW	IR	LC	LES
TP	•	•	•	TP	HFP	HCPT	LW	LTI	LC	LES
C	•	•	•	•	C	C	LW	C	C	LES
HFP	•	•	•	•	•	HFP	HFP	HFP	HFP	LES
HCPT	•	•	•	•	•	•	LW	HCPT	LC	LES
LW	•	•	•	•	•	•	•	LW	LW	LW
LTI	•	•	•	•	•	•	•	•	LTI	LES
LC	•	•	•	•	•	•	•	•	•	LES
LES	•	•	•	•	•	•	•	•	•	•

PROBLEM	SCORING	RANKING
1. Lack of formal housing (LFH)	2	8
2. Informal Roads (IR)	2	8
3. Teenage pregnancy (TP)	3	7
4. Crime (C)	5	4
5. High food prices (HFP)	7	3
6. High cost of public transport (HCPT)	2	8
7. Lack of water (LW)	8	1
8. Lack of tertiary institutions (LTI)	4	5
9. Lack of clinics (LC)	4	5
10. Lack of extension services (LES)	8	1

The respondents of the Carisbrooke focus group exercise were all female and comprised of a diversity of ages ranging from 20 years to more than 65 years of age. This provided a wide spectrum of perceptions from various respondents.

The most critical problem for these respondents was the lack of water (1) and the lack of extension services (1). This was followed by high food prices (3), crime (4), lack of tertiary institutes (5), lack of clinics (5), teenage pregnancy (7), lack of formal housing (8), informal roads (8) and high cost of public transport (8).

The most critical problems included the lack of extension services and the lack of water. Respondents stated that many of their neighbouring communities receive extension support, however they do not receive any extension support and if they do, the service is very inconsistent, making it difficult for respondents to plan adequately. Respondents stated that if they could receive seedlings and some training, they would be able to provide staple foods for

their families as well as earn a small income. The lack of water is a common concern among the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, as these communities do not have infrastructure related to water therefore they do not have access to piped water within their households. Participants stated that this makes it difficult for them to carry out their daily chores and puts their health at risk due to poor sanitation. High food prices are also considered a problem within this community as respondents stated that their local community shops have a high mark-up rate, causing food prices to increase.

Crime poses a problem within the community as respondents have stated that there are too many unemployed youths who participate in criminal activities in order to sustain their livelihoods. The next problem was the lack of tertiary institutes within the community or institutes that encourage skills development among youth. Respondents felt that if further education training (FET) colleges and tertiary institutions were present within the Carisbrooke community, unemployment and crime rates would decrease as the youth would be able to broaden their skill set and pursue a job within the Carisbrooke community.

Lack of clinics can be attributed to the entire absence of a clinic within the Carisbrooke community. This community relies on a mobile clinic, which is under resourced and inconsistent in its visits. Teenage pregnancy is also rife within the community. Overall most females are not educated about the use of contraceptives, the practicing of safe sex and the risks involved in their pregnancy.

The lack of formal housing was pointed out by a few respondents in the group, who indicated that many residents within the community reside in huts without plumbing or access to water. Sometimes if there is heavy rainfall or strong winds, their houses are damaged and the cost involved in fixing their dwelling is exorbitant. Informal roads and the high cost of public transport can be linked as the cost of transport is exceedingly high due to the informal roads as explained in the eMazabekweni, Kwanokweja and Hopewell communities.

5.10.2 Venn diagrams indicating the relationship among community stakeholders from the community's perspective

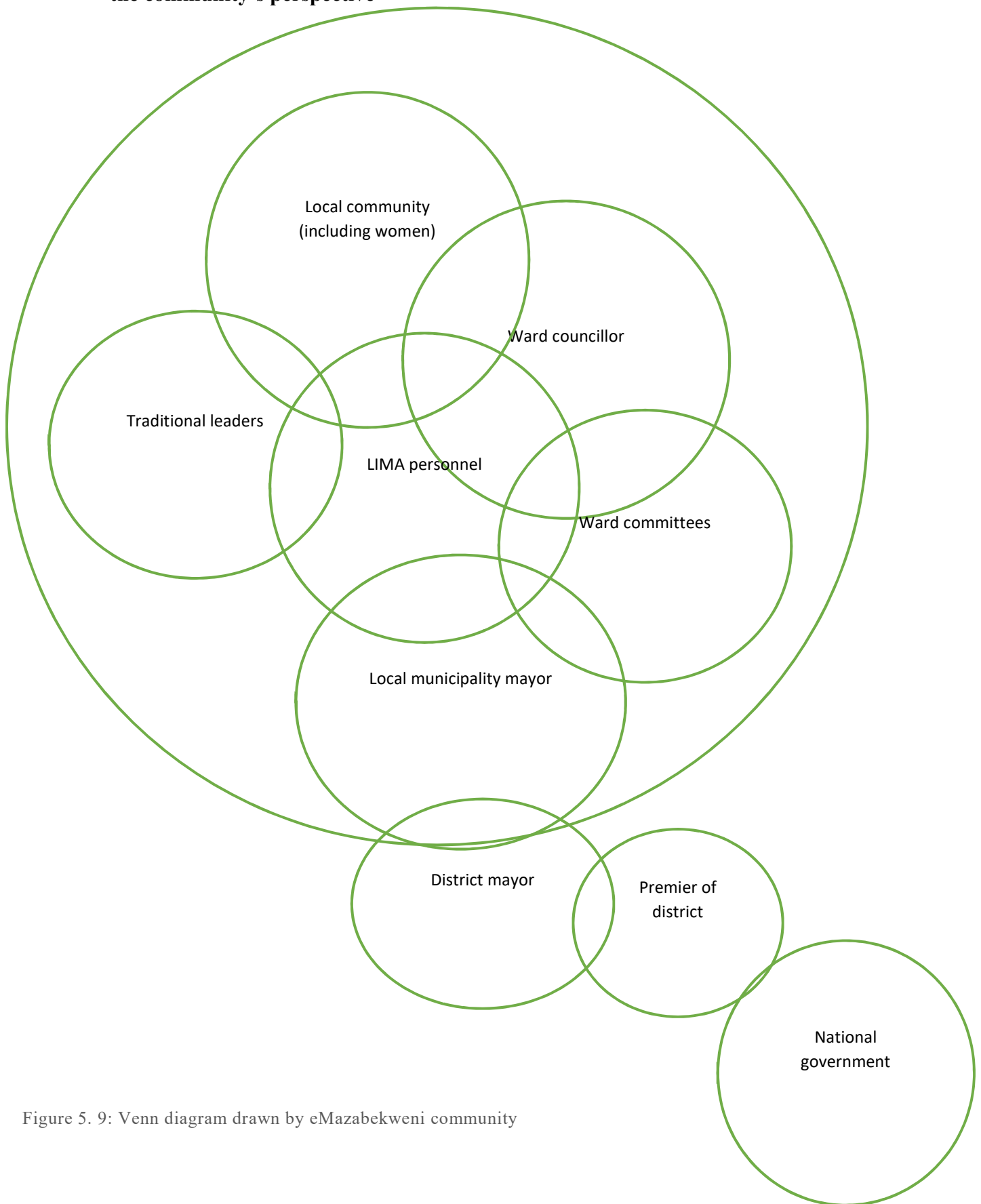


Figure 5. 9: Venn diagram drawn by eMazabekweni community

The Figure 5.9 above is a Venn diagram that was drawn by the respondents in the focus group held in eMazabekweni community. The respondents of the eMazabekweni focus group exercise were all female and ranged between the ages of 45 to 60. Circles that overlap indicate that these members of the community interact with each other. The focus group indicated that the eMazabekweni community is a very close-knit community, and value the opinion of women within the community. Female's contributions are taken into consideration during the decision-making process, as they have direct contact with traditional leaders within the community, LIMA personnel as well as ward councillors who visit occasionally. These stakeholders then pass on the message to other stakeholders such as the local municipality mayor, who then passes it to his seniors. The stakeholders within the community often engage with each other and are familiar the plight of the respondents. For example, when collecting data from the community, a LIMA field officer took the researcher to the Chief's house. The Chief then contacted women within the community in order to plan their participation in the focus group exercises. Respondents of the focus group have a very close link to ward councillors as they feel that the ward councillors are a medium for them to attain the delivery of basic services as well as convey their needs or complaints to ward committees and those in higher government positions.

The Thailand Community Based Tourism Network Coordination Center (CBT-N-CC) (n.d) has indicated that it is becoming a norm for women to be included in decision-making processes as men migrate to cities in search of employment, leaving women behind to make decisions that will be for the betterment of the communities' development.

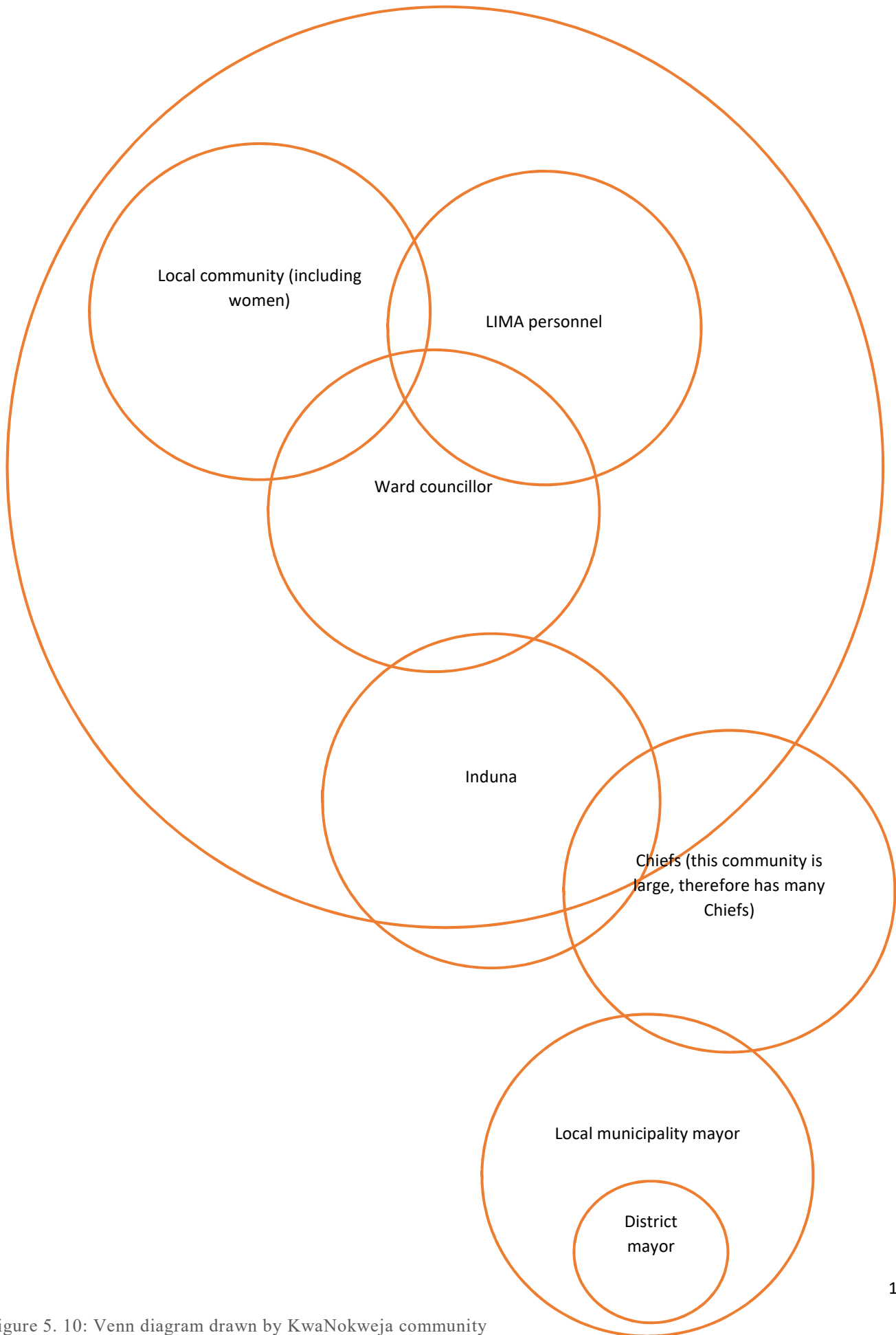


Figure 5. 10: Venn diagram drawn by KwaNokweja community

The Figure 5.10 above is a Venn diagram that was drawn by the participants of the focus group held in KwaNokweja. The respondents were all female and had an age range of 25 to 68. The focus group once again indicated that women are viewed as an integral part of the community and their inputs are taken into consideration during the decision-making process. The circles indicate that the community interacts with the LIMA personnel and they are quite familiar with, as well as ward councillors who act as an intermediary between the community members, LIMA personnel and the Induna of the community. The Induna then conveys the message to the Chief. This was quite a large community and respondents indicated that there were many Chiefs within the community however, during discussions it became evident that there was some animosity among the Chiefs of the community.

During this exercise, respondents indicated that they felt very isolated from the local municipality, as they did not receive delivery of the basic services that they required, nor were these communicated well to the municipality. Augustine (2016) indicated that although traditional leadership plays a key role within African countries, it has been found that some governments have deigned to turn traditional authorities into civil-servants, who are easily replaceable if they resist changes enforced by aforementioned governments. This sometimes leads to the hindrance of development at transformation at all levels.

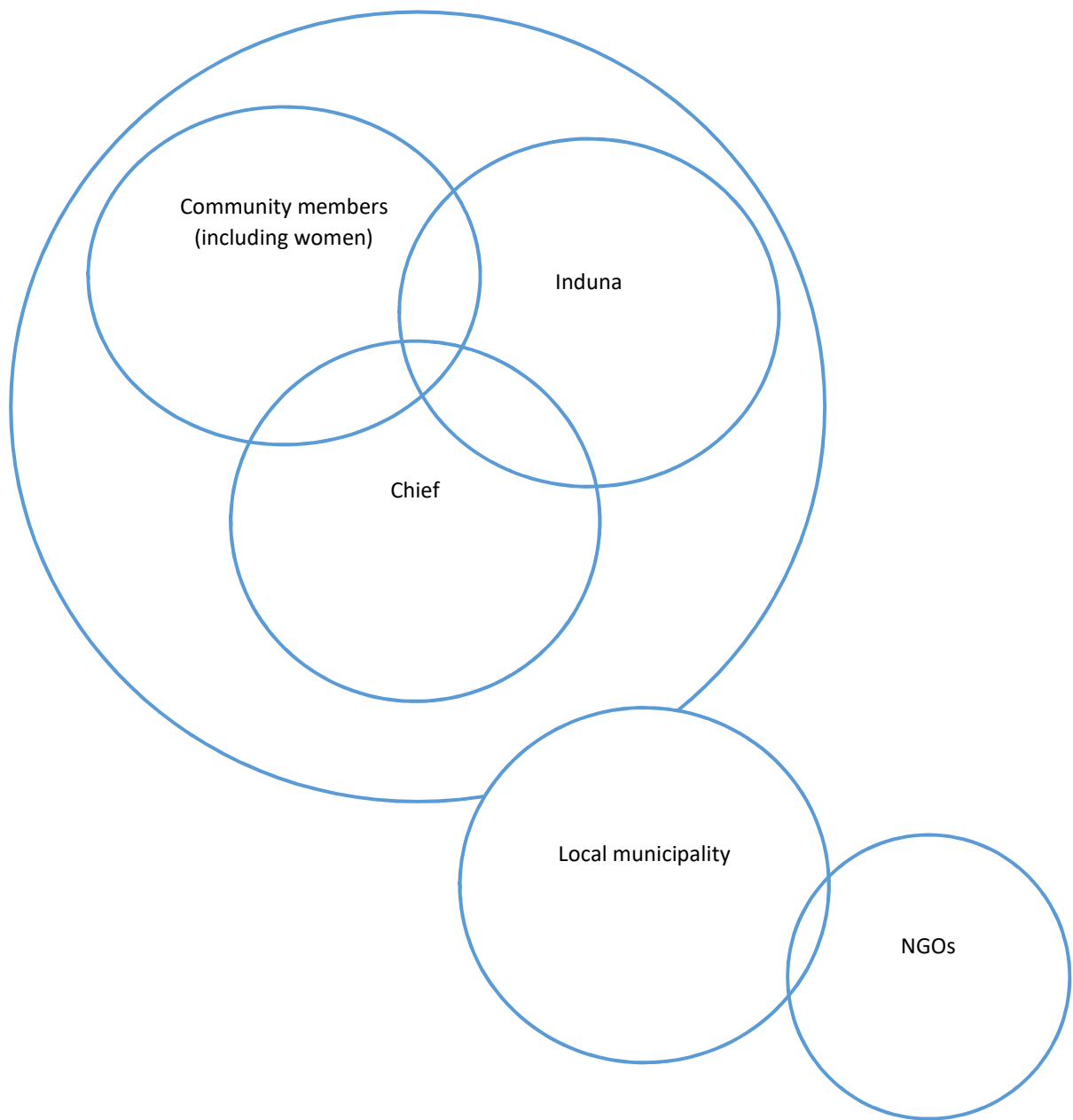


Figure 5. 11: Venn diagram drawn by Hopewell community

The Venn diagram above was drawn by respondents of a focus group in Hopewell. The focus group was comprised of females who fall within age category of older than 50 years of age. The women in the focus group indicated that they were not excluded from decision-making processes within their community as the community was mostly made up of elder women. These women interacted with the Chief and Induna within the community however, it is evident from the questionnaires in addition to the PRAs that there is an absence of extension service support as in the KwaNokweja and eMazabekweni communities above.

This community is very poor and under resourced in comparison with the eMazabekweni and KwaNokweja communities. They lack basic services such as access to reliable healthcare as well as water. All of the respondents stated that they have prepaid electricity meters, however they cannot afford to constantly be purchasing electricity therefore they have to rely on other forms of energy such as candles or wood for fires, which they stated is sometimes dangerous.

The community has indicated that they do not have a good relationship with personnel from the local municipality and many of their requests do not actually reach the municipality. There is also no assistance from NGOs, therefore the distance between the circles that local municipalities and NGOs are not perceived to be a part of the community network.

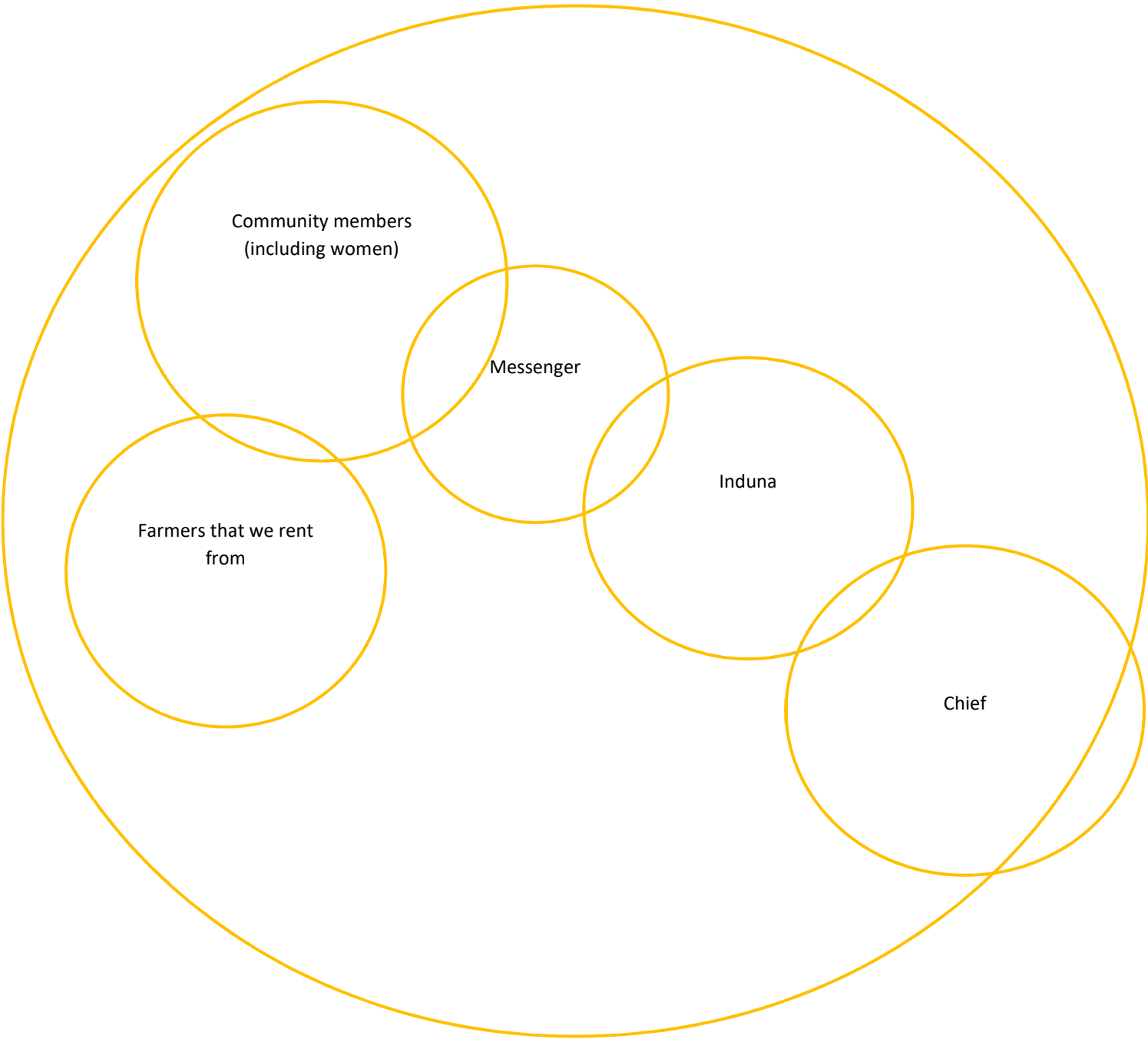


Figure 5. 12: Venn diagram drawn by Carisbrooke community



















The Venn diagram above is the result of a focus group exercise that was conducted in Carisbrooke (Figure 5.12). The focus group consisted of only women and comprised of a diversity of ages ranging from 20 years to more than 65 years of age. The respondents of this focus group have indicated that women are not excluded from their community. There is a messenger within the community who conveys messages to the Induna, who then conveys these messages to Chiefs. Another stakeholder within the community is the farmers from who respondents rent farms.

It is important to note that respondents of this group did not identify any members of the municipality as a role-player within the community. The reason provided by the respondents is that they do not interact with members of the municipality and do not identify them as an important stakeholder.

5.10.3 Mental maps

Key:

Existing amenities:

	Forest plantations		Private Doctor's surgery
	Library		Community tap
	Broiler farm		Taxi stop
	Church		Railway station
	Crop fields		Informal roads
	Borehole		River
	Community hall		
	Clinic		
	Informal house		
	Community spaza shops		
	Railway track		
	School		

Amenities that respondents want:



Cattle fences



Crèche



Taxi stop



24/7 hospital



Formal house



Piped water



Extension support



Sport/ recreation centre that can also be used as a community hall



Streetlights



Supermarket with cash withdrawal facilities



Tertiary institute/ skills development centre



Formal roads

The mental map exercise was done within the focus groups held within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities. Respondents of the focus group were asked to draw their respective communities, as they currently perceive it. They were then asked to draw in the amenities that they felt they needed within their communities. This was done in a different coloured pen.

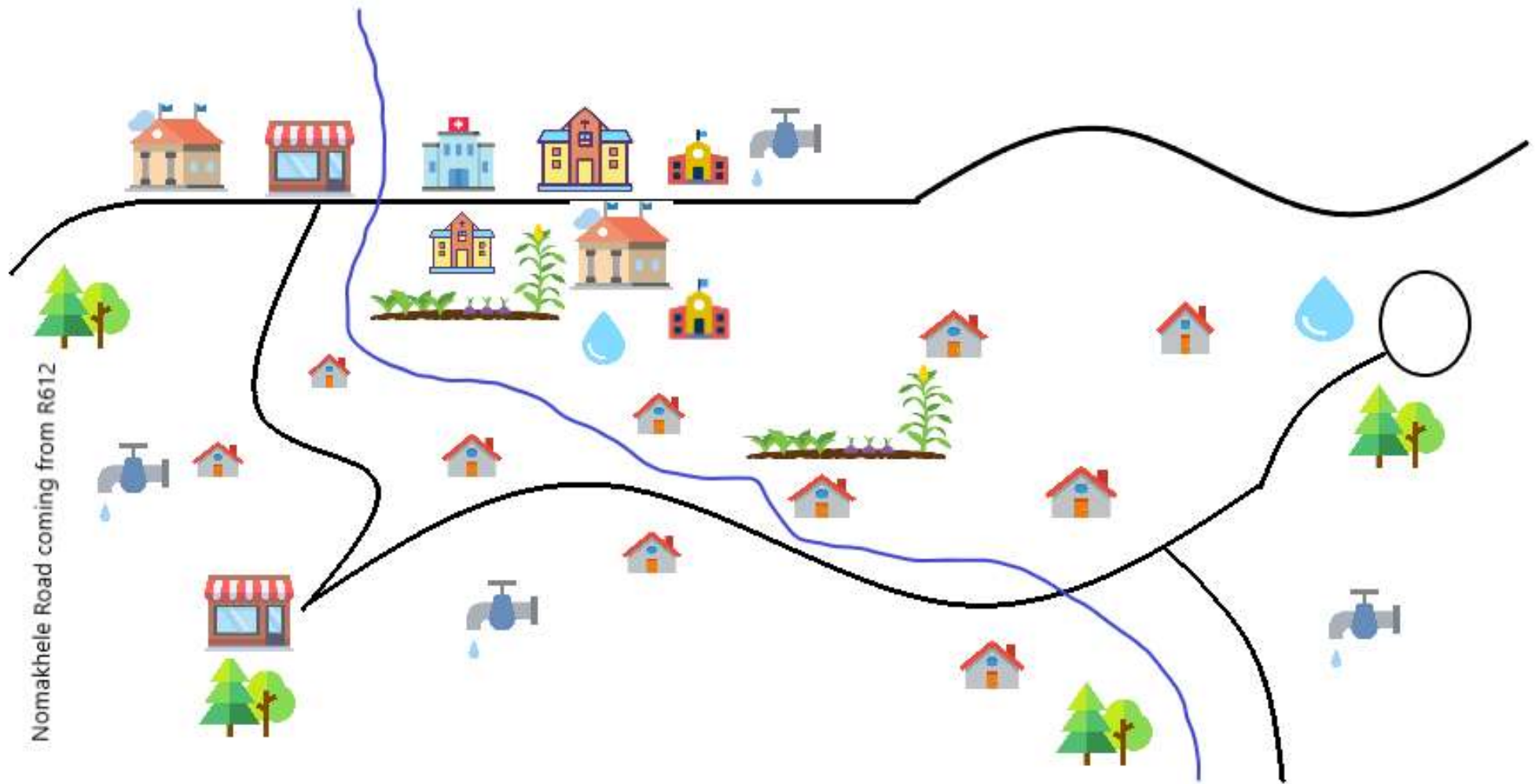


Figure 5. 13: A mental map of the current facilities within the eMazabekweni community

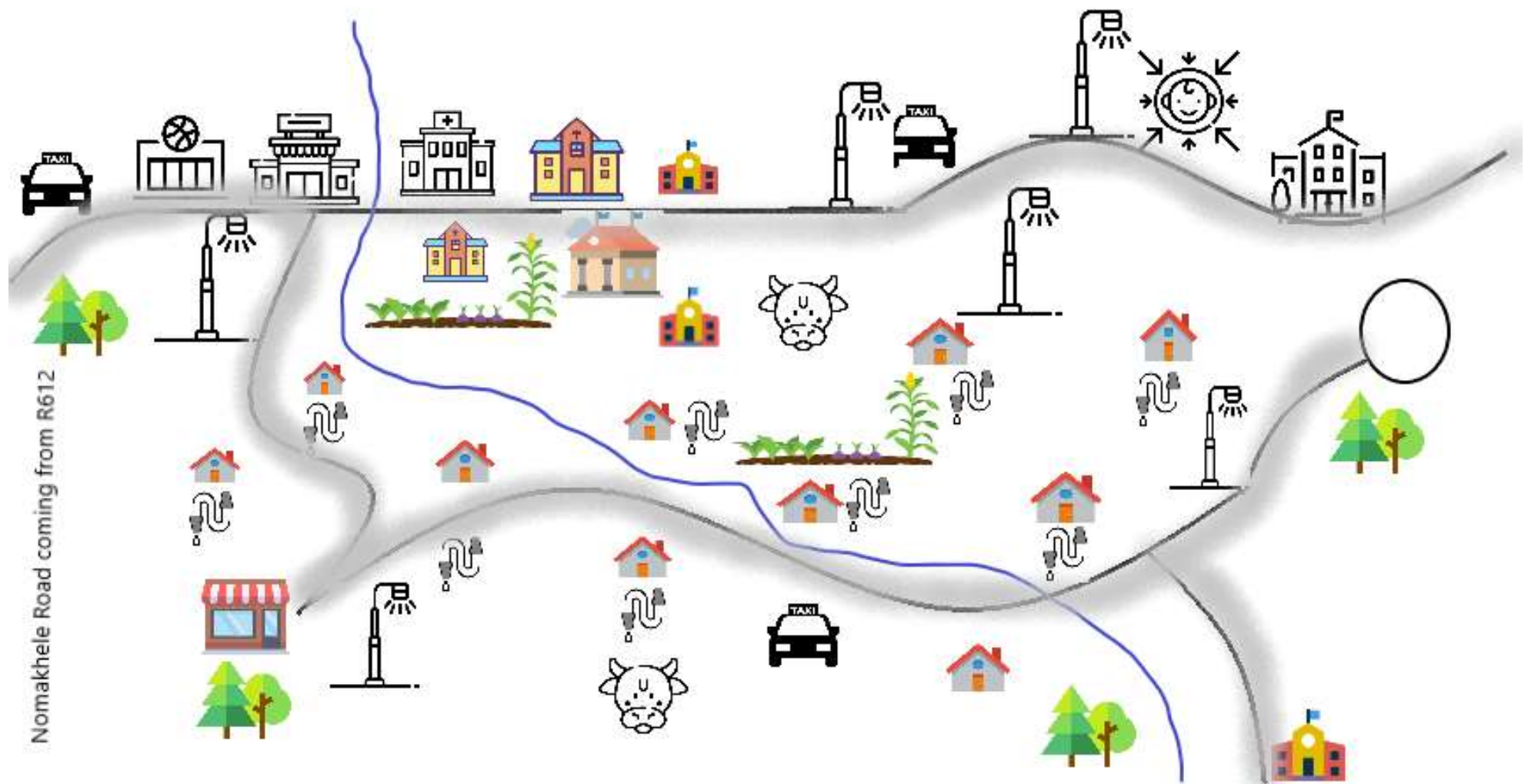


Figure 5. 14: A proposed mental map of the facilities that are considered vital to the eMazabekweni community

Figure 5.13 was drawn by respondents of the focus group held within eMazabekweni. The respondents of the eMazabekweni focus group exercise were all female and ranged between the ages of 45 to 60. Figure 5.13 indicates that there is a school, clinic, community hall, shops and informal houses within the community. This map indicates where the cultivation farms, community taps and boreholes are placed. The community is surrounded by Mondi forests and there is a river that runs within the community.

Figure 5.14 indicates a map of facilities that respondents from the community consider vital and want to have within their communities. Respondents stated that they want formal roads within their communities and taxi stops which will make the “outside world” more accessible for them. They indicated that streetlights are imperative because this would reduce crime within the community. A skills development centre would also improve their living conditions within the community, as residents would be able to further their education and gain skills training within the community, therefore they would not have to leave the community. Respondents stated that a hospital within the community is a necessity as their clinic is not open throughout the night and is under resourced therefore not providing appropriate healthcare. Respondents also stated that they would like to have a supermarket within their community as their local stores charge too much for food. These supermarkets should also have facilities such as ATMs available so that they can access cash.

The above suggestions of amenities within the community indicate what the residents of the eMazabekweni community would consider to be the ideal level of service delivery within their community.

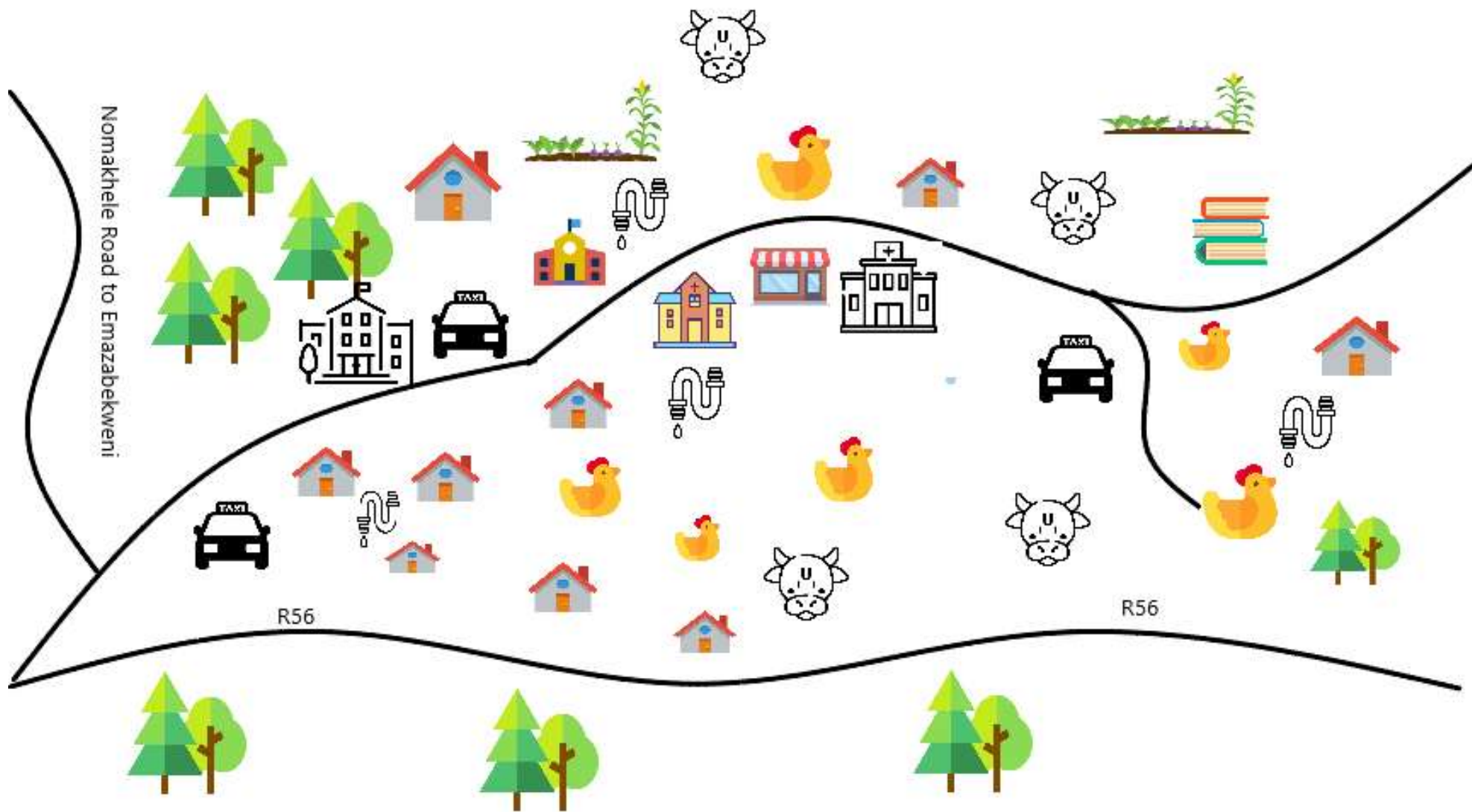


Figure 5. 15: A mental map of the current facilities within the KwaNokweja community

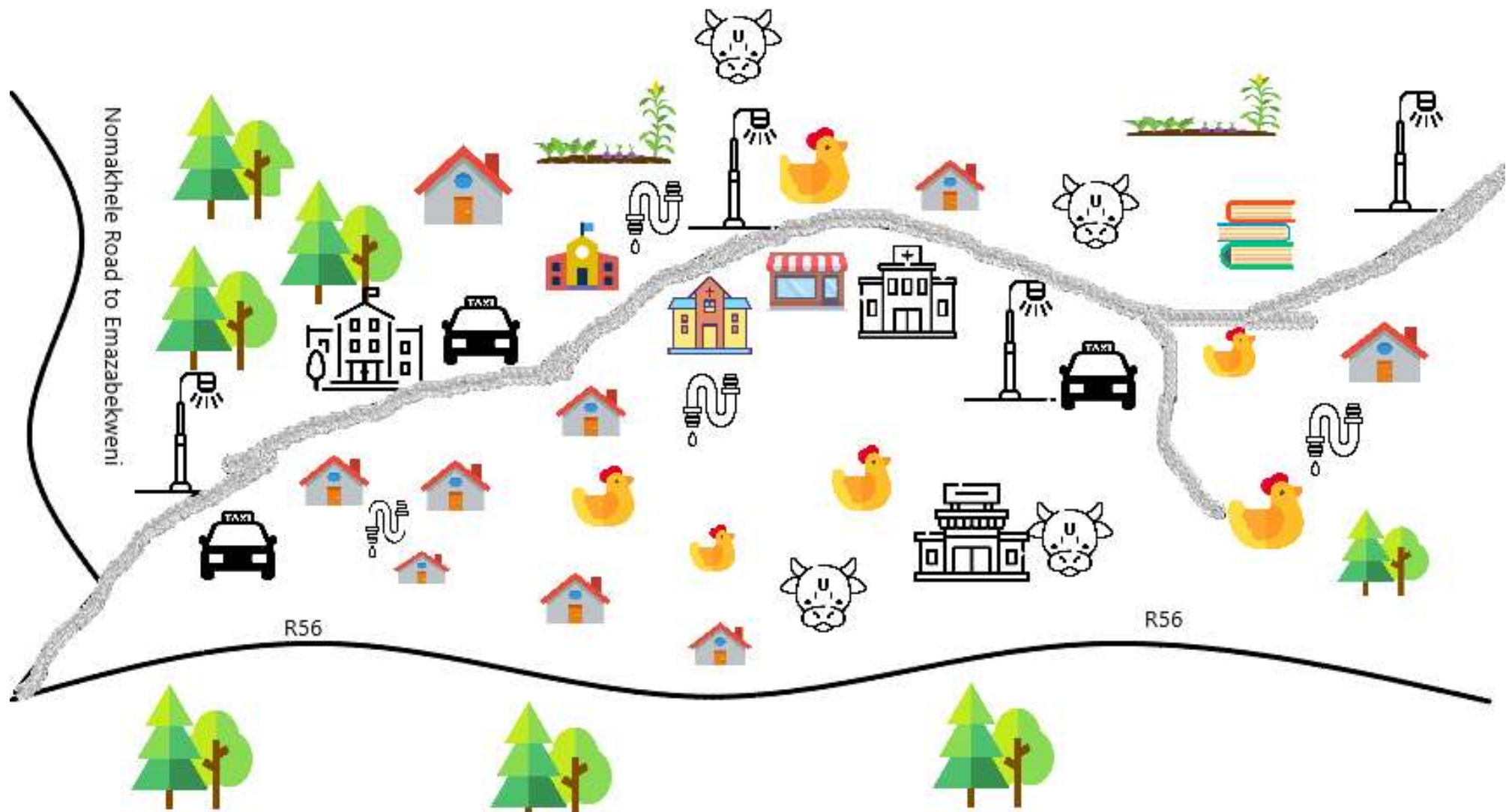


Figure 5. 16: A proposed mental map of the facilities that are considered vital to the KwaNokweja community

Respondents of the KwaNokweja focus group drew Figure 5.15. The respondents were all female and had an age range of 25 – 68. The Figure 5.15 indicates that within the community there are schools, a library, a clinic, a church, stores and the location of community boreholes and taps is indicated on the map. The map also indicates that the community has informal roads. The chicken icon indicates the presence of broiler farms. The trees indicate the presence of Mondi forest plantations.

Figure 5.16 indicates that the respondents of the focus group require piped water, formal roads, streetlights and taxi stops within the community. Respondents of the focus group would also like fences constructed to prevent cattle from entering their fields, a supermarket with ATM facilities so that they can access their cash and a hospital that is open throughout the day and night. Figure 5.16 indicates the ideal composition of the community according to respondents from the focus group and their fellow community members.



Figure 5. 17: A mental map of the current facilities within the Hopewell community



Figure 5. 18: A proposed mental map of the facilities that are considered vital to the Hopewell community

Figure 5.17 indicates the map of current amenities within the Hopewell community. This map was drawn by respondents in the Hopewell focus group. The focus group was comprised of females who fall within age category of older than 50 years of age. These amenities include a formal taxi stop, a private doctor's surgery, one school that services the entire community, a community store and the presence of community taps and boreholes.

Figure 5.18 indicates what the respondents of the focus group desire to have within their community. This includes formal roads, more taxi stops, formal houses with piped water, extension services, streetlights, a sports centre that can be used as a community hall and a tertiary institutes or kills development centre. This community does not have a clinic and is serviced by a mobile clinic thus respondents want a hospital that is well resourced and open throughout the day or night for them to access. Although there is a private doctor within the community, residents of the community cannot afford to go to him for their healthcare needs. This is the ideal composition of the community according to respondents of the focus group.

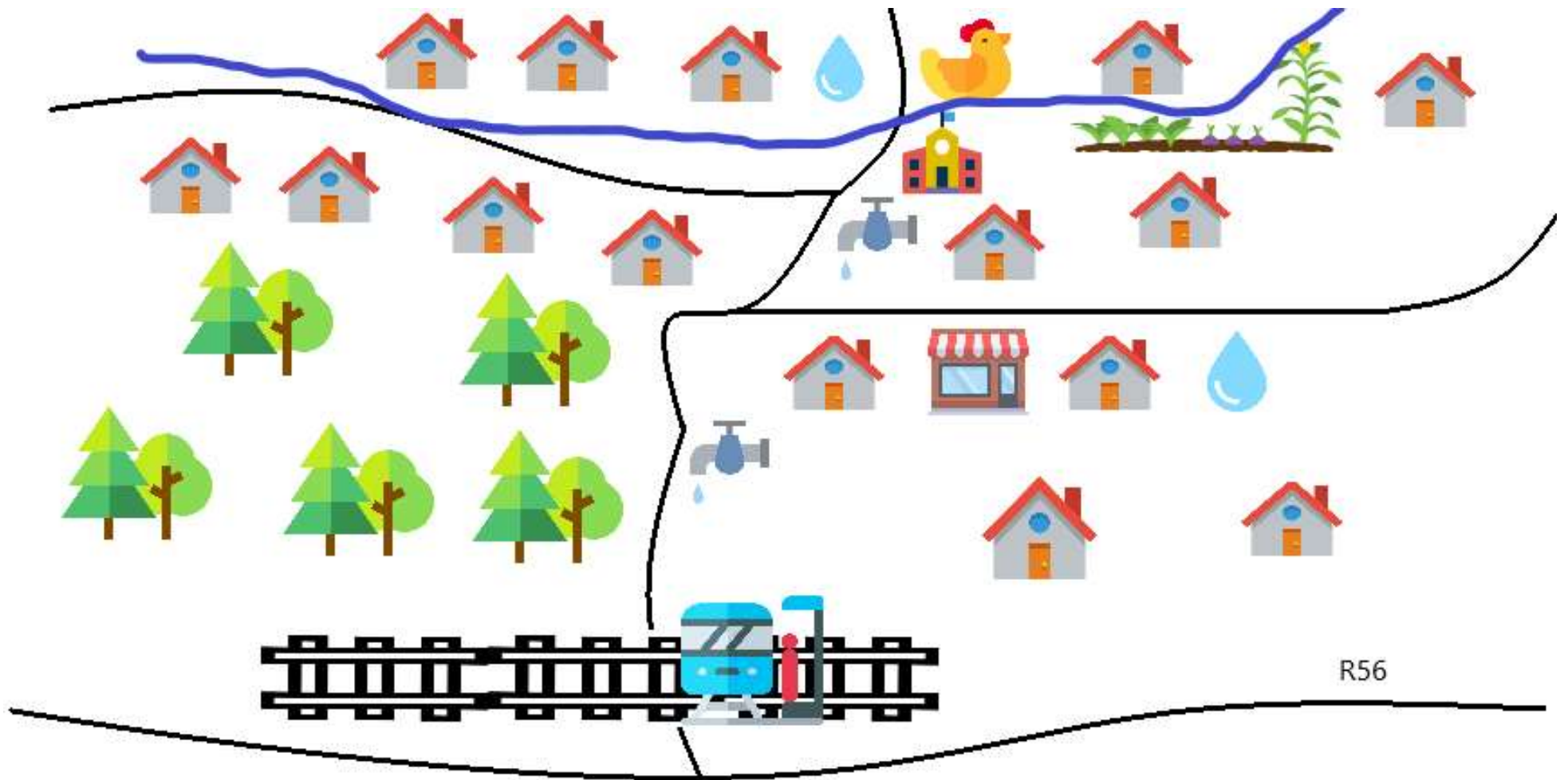


Figure 5. 19: A mental map of the current facilities within the Carisbrooke community

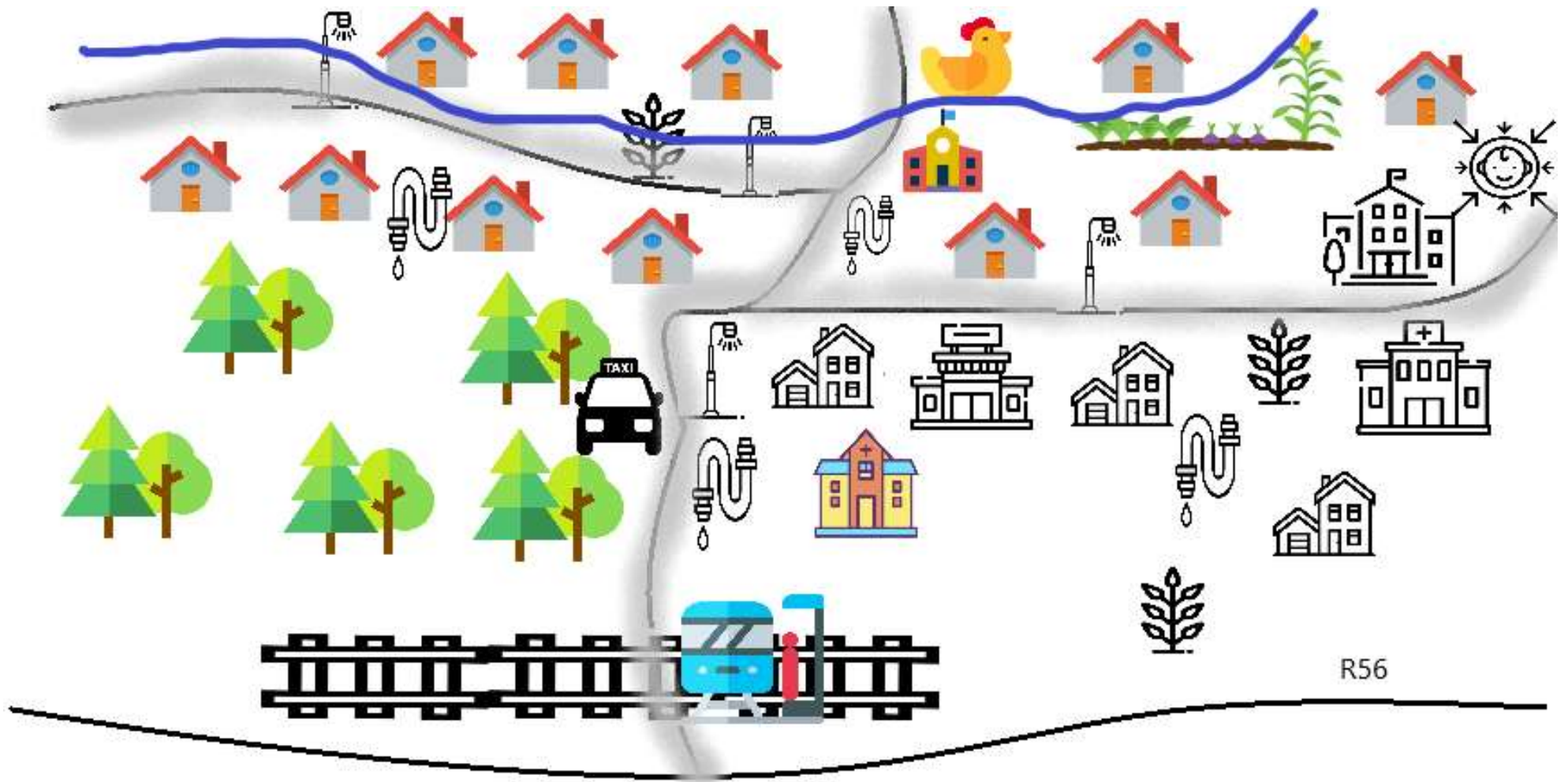


Figure 5. 20: A proposed mental map of the facilities that are considered vital to the Carisbrooke community

The Figure 5.19 above indicates the Carisbrooke community as it is perceived by the respondents of the focus group. The focus group consisted of only women and comprised of a diversity of ages ranging from 20 years to more than 65 years of age. The community is surrounded by Mondi forest plantations. As you enter into the community, one has to cross over Alan Paton railway line. This railway line is used as a tourism mechanism and tourists are able to board the train at dedicated times on certain days. This train takes them on a designated route. There is a river running within the community, and there is just one broiler farm. This community is very small and is quite close to Hopewell community, however one has to travel through a steep road to access the other community. This map indicates the presence of boreholes and taps within the Carisbrooke community.

The Figure 5.20 indicates that respondents of the focus group would like to have taxi stops within their community, formal roads and streetlights. They would also like formal houses with piped water. There are no extension services within the community therefore the respondents would like to receive some form of assistance. There is no clinic within the community, thus a hospital that is open throughout the day and night is needed. Respondents also envision a supermarket with ATM services within the community, a day care centre where they can leave children when they go to work as well as a tertiary education institute.

5.11 Conclusion

The data obtained from the research that was conducted was presented, analysed and discussed in this chapter. The results indicate that market access is increased by the provision of extension services. Communities that did not receive any support from organisations were not able to access markets due to the lack of resources to start their business. Resources within the community itself, such as the lack of water, also hindered the ability of respondents to participate in markets. Most respondents were a part of the elder generation, and many of them stated that they are too old to produce a crop yield that is large enough for themselves and their families, as well as for selling. The lack of youth to assist elders can be attributed to rural-urban migration, which occurs due to the lack of jobs within the community.

These findings were in agreement with the literature however, the hindering factors to market access are factors that are institutionalised within respective four communities which are eMazabekweni, KwaNokweja, Hopewell and Carisbrooke. All communities are in dire need of infrastructural and social development.

Chapter 6: Summary, Recommendations and Conclusion

6.1 Introduction

This chapter will summarise the results that were obtained from this study, linking them to the objectives of this study. Recommendations will be provided following which the study will be concluded. As chapter one has indicated, this study aimed to investigate the effectiveness of NGOs in increasing access to agricultural markets as a poverty alleviation strategy amongst female smallholder farmers. This research utilised the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities in the Ubuhlebezwe Local Municipality, KwaZulu Natal as case studies. The last objective of this study was to summarise findings and provide further recommendations to LIMA as well as the Department of Rural Development. This will be addressed in this chapter.

6.2 Summary of key findings

A summary of the key findings of this study will be presented and discussed in the context of this study's objectives.

6.2.1 Objective 1: To investigate the gendered barriers to market access that prevent female smallholder farmers from participating in agricultural markets within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal

This objective aimed to investigate the gendered barriers to market access that prevent female smallholder farmers from participating in agricultural markets within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal. Stemming from key issues highlighted in the literature, the key questions surrounding this objective included determining demographics of the respondent's household, asking respondents what household duties they carried out, enquiring about how the respondent accesses land, enquiring whether the respondent owned any land and enquiring about their farming practices.

Results from quantitative data collection (questionnaire) and qualitative data collection (Venn diagrams) revealed that while women were involved in the decision-making process within their communities, many of them fulfil multiple roles within their household. These roles included being the head of their household, being their family's breadwinner, chief decision-maker and primary caregiver. These tasks proved to be time consuming for the women within these communities and

they stated that they did not have time to participate in smallholder farming. Additionally, respondents within the communities comprised of elder females who were caregivers to their young grandchildren while their children moved to other cities for employment. Responses from focus group exercises reinforced this statement as many respondents stated that teenage pregnancy is common within the communities. This forces older respondents within the communities to financially and physically support another resident of their households. During the mental map exercise, respondents also expressed the desire for a crèche thus iterating the above statement. Furthermore, a large number of respondents were widowed. This could be attributed to high HIV/AIDS rates within the communities. Lack of efficient clinics were raised as a problem within all four communities. The lack of clinics and basic healthcare could also contribute to the spread of HIV/AIDS and increase the number of deaths caused by HIV/AIDS as community members are unable to seek sufficient care. These elderly women stated that fulfilling multiples roles wore them out and they did not have enough energy or capacity to carry out smallholder farming. They stated that even though there were many people residing within their households, their grandchildren attended school and could only assist with chores when they returned from school. These points align with the literature by Barnett (2004) and Van Willigen (2014) who state that the multiple roles that women play within their households impacts on their health.

A high percentage of respondents from the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities did not own any land. Land within the eMazabekweni and KwaNokweja communities is owned by the Chief while respondents within the Hopewell and Carisbrooke communities stated that they rent land from the Roman Catholic Church. The low rates of land ownership among women coincides with the literature by Cross and Hornby (2002), Bob (2008), Tibesigwa and Visser (2016a) and Mehta (2018) who state that without ownership of land many women lose a food source and a source of income. Many women stated that they could not participate in smallholder farming as they could not afford rent for larger plots of land. This indicates that while land is available, women do not have the financial resources to access this land. Additionally, women without access to land are not able to access loans from banks as they do not possess any collateral. This affects their ability to participate in smallholder farming.

The inability of females within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities to participate in smallholder farming is an issue that cannot be studied in isolation. There are social, economic, political and environmental issues which need to be taken into consideration.

6.2.2 Objective 2: To determine the extent of support that is provided by NGOs for rural female smallholder farmers in the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal

This objective aimed to determine the extent of support provided by various NGOs who are operating within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal. Through the results and interactions with community stakeholders, it emerged that the LIMA Rural Development Foundation is the most active NGOs within this municipality, however they are only active within the eMazabekweni and KwaNokweja communities. Additionally, the eMazabekweni and KwaNokweja communities receive support for two other NGOs known as the SEDA and World Vision. The Hopewell and Carisbrooke communities do not receive any assistance from NGOs. The key questions surrounding this objective included enquiring if respondents had received any assistance from NGOs, enquiring whom they had received this support from and determining the type of support the respondents had received.

A key finding among the communities presented in this study indicates that although LIMA and other NGOs are present within the eMazabekweni and KwaNokweja communities, a majority of respondents within these communities did not receive extension support and many of them were not aware that these organisations were active within their community. This finding aligns with the IDP 2017/2018 which indicates that LIMA has been active within the municipality since 2016 however they are only able to assist 800 farmers thus not all farmers could be assisted (IDP, 2017). The Hopewell and Carisbrooke communities did not receive any extension support from NGOs. Observations by the researcher during data collection also indicate that overall, the eMazabekweni and KwaNokweja communities are more developed and populated than the Hopewell and Carisbrooke communities. The presence of NGOs within the eMazabekweni and KwaNokweja communities could be attributed to their increased levels of development which make agricultural market access easier in comparison to the Hopewell and Carisbrooke communities (Porter, 2002; Mazibuko, 2013). Furthermore, the low number of female smallholder farmers who were provided with extension support could be attributed to their lack of land ownership, access to land and farming resources (Bob, 2008; Tibesigwa and Visser, 2016a). This finding does not correlate with government policies which have been implemented in the post-apartheid era. These policies state that women are the key to food security and sustainable farming practices thus extra support should be provided to them in order to assist them with smallholder farming however majority of women within these communities have not received any extension support.

A minority of respondents from the eMazabekweni and KwaNokweja communities indicated that they receive inputs from NGOs. These inputs include seeds, fertiliser and manure. The Hopewell and Carisbrooke communities indicated that they do not receive any inputs from NGOs, however it is interesting to note that many of the respondents received inputs from fellow community members. These inputs included livestock to plough their fields and homemade manure. This iterates the statement by Mazibuko (2013) who explains that social capital such as the formation of networks within communities is imperative to enable poor people to receive some form of assistance. Furthermore, respondents from the Hopewell and Carisbrooke communities did not receive any training from NGOs while a minority of respondents from the eMazabekweni and KwaNokweja communities did receive training from NGOs. It is important to note that within these two communities, a very small number of respondents received training from fellow community members. This reinforces the above point regarding social capital as those who had been trained, share their knowledge with their community. Qualitative data collection revealed that respondents from the Hopewell and Carisbrooke communities perceive the lack of farming machines and extension support as a critical problem within their communities and have expressed a desire for these amenities to exist within their communities. This has been expressed through the problem ranking matrix, Venn diagrams and mental map exercises.

6.2.3 Objective 3: To investigate whether NGOs intervention through agricultural extension support has increased the ability of female smallholder farmers to access agricultural markets within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal

This objective aimed to investigate whether the provision of agricultural extension support by NGOs to female smallholder farmers within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal has allowed these female smallholder farmers to access agricultural markets. As mentioned in the objective above, minority of respondents from eMazabekweni and KwaNokweja received agricultural extension support while none of the respondents from Hopewell and Carisbrooke received any extension support. The key questions surrounding this objective included enquiring whether respondents who have received extension support have access to agricultural markets, how often they sell their produce at these markets, their proximity to agricultural markets, how they access these markets and the financial resources that are available to them in order to make agricultural market access a sustainable stream of income.

Within the eMazabekweni community, a minority of respondents stated that they traded crops at agricultural markets, with many respondents only trading their crops once a month. Respondents

from this community have to travel more than 21 km to access their closest market, and rely on public transport to access these markets. Respondents stated that taxi charges were high as they lived far away from markets and road conditions within their community were poor. This reinforces the literature by Porter (2002) who states that off-road communities face high transport costs. Some respondents from the community stated that they received financial loans from NGOs, namely LIMA, and they pay these back monthly however, some find it difficult to pay back these loans as they do not have access to banks within their community and transport to town is too costly. Some respondents stated that they received loans from their neighbours. This emphasises the above literature by Mazibuko (2013) regarding the importance of social capital within a community. The eMazabekweni community is a close-knit community and this was evident to the researcher during data collection.

More than half the respondents from the KwaNokweja community participated in agricultural markets, with many respondents trading their produce monthly. The high number of market participation can be attributed to broiler production within this community as community members are provided with extension support by LIMA for broiler production. Respondents from this community utilise public transport to access markets however they also face high transport costs and unreliability of public transport as they also have to travel more than 21 km to access markets. Some respondents from the KwaNokweja community receive loans from LIMA however some receive loans from their neighbours and most of them utilise their own income to subsidise their market participation. This emphasises the literature by Busingye *et al.* (2018) stating that many female-headed households do not qualify for loans from banks due to their inability to provide collateral. As in this study none of the respondents from the eMzabekweni, KwaNokweja, Hopewell and Carisbrooke communities do not own land. Additionally, qualitative data collection in the eMazabekweni and KwaNokweja communities revealed that while respondents want to participate in smallholder farming, lack of water infrastructure within their communities prevents them from participating.

A small percentage of respondents from the Hopewell community participated in crop trading at agricultural markets, with majority of these respondents only selling their crops once a month. This community does not receive any agricultural extension support from NGOs thus they are not supported enough to participate in markets at a larger scale. Respondents from this community utilise public transport to access markets and mostly rely on busses. Results from qualitative data collection has indicated that respondents perceive informal roads within their community as a critical problem. Respondents from this community have to travel more than 21 km to access agricultural markets and have indicated that they incur increased transport costs due to the far

distance that they have to travel. Respondents do not receive any form of loans from NGOs, this has led to many respondents not being able to participate in markets.

A minuscule percentage of respondents from the Carisbrooke community participated in trading crops at their closest agricultural market with a majority of these respondents only selling their crops once a month. A majority of respondents have to travel between 11 to 15 km to access their closest market. This community was relatively closer to Ixopo than the eMazabekweni, KwaNokweja and Hopewell communities utilised in this study. Respondents from this community utilise public transport to access markets and rely on busses to commute between their home and markets. Results from qualitative data collection has highlighted the critical problem that high costs of public transport pose to the residents of Carisbrooke as this hinders them from accessing and participating in agricultural markets. Respondents do not receive any loans from NGOs and are unable to participate in markets.

An additional key finding from this research indicates that while many respondents did not receive any extension support from NGOs, those that did receive extension support fared better than those who did not receive any support and some were able to participate in agricultural markets. This finding iterates that although policies have been implemented to assist women, it is not working at a grassroots level as many women are not receiving the aid that they require in order for them to be able to participate in agricultural markets. Furthermore, patriarchy and other social issues exist within these communities thus agricultural market access cannot be considered in isolation. This point will be elaborated on further in this chapter.

6.2.4 Objective 4: To investigate whether increased access to agricultural markets has assisted female smallholder farmers to improve their livelihoods within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal

This objective aimed to investigate whether increased access to agricultural markets has assisted female smallholder farmers to improve their livelihoods within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities, Ubuhlebezwe Local Municipality, KwaZulu-Natal. As mentioned in the discussion of objective 1 and 2 above, minority of respondents from eMazabekweni and KwaNokweja received agricultural extension support while none of the respondents from Hopewell and Carisbrooke received any extension support from NGOs. The key questions surrounding this objective included enquiring whether respondents who have received extension support and have acquired access to agricultural markets are now able to sustain their livelihoods and if living conditions within their households had been improved.

A majority of respondents from the eMazabekweni community who did receive extension support from NGOs indicated that they felt the additional support had improved living conditions within their household as they could use the profit from selling their crops at agricultural markets to purchase food from markets to meet their family's nutritional requirements. This point is iterated by Riesgo *et al.* (2016) and the Food and Agricultural Organisation (2017) who state that an increase in smallholder farmers may have an impact on the livelihoods of the poor, allowing them to become food secure and earn an income from their excess produce which can be sold at markets.

A majority of respondents from the KwaNokweja community who received extension support from NGOs also indicated that they felt this additional support had improved living conditions within their household. These respondents also utilised profit from selling their crops at markets to supplement their ability to meet their family's nutrition requirements. The Hopewell and Carisbrooke communities did not receive any extension support from NGOs thus living conditions within their households did not improve. The communities remain dilapidated and underdeveloped with minimal development taking place.

While NGOs, namely LIMA, did not reach many female smallholder farmers within the eMazabekweni and KwaNokweja communities, it is evident that they have improved the livelihoods of female smallholder farmers to whom they do provide extension support. This reinforces the literature by Matthews (2017) who indicates that while NGOs improve lives on various scales they are unable to address or change the power dynamics that exist especially within rural communities. NGOs within the eMazabekweni and KwaNokweja communities have provided a band-aid solution to smallholder farmers however, they have not been able to address underlying issues within communities such as patriarchy and the effects of colonial regimes. Furthermore, results from qualitative data collection has revealed that respondents in the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities perceive the lack of basic services such as potable water, healthcare and education as the immediate issues that need to be reconciled within their communities. This reinforces the theory of Maslow's Hierarchy of Needs which states that once one's basic needs have been met, then only can one progress to fulfilling higher ranking needs (Cherry, 2019).

6.3 Conceptual reflections

The conceptual frameworks utilised in this study clearly indicate the importance of focusing on social contexts and circumstances within rural communities. The adoption of a political ecology framework to understand the role of NGOs in increasing market access for female smallholder farmers allows for an understanding of the power dynamics, inequalities and the control of and access to resources within the eMazabkweni, KwaNokweja, Hopewell and Carisbrooke

communities. An example of this can be seen with all four communities of this study being situated in mountainous areas within the Ubuhlebezwe Local Municipality as a result of political tensions and laws during the apartheid era. This makes it difficult for residents of these communities to practice farming due to unfavourable conditions. This inability to farm abundantly impacts their ability to improve their livelihoods (Adams, 2001). Additionally, NGOs are only present within these communities as an attempt to right the wrongs of the injustices of apartheid, however they are unable to fully assist these communities. Furthermore the apartheid regime has led to the underdevelopment of these communities causing their poverty to be exacerbated further. Chapter three also examined the importance of the urban bias theory and its relevance within these communities. These communities are underdeveloped as they lack water infrastructure, road infrastructure and sewage systems while their counterparts in urban areas have access to all these forms of infrastructure. This lack of development has the ability to hinder the community's participation in agricultural markets and also discourages them from participating in smallholder farming as they cannot irrigate their crops due to lack of water infrastructure nor can they store their crops in facilities to prolong their lifespan.

The SLA was also discussed in chapter three. This acknowledges that rural residents have the indigenous knowledge necessary to provide useful insight into the development of a sustainable livelihood and poverty alleviation strategy. The SLA also acknowledges that local people should be involved in discussions for their development so that the sharing of knowledge between stakeholders can be maximised. It is evident that the SLA was not utilised by NGOs for development strategies within the communities, as these strategies did not majorly assist females within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities. This is counterproductive as rural communities mostly comprise of female-headed households.

The feminisation of poverty brought attention to the intensity of poverty experienced among female-headed households within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities. Women within the study communities are evidently disadvantaged due to gender inequalities pertaining to land rights, access to resources and privileges. It is evident that women in these communities' experience poverty more intensely when compared to their male counterparts and are struggling to escape from the poverty cycle. Developing countries such as South Africa have adopted SAPs at the behest of developed Western countries. These policies use a one-fits-all approach to poverty in the developing world. These approaches often do not include women and assume that benefits will eventually trickle-down to assist these women. As in these communities, this is not the case as women are not benefitting from the implementation of policies. This reinforces the above points which state that women need to be involved in the creation of policies that will benefit them within the communities.

6.4 Recommendations

6.4.1 Policy reform and female targeted interventions

Key findings from this study and literature indicate that female-headed households within rural communities are a marginalised group and can be considered the poorest of the poor (Tibesigwa and Visser, 2015). As iterated in this study, women are key role players within the agricultural sector and responsible for fulfilling many household duties which includes being the main source of income within their household, fulfilling their households' nutritional needs and fulfilling the role of primary caregiver within their household. Females within rural communities such as the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities are forced to abide by patriarchal systems as well as colonial policies that were enforced upon them during the apartheid era within South Africa. These policies and practices have exacerbated the plight of females within rural communities as their communities' lack access to basic infrastructure such as running water, electricity that is reliable, formal roads and transport networks. It has also led to many residents of rural communities being forced to live on land that is not suitable for farming thus forcing many younger residents to move to urban cities to search for alternate sources of income so that they may sustain their incomes. As explained in the literature, this has an impact on the socioeconomic conditions for female rural residents within communities.

While policies have been supposedly implemented to assist females within rural communities to hone their farming skills and earn a viable income through smallholder farming, this has not managed to trickle down to community level and reach females within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke rural communities. Many are still left to rely on the meagre grant of one family member to survive thus exacerbating their impoverished conditions. It is evident that while NGOs have been employed to assist and uplift residents of the communities utilised in this study, many females are still not being assisted through the provision of farming implements or training.

In the future, programmes should be developed to specifically target women within rural communities. Patriarchal systems and colonial regimes should be taken into consideration when developing these programmes so that the background conditions of these women are taken into consideration and policies include these barriers when developing training programmes and considering ways to improve agricultural market access among female smallholder farmers. With future establishment and development of training programmes, women could become financially and socially independent thus improving their livelihoods. Primarily this could be achieved through the implementation of training programmes that are designed to teach women how to

utilise the forms of capital that they already possess to practice smallholder farming and to grow their incomes, eventually leading to them being able to fully participate in agricultural markets.

6.4.1.2 The inclusion of rural females in the development of rural development programmes

Literature has indicated that it is imperative for local rural communities, such as the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities utilised in this research, to be involved in the development of programmes that are designed to assist them. These communities need to be involved with the public and private sector so that knowledge, especially indigenous knowledge which local communities gain through knowledge passed down from generation to generation can be shared. In this manner, local communities can share their knowledge with other stakeholders and vice versa. This will allow rural development organisations to gauge what resources exist within communities as well as what needs to be implemented and how it should be implemented (Chambers and Conway, 1992; Krantz, 2001; Morse *et al.*, 2009; Mazibuko, 2013; Serrat, 2017)

6.4.2 Stakeholder partnerships

Elaborating on the point above, in order to achieve sustainable development, a holistic and transdisciplinary approach to development has to be employed (Krantz, 2001; Borowy, 2013; UN Women, 2013; United Nations, 2016). This translates to the inclusion of stakeholders at multiple levels in the development of policies and frameworks that are created to assist smallholder farmers, especially female smallholder farmers. Stakeholders such as the government, NGOs, the private sector, the public sector and the communities themselves need to be involved in the process of intervention development. Communication between stakeholders need to be developed in order to deliver efficient implementation of development programmes. NGOs need to be viewed as a member of the community and a mechanism of development, not just as a service provider. The unawareness LIMA's presence among members of the eMazabekweni and kwaNokweja communities indicates the inefficiency of the organisation. Additionally, the intermittent service provision by government department indicates a lack of unity, coordination and planning among the stakeholders within the community.

In the future, a strong relationship between government, NGOs, the private sector and communities will encourage development that is specific to the chosen communities and will allow development and capacity building that is suited to what the communities need to achieve. These partnerships have the ability to promote sustainable development and poverty alleviation through the encouragement and support of smallholder farming on a scale that allows agricultural market participation. Additionally, the establishment of site-specific policies has the ability to provide

residents within a community with explanations for the challenges that they are facing and will allow for them to develop mechanisms to overcome these challenges. Furthermore, NGOs should develop programmes that do not use the cookie cutter approach and are rather tailored to specific communities. In addition, institutional barriers to market access faced by female smallholder farmers needs to be acknowledged by government departments and plans need to be put into place to reasonably develop these communities over time.

Partnerships within the public and private sector need to be encouraged as the private sector has the ability to fund agricultural intervention strategies however, these interventions need to be implemented without the prejudice of agendas stipulated by the private sector (Matthews, 2017). The agricultural sector and smallholder farming hold the potential to extract rural residents and more specifically females, from the poverty cycle through support from NGOs in partnership with the government and the private sector. An example from this study can be seen within the eMazabekweni and KwaNokweja communities who receive extension support from NGOs. While only a few female smallholder farms received support from NGOs it is evident that these farms fared better than those who did not receive any support.

6.5 Contributions of this thesis to the field

This thesis has discussed gaps in the provision of support by NGOs specific to the province of KwaZulu-Natal. This thesis has highlighted that while extension support from NGOs cannot be discarded, intervention programmes need to be designed to specifically target female smallholder farmers as women are a marginalised group within society and they face a variety of institutionalised barriers that prevent them from participating in smallholder farming and agricultural markets. NGOs hold the capacity and capability to play a key role in small-scale agricultural growth however their capacity need to be planned accordingly so that it can reach its full potential.

Communities need to be included as a stakeholder during the planning and development phase of support programmes and need to be included in the decision-making process as it concerns them. The integration of these communities is imperative to understand the issues within the community and plan for development that is sustainable. This thesis has hopefully highlighted the role of NGOs within communities but has also found that while NGOs are present they are not carrying out extension support initiatives in a manner that is community specific in order to improve living conditions within communities.

This thesis has also utilised triangulation as a methodological approach. Triangulation requires the collection of quantitative and qualitative data which is useful to gain insight into rural communities. An example of this would be that respondents from the eMazabekweni,

KwaNokweja, Hopewell and Carisbrooke community were hesitant to disclose information during the questionnaire survey out of fear of being reprimanded however, respondents were willing to engage in discussions with the researcher during participatory exercises. Respondents were also more willing to disclose their woes during participatory exercises, indicating that while respondents fear government officials they would still like to voice their concerns and issues. Respondents are also able to explain indigenous knowledge that has been passed down within their families and communities. The findings of this research highlight the importance of the community inclusion in the development of policies for community upliftment. Furthermore, communities should be the first stakeholder that is consulted during policy development as these policies have a direct impact on them.

6.6. Conclusion

While smallholder farming is perceived to be one of the suggestions for poverty and hunger alleviation within many rural communities across Africa and South Africa, from this thesis in respect to the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities it is perceived to be incorrect. Women are often seen as the key to food security within their households however, in practice many of these women lack access to basic necessities such as healthcare, water, education and a safe environment. Many policies and frameworks have been implemented in an attempt to provide farming assistance to smallholder farmers within rural areas thus enabling them to access agricultural markets in order to earn an income to improve their livelihoods. However, through this research in the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities it has come to light that a large majority of households within rural communities are comprised of female-headed households who can be considered the poorest of the poor. Many of these female-headed households face institutionalised, patriarchal, historical and social barriers to participating in smallholder farming, let alone participating in agricultural markets where they can sell their produce.

While NGOs have implemented policies and programmes to assist these farmers there are no programmes for farming assistance to increase access to agricultural markets that are specifically targeted at providing assistance to women within the eMazabekweni, KwaNokweja, Hopewell and Carisbrooke communities. The result of a lack in women specific agricultural programmes is reinforced by the majority of women within the eMazabekweni and KwaNokweja communities not being able to access agricultural markets even though the provision of farming assistance is available within their communities. However, it must be acknowledged that the female smallholder farmers who do receive assistance from NGOs within the eMazabekweni and KwaNokweja communities fare better than women within the Hopewell and Carisbrooke communities.

It is ambitious to attempt to provide agricultural programmes to females within rural communities while many of these women are not able to own land, access water or attend skills workshops due to the household chores that they are burdened with. Thus, it is recommended that the South African government focus on intervention programmes that target the provision of basic services for women in rural communities across South Africa. Additionally, the involvement of women is imperative in the process of creating policies for the upliftment of rural communities.

References

- Abel, M. 2015. Long-run effects of forced removal under apartheid on social capital. In *Harvard University Economic History seminar. Two examples are the Andrew W. Mellon Foundation-funded Biography of an Un.*
- Adams, J, Khan, H T, Raeside, R. and White, D. 2007. Primary data collection. In *Research methods for graduate business and social science students*. India: Sage Publications, pp. 107-116.
- Adams, W. M. 2001. *Green development: Environment and sustainability in a developing world*. 2nd Ed. Routledge, London.
- Ajayi, O.V. 2017. *Course Title: Advance Statistical Methods in Education* .Course Code: EDU 901
Course of Study: PhD Science Education.
- Akinsola, H. A. and Popovich, J. M. 2002. The quality of life of families of female-headed households in Botswana: A secondary analysis of case studies. *Health Care for Women International*, 23(6-7), pp. 761-772.
- Alexander, M. C. 2019. The provinces and ‘homelands’ of South Africa before 1996 [Online]. Available at: <https://southafrica-info.com/infographics/provinces-homelands-south-africa-1996/> (Accessed 2 November 2019)
- Altman, M., Hart, T. G. B. and Jacobs, P. T. 2009. Household food security status in South Africa. *Agrekon*, 48(4), pp. 345-361.
- Augustine, M. 2016. The role of traditional leaders in post independence countries Botswana, Ghana and Zimbabwe [Online]. Available at: <https://hsf.org.za/publications/hsf-briefs/the-role-of-traditional-leaders-in-post-independence-countries-botswana-ghana-and-zimbabwe> [Accessed 17 April 2019].
- Azarian, R. 2011. Potentials and limitations of comparative method in social science. *International Journal of Humanities and Social Science*, 1(4), pp.113-125.
- Baiphethi, M.N. and Jacobs, P.T. 2009. The contribution of subsistence farming to food security in South Africa. *Agrekon*, 48(4), pp.459-482.
- Banks, N. and Hulme, D. 2012. The role of NGOs and civil society in development and poverty reduction. *Brooks World Poverty Institute Working Paper*, (171).
- Barnett, R.C. 2004. Women and multiple roles: Myths and reality. *Harvard review of psychiatry*, 12(3), pp.158-164.

- Bassett, T.J. and Peimer, A.W. 2015. Dossier: «À propos des relations natures/sociétés»– *Political ecological perspectives on socioecological relations*.
- Bateman, M. 2014. South Africa's post-apartheid microcredit-driven calamity. *Law, Democracy and Development*, 18, pp.92-135.
- Benjaminsen, T, A. and Robbins, P. 2015. Nordic political ecologies. *Norwegian Journal of Geography*. 69 (4), pp. 191-169.
- Bernard, H.R. 2002. *Research Methods in Anthropology: Qualitative and quantitative methods*. 3rd edition. Walnut Creek, California: AltaMira Press.
- Bernard, H.R. and Bernard, H.R. 2012. *Social research methods: Qualitative and quantitative approaches*. Sage
- Bezemer, D. and Headey, D. 2008. Agriculture, development, and urban bias. *World development*, 36(8), pp.1342-1364.
- Bhattacharjee, A. 2012. *Social science research: Principles, Methods, and Practices* [Online] Available at:
http://scholarcommons.usf.edu/oa_textbooks/?utm_source=scholarcommons.usf.edu%2Foa_textbooks%2F3&utm_medium=PDF&utm_campaign=PDFCoverPages [Accessed 13 March 2018].
- Binder Dijker Otte. 2016. *Non-governmental organisations play a significant role in today's society* [Online]. Available at: <https://www.bdo.co.za/en-za/insights/2016/audit-insight/non-governmental-organisations-play-a-significant-role-in-todays-society> (Accessed 5 November 2019).
- Bingen, R.J. and Mpyisi, E. 2001. *Non-Governmental Organizations in Agricultural Development: Preliminary Survey Results*.
- Binns, T., Hill, T. and Nel, E. 1997. Learning from the people: participatory rural appraisal, geography and rural development in the 'new' South Africa. *Applied Geography*, 17(1), pp.1-9.
- BizCommunity. 2019. *Driving transformation: The role of women in SA agriculture should be prioritised* [Online]. Available at:
<https://www.bizcommunity.com/Article/196/358/194178.html> (Accessed 26 October 2019).
- Blease, B., and Condy, J. 2014. What challenges do foundation phase teachers experience when teaching writing in rural multigrade classes? *South African Journal of Childhood Education*. 4 (2), 36-56.

- Bob, U. 2008. Rural Women's Relations to Land Resources in KwaZulu-Natal: Issues of Access and Control. *Alternations* 5(1):110-134.
- Boko, M., Niang, I., Nyong, A., Vogel, A., Githeko, A., Medany, M., Osman-Elasha, B., Tabo, R. and Yanda, P.Z. 2018. *Africa Climate Change 2007: Impacts, Adaptation and Vulnerability: Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*.
- Borowy, I. 2013. *Defining sustainable development for our common future: A history of the World Commission on Environment and Development (Brundtland Commission)*. Routledge.
- Brand South Africa. 2012. *Empowering the Rural Women* [online]. Available at: <https://www.brandsouthafrica.com/south-africa-fast-facts/news-facts/womensday-080312> [Accessed 17th January 2018].
- Brand South Africa. 2012. *South Africa Still a Net Food Exporter* [online]. Available at: <https://www.brandsouthafrica.com/investments-immigration/business/trade/export/agriculture-030212> [Accessed 01st January 2018].
- Brocklesby, M, A. and Fisher, E. 2003. *Community development in sustainable livelihoods approaches- an introduction*. Available at: http://agriflifecd.tamu.edu/essm675/files/2013/01/03_Brocklesby-et.pdf. [Accessed 25 February 2019].
- Brown, L.R., Feldstein, H.S., Haddad, L.J., Peña, C. and Quisumbing, A.R. 1995. *Generating food security in the year 2020: Women as producers, gatekeepers, and shock absorbers*.
- Bryant, R.L. and Bailey, S. 1997. *Third world political ecology*. Psychology Press.
- Bryman, A. 2015. *Social research methods*. Oxford: Oxford University Press.
- Budlender, D. 2003. The debate about household headship. *Social Dynamics*, 29(2), pp.48-72.
- Business Tech. 2018. *South Africa's poorest can't afford the R20 a day needed just to eat: Pacsa* [Online]. Available at: <https://businesstech.co.za/news/wealth/223430/south-africas-poorest-cant-afford-the-r20-a-day-needed-just-to-eat-pacsa/> (Accessed 9 August 2018).
- Business Tech. 2019. *What land expropriation without compensation will mean for homeowners in South Africa* [Online]. Available at: <https://businesstech.co.za/news/property/358797/what-land-expropriation-without-compensation-will-mean-for-homeowners-in-south-africa/?fbclid=IwAR2HYkj03-kJLOZdNfMUyTDdfPkUsyBiFLoZc1DyUDD0CdUA3NqgOZvGo> (Accessed 5 December 2019).
- Collison, C. 2018. *Women farmers need land but not all want expropriation* [Online]. Available at: <https://mg.co.za/article/2018-07-06-00-women-farmers-need-land-but-not-all-want->

expropriation?fbclid=IwAR1flwi6p76uFyga9vFETBpflL3XfdXZKDIupnIDD56fW4P5cVjqfU_osKY (Accessed 5 December 2019).

Busingye, J., TushabomweKazooba, C. and Tumuhimbise, M. 2018. *Challenges Facing Female Headed Households in Accessing and Utilizing Microfinance Lending among Selected Municipalities of South West Uganda*.

Calderon, G., Cunha, J.M. and De Giorgi, G. 2013. *Business literacy and development: Evidence from a randomized controlled trial in rural Mexico*. National Bureau of economic research.

Carney, D. 2003. *Sustainable livelihoods approaches: progress and possibilities for change* (p. 64). London: Department for International Development.

Caruso, B. 2016. *To empower women, give them better access to water* [Online]. Available at: <http://theconversation.com/to-empower-women-give-them-better-access-to-water-56244> [Accessed 20 January 2019].

Cavestro, L. 2003. *PRA-participatory rural appraisal concepts methodologies and techniques*. Padova University. Padova PD. Italia.

Centre for Innovation in Research and Teaching. n.d. *Benefits & Limitations of Comparative Research - Center for Innovation in Research and Teaching* [Online] Available at: https://cirt.gcu.edu/research/developmentresources/research_ready/comparative/benefits_limits [Accessed 20 May 2019].

Cerutti, P.O., Sola, P., Chenevoy, A., Iiyama, M., Yila, J., Zhou, W., Djoudi, H., Atyi, R.E.A., Gautier, D.J., Gumbo, D. and Kuehl, Y. 2015. The socioeconomic and environmental impacts of wood energy value chains in Sub-Saharan Africa: a systematic map protocol. *Environmental Evidence*, 4(1), p.12.

Chambers, R. 1995. *Participatory Rural Appraisal. Methods and applications in rural planning*. New Delhi: Vikas Publishing House PVT LTD.

Chambers, R. and Conway, G. 1992. *Sustainable rural livelihoods: practical concepts for the 21st century*. Institute of Development Studies (UK).

Chandra, G. 2010. Participatory Rural Appraisal. In: Katiha, P.K., Vaas, K.K., Sharma, A.P., Bhaumik, U. and Chandra, G. Eds. 2010. *Issues and tools for social science research in inland fisheries*. India: Central Inland Fisheries Research Institute Bulletin, (163), pp.286-302.

Chandra, R. 2014. *Role of Education in Rural Development*.

Chant, S. 2003. Female household headship and the feminisation of poverty: facts, fictions and forward strategies.

- Chant, S. 2014. Exploring the “feminisation of poverty” in relation to women’s work and home-based enterprise in slums of the Global South. *International Journal of Gender and Entrepreneurship*, 6(3), pp.296-316.
- Cherry, K. 2019. *What is Maslows Hierachy of Needs?* [Online]. Available at: <https://www.verywellmind.com/what-is-maslows-hierarchy-of-needs-4136760> (Accessed 5 November 2019)
- Chigbu, U. E. 2013. Rurality as a choice: Towards ruralising rural areas in sub-Saharan African countries. *Development Southern Africa*, 30(6), pp. 812-825.
- Chinnakali, P., Upadhyay, R.P., Shokeen, D., Singh, K., Kaur, M., Singh, A.K., Goswami, A., Yadav, K. and Pandav, C.S. 2014. Prevalence of household-level food insecurity and its determinants in an urban resettlement colony in north India. *Journal of health, population, and nutrition*, 32(2), p.227.
- Chirwa, E.W. 2004. Issues in Rural Infrastructure and Rural Services for Smallholder Agricultural Development in Malawi. *Final Report for NASFAM Centre for Development Support, Lilongwe, Malawi*.
- Colton, D., and Covert, R, W. 2007. *Designing and constructing instruments for social research and evaluation*. San Francisco: John Wiley & Sons Inc
- Commission for Gender Equality. 2010. *A gendered analysis of land reform policy and implementation outcome in South Africa (2006 – 2008/09): National perspective report*. South Africa: Commission for Gender Equality.
- Cooper, P. J. M., Dimes, J., Rao, K. P. C., Shapiro, B., Shiferaw, B. and Twomlow, S. 2008. Coping better with current climatic variability in the rain-fed farming systems of sub-Saharan Africa: An essential first step in adapting to future climate change. *Agriculture, Ecosystems and Environment*. 126, pp. 24-35.
- Cousins, B. 2018. *Small-scale farmers should be at the centre of land reform*. [Online] Available at: <https://www.timeslive.co.za/news/south-africa/2018-04-17-small-scale-farmers-should-be-at-the-centre-of-land-reform> [Accessed 8 February 2019].
- Cross, C. and Hornby, D. 2002. *Opportunities and obstacles to women's land access in South Africa*. National Land Committee.
- Dadzie, D. 2008. *Perpetuators or alleviators? The politics of globalisation and poverty in Africa*. In: Godwyll, F. and Kang, S. eds. *Poverty, Education and Development*. Pennsylvania: Nova Science. pp. 31-42.

- De Beer, C. 2018. City of Cape Town on IDP, LED & service delivery. *Minutes of City Of Cape Town NCOP Finance Meeting*. Northern Cape, South Africa.
- Deavers, K. 1992. What is rural? *Policy Studies Journal*, 20(2), p.183.
- Department of Trade and Industry. n.d. *Small Enterprise Development Agency (seda)* [Online]. Available at: <https://www.thedti.gov.za/agencies/seda.jsp> [Accessed 12 February 2019].
- Derman, B. and Ferguson, A. 2003. Value of water: political ecology and water reform in Southern Africa. *Human organization*, 62(3), pp.277-288.
- Dioula, B.M., Deret, H., Morel, J., Vachat, E. and Kiaya, V. 2013. Enhancing the role of smallholder farmers in achieving sustainable food and nutrition security. In *International Conference on Nutrition-better nutrition better lives, Paris*.
- Dlodlo, N. 2009. Access to ICT education for girls and women in rural South Africa: A case study. *Technology in society*, 31(2), pp.168-175.
- Dludla, S. 2014. *Funding for rural women in agriculture: Rural women get government support for forming agricultural cooperatives in the form of the Isivande Women's Fund*. [online] Available at: <http://www.smesouthafrica.co.za/Funding-for-rural-women-in-agriculture/> [Accessed 2nd August 2017].
- Doss, C., Kovarik, C., Peterman, A., Quisumbing, A. and van den Bold, M. 2015. Gender inequalities in ownership and control of land in Africa: myth and reality. *Agricultural Economics*, 46(3), pp.403-434.
- Drimie, S. 2002. *The impact of HIV/AIDS on rural households and land issues in Southern and Eastern Africa. A Background Paper prepared for the Food and Agricultural Organization, Sub-Regional Office for Southern and Eastern Africa*. Pretoria, South Africa: Human Sciences Research Council.
- Dy, R. 2015. *Urban bias against the rural poor* [Online] Available at: <https://business.inquirer.net/204719/urban-bias-against-the-rural-poor> (Accessed 19 May 2019).
- Elmhirst, R. 2011. Introducing new feminist political ecologies. *Geoforum*, 42(2), pp.129-132.
- Environment and Ecology. n.d. Political Ecology [Online]. Available at: <http://environment-ecology.com/political-ecology/407-political-ecology.html>. [Accessed 15 June 2018]
- Esienna Life. n.d. *E-Sienna Life: The importance of soil preparation before planting anything* [Online] Available at: <https://esiennialife.co.za/the-importance-of-soil-preparation/> [Accessed 6 March 2019].

- ETU. n.d. Integrated Development Planning for Local Government [Online] Available at: www.etu.org.za/toolbox/docs/localgov/webidp.html [Accessed 18 March 2018].
- European Institute for Gender Equality. n.d. *Female-headed households*. [online] Available at: <https://eige.europa.eu/thesaurus/terms/1126> [Accessed 19 May 2019].
- Fabricius, C. and de Wet, C. 2002. The Influence of Forced Removals and Land Restitution. *Conservation and mobile indigenous peoples: displacement, forced settlement, and sustainable development*, 10, p.142.
- Fatteross, J. n.d. *Types of Research: Primary VS. Secondary* [online] Available from: <https://www.thehartford.com/business-playbook/in-depth/business-primary-second-research> [Accessed 13 March 2018].
- Feldman, H. 2018. *What white people didn't learn from Bantu education* [Online]. Available at: <https://www.news24.com/Columnists/HowardFeldman/what-white-people-didnt-learn-from-bantu-education-20180418> [Accessed 13 Jan. 2019].
- Food and Agriculture Organisation. 2011a. *The role of Women in Agriculture*. Rome, Italy: FAO and SOFA Team.
- Food and Agriculture Organisation. 2011b. *Women in Agriculture: Closing the gender gap for development*. Rome, Italy: FAO and Agriculture Organization of the United Nations
- Food and Agriculture Organisation. 2012. *Food Security & Staple Crops*. Europe: FAO
- Food and Agriculture Organisation. 2017. *Empowering Women to End Hunger and Poverty* [online]. Available at: <http://www.fao.org/zhc/detail-events/en/c/471293/> [Accessed 20 January 2018].
- Food and Agriculture Organisation. 2018. *SOFI 2018 - The State of Food Security and Nutrition in the World*. [online] Available at: <http://www.fao.org/state-of-food-security-nutrition/en/> [Accessed 6 May 2019].
- Fungo, E., Krygsman, S. and Nel, H. 2017. *The role of road infrastructure in agricultural production*. Southern African Transport Conference.
- Gabrielsson, S. and Ramasar, V. 2013. Widows: agents of change in a climate of water uncertainty. *Journal of Cleaner Production*, 60, pp.34-42.
- Gay, K., Stubbs, E., and Galindo-Gonzalez, S. 2016. *Matrix Ranking: A Tool for Decision-Making and Prioritization*. Florida: University of Florida.
- GLOPP. 2008. *DFID's Sustainable Livelihoods Approach and its Framework* [online]. Available at: http://www.glopp.ch/B7/en/multimedia/B7_1_pdf2.pdf [Accessed 20 August 2018].

- Gnade, H. 2013. *The effect of basic infrastructure delivery on welfare in rural and urban municipalities* | *Econ3x3*. [online] Available at: <http://www.econ3x3.org/article/effect-basic-infrastructure-delivery-welfare-rural-and-urban-municipalities> [Accessed 11 May 2019].
- Gneiting, U. and Sonenshine, J. 2018. *A Living Income for Small-Scale Farmers: Tackling unequal risks and market power*.
- Goldstein, A.E. and Reiboldt, W. 2004. The multiple roles of low income, minority women in the family and community: A qualitative investigation. *The qualitative report*, 9(2), pp.241-265.
- Grant, C. and Osanloo, A. 2014. Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your “house”. *Administrative Issues Journal*, 4(2), p.4.
- Greasley, P. 2008. *Quantitative data analysis using SPSS: An introduction for health and social sciences*. England: Open University Press.
- Greenberg, J, B. and Park, T. K. 1994. Political Ecology. *Journal of Political Ecology*. 1 (1), pp. 1-12.
- Guest, G., Namey, E.E. and Mitchell, M.L. 2013. *Collecting qualitative data: A field manual for applied research*. United States of America: Sage.
- Hall R. 1998. Design for Equity: Linking Policy with Objectives in South Africa’s Land Reform. *Review of African Political Economy*, 77.
- Hammer, C.S. 2011. The importance of participant demographics. *American Journal of Speech-Language Pathology*, 20(4), pp.261-261.
- Hanekom, D. 1998. Agricultural Policy in South Africa: Discussion Document [Online]. Available at: <https://www.gov.za/documents/agricultural-policy-south-africa-discussion-document> (Accessed 7 November 2019).
- Harper, P. 2019. *AG red flags Ingonyama’s board* [Online]. Available at: https://mg.co.za/article/2019-10-11-00-ag-red-flags-ingonyamas-board?fbclid=IwAR2i_hYYXW3v3ZlBT_pLpCgBfi3YgUiuUwpoNWYFGZA1DJ3Gm_iL8UG2fRs (Accessed 5 December 2019).
- Harris, L, R., and Brown, G, T, L. 2010. Mixing interview and questionnaire methods: Practical problems in aligning data. *Practical Assessment research and evaluation*. 15 (1).
- Hattangadi, V. 2014. *Why Current Affairs Knowledge is important?* [Online]. Available at: <http://drvidyahattangadi.com/why-current-affairs-knowledge-is-important/> [Accessed 28 March 2019].

- Head, T. 2018. *Food prices on the increase as living costs head for a sharp rise* [Online]. Available at: <https://www.thesouthafrican.com/food-prices-south-africa-increase-july-2018/> [Accessed 26 March 2019].
- Health24. 2014. *HIV danger to migrant workers*. [online] Available at: <http://www.health24.com/Medical/HIV-AIDS/The-South-African-culture/HIV-dangerto-migrant-workers-20120721> [Accessed 9 May 2019].
- Hennink, M., Hutter, I. and Bailey, A.. 2011. *Qualitative research methods*. London: Sage.
- Holmes, R. and Jones, N. 2011. *Gender inequality, risk and vulnerability in the rural economy*. Refocusing the public works agenda to take account of economic and social risks.
- Housing and Land Rights Network. n.d. *Urban Bias: The Continuing Debate* [online]. Available at: <http://www.hlrn.org/img/documents/Corbridge%20Continuing%20Debate.pdf> [Accessed 10 June 2018].
- Hox, J, J. and Boeijs, H, R. 2005. Data collection, Primary Vs Secondary. *Encyclopaedia of social movement*. 1 (1), pp. 593-599.
- <http://www.globalissues.org/article/3/structural-adjustment-a-major-cause-of-poverty> [Accessed 31 October 2019].
- ICRW (International Centre for Research on Women). 2011. *Gender Land and Asset Survey*. University of KwaZulu-Natal and Associates Research Uganda Limited.
- Ijatuyi, E.J., Omotayo, A.O. and Mabe, L.K. 2017. Effect of extension service (s) and socio-economic characteristics on the livelihood of Nguni cattle development project beneficiaries in North West Province: a tobit-ols regression approach. *South African Journal of Agricultural Extension*, 45(1), pp.64-77.
- Integrated Development Plan. 2017. Harry Gwala District Municipality 2017 – 2022 Final Draft. Integrated Development Plan. KwaZulu – Natal: Harry Gwala District Municipality.
- Integrated Development Plan. 2017/2018. Draft Integrated Development Plan 2017/2018. KwaZulu – Natal: Ubuhlebezwe Local Municipality.
- Jackson, C., 2005. Rescuing gender from the poverty trap. In *Feminist visions of development* (pp. 48-73). Routledge.
- Jackson, C., 2005. Rescuing gender from the poverty trap. In *Feminist visions of development* (pp. 48-73). Routledge.

- Jacobs, K., Namy, S., Kes, A., Bob, U. and Moodley, V. 2011. *Gender Differences in Asset Rights in KwaZulu-Natal, South Africa*. International Centre for Research on Women, Washington, DC, USA.
- Jari, B. and Fraser, G. 2012. Influence of institutional and technical factors on market choices of smallholder farmers in the Kat River Valley. In H. D. van Schalkwyk, J. A. Groenewald, G. C. G. Fraser, A. Obi, & A. van Tilburg (Eds.), *Unlocking markets to smallholders: Lessons from South Africa* (pp. 59– 89). Netherlands: Wageningen Academic Publishers
- Jedwab, R., Christiaensen, L. and Gindelsky, M. 2015. *Demography, urbanization and development: Rural push, urban pull and... urban push?* The World Bank.
- Johnson, M. 2017. *Water & Sanitation: Statistics SA analysis; Water & Sanitation Infrastructure: Auditor-General performance audit | PMG* [Online]. Available at: <https://pmg.org.za/committee-meeting/23868/> [Accessed 5 January 2019].
- Jones, G.A. and Corbridge, S. 2010. The continuing debate about urban bias: the thesis, its critics, its influence and its implications for poverty-reduction strategies. *Progress in Development Studies*, 10(1), pp.1-18.
- Kalipeni, E. and Opong, J. 1998. The refugee crisis in Africa and implications for health and disease: a political ecology approach. *Social Science & Medicine*, 46(12), pp.1637-1653.
- Kapungu, S.T. 2013. *A study of rural women farmers' access to markets in Chirumanzu* (Doctoral dissertation, Stellenbosch: Stellenbosch University).
- Kassie, M., Stage, J., Teklewold, H. and Erenstein, O. 2015. Gendered food security in rural Malawi: why is women's food security status lower? *Food Security*, 7(6), pp.1299-1320.
- Kevane, M., 2004. *Women and development in Africa: How gender works*. Lynne Rienner Publishers.
- Khan, M, T. 2013. Theoretical frameworks in political ecology and participatory nature/forest conservation: the necessity for a heterodox approach and the critical moment. *Journal of political Ecology*. 20 (1), pp. 460-472.
- Khapayi, M. and Celliers, P.R. 2016. Factors limiting and preventing emerging farmers to progress to commercial agricultural farming in the King William's Town area of the Eastern Cape Province, South Africa. *South African Journal of Agricultural Extension*, 44(1), pp.25-41.
- Khunou, S.K. 2009. Traditional leadership and independent Bantustans of South Africa: some milestones of transformative constitutionalism beyond Apartheid. *Potchefstroom Electronic Law Journal/Potchefstroomse Elektroniese Regsblad*, 12(4).

- Kimani, M. 2008. *Women struggle to secure land rights: Hard fight for access and decision making power*. [online] Available at: <http://www.un.org/africarenewal/magazine/april-2008/women-struggle-secure-land-rights> [Accessed 11 May 2019].
- Kimaro, A.E. 2013. *The role of NGOs in lobbying and advocacy for market access by smallholder farmers: a case of Mkuranga district* (Doctoral dissertation).
- Kirsten, M.A. 2011. *Improving the well-being of the poor through microfinance: Evidence from the Small Enterprise Foundation in South Africa* (Doctoral dissertation, Stellenbosch: Stellenbosch University).
- Knox, P. and McCarthy, L. 2005. *Urbanization: An Introduction to Urban Geography, 2nd Edition*. United States: Pearson.
- Moeng, J.K. 2011. *Land reform policies to promote women's sustainable development in South Africa* (Doctoral dissertation, University of Pretoria).
- Klynveld Peat Marwick Goerdeler. 2015. *Agriculture in Africa* [online]. Available at: https://agriorbit.com/wp-content/uploads/2016/06/KPMG_Agriculture-in-Africa-sector-report-2015.pdf [Accessed 13 March 2018].
- Klynveld Peat Marwick Goerdeler. 2016. *KPMG Paves a Way for Strategic Agribusiness in Africa* [Online]. Available at: <https://home.kpmg.com/za/en/home/home/press-releases/2016/06/kpmg-paves-the-a-way-for-strategic-agribusiness.html> [Accessed 13 March 2018].
- Krantz, L. 2001. The sustainable livelihood approach to poverty reduction. *SIDA. Division for Policy and Socio-Economic Analysis*.
- Kubheka, T. 2018. *Ramaphosa launches school sanitation initiative to remove pit toilets* [Online]. Available at: <https://ewn.co.za/2018/08/14/ramaphosa-launches-school-sanitation-initiative-to-remove-pit-toilets> (Accessed 9 November 2019).
- Kwa, A. 2001. *Agriculture in Developing Countries: Which Way Forward?* [Online]. Available at: https://focusweb.org/publications/2001/agriculture_which_way_forward.html [Accessed 01 January 2018].
- Labadarios, D., Mchiza, Z.J.R., Steyn, N.P., Gericke, G., Maunder, E.M.W., Davids, Y.D. and Parker, W.A. 2011. Food security in South Africa: a review of national surveys. *Bulletin of the World Health Organization*, 89, pp.891-899.
- Lewis, J. 2013. Design Issues. In: Ritchie, J. and Lewis, J, ed. 2013. *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. London: SAGE Books. Ch. 3.

- Lewis-Beck, M.S, Bryman, A., and Futing Liao, T. 2004. *The sage encyclopaedia of social science research methods*. Thousand Oaks, CA: Sage Publications, Inc.
- LIMA Rural Development. 2015. *Jobs Fund Concept Document and Fact Sheet*. South Africa: LIMA
- LIMA. n.d. *Abalimi Phambili Farmer Support Programme - Lima - Rural Development Foundation* [Online] Available at: <https://lima.org.za/our-work/agriculture/abalimi-phambili-farmer-support-programme/> [Accessed 3 April 2019].
- Linganiso, W.S. and Gwengweni, J.M.T. 2016. *What Perpetuates the Spread of HIV/AIDS in Rural South African Communities? A Closer Look at Social Factors* [Online]. Available at: <http://austinpublishinggroup.com/public-health-epidemiology/fulltext/ajphe-v3-id1031.php> [Accessed 5 February 2019].
- Lipton, M. 1977. *Why poor people stay poor: a study of urban bias in world development*. London: Canberra, ACT: Temple Smith; Australian National University Press.
- Little, J., Panelli, R. and Kraack, A. 2005. Women's fear of crime: A rural perspective. *Journal of Rural Studies*, 21(2), pp.151-163.
- Local Government. n.d. Integrated Development Plan [Online] Available at: <http://www.localgovernmentaction.org/xh/content/integrated-development-plan> [Accessed 19 March 2018].
- Lopez, X. 2013a. *Advantages and disadvantages of secondary data collection nowadays* [Online] Available at: <https://xaperezsindin.com/2013/12/11/advantages-and-disadvantages-of-secondary-data-collection/> [Accessed 18 March 2018].
- Lopez, X. 2013b. What is secondary data and where is it located? [Online] Available at: <https://xaperezsindin.com/2013/11/26/what-is-secondary-data-and-where-is-located/> [Accessed 18 March 2018].
- Louw, K., Conradie, B., Howells, M. and Dekenah, M. 2008. Determinants of electricity demand for newly electrified low-income African households. *Energy policy*, 36(8), pp.2812-2818.
- Luymes, G. 2017. *Crop theft a growing concern for some farmers* [Online]. Available at: <https://www.timescolonist.com/news/b-c/crop-theft-a-growing-concern-for-some-farmers-1.23099276> [Accessed 13 February 2019].
- Machethe, C.L. 2004. October. Agriculture and poverty in South Africa: Can agriculture reduce poverty. In *Paper presented at the Overcoming Underdevelopment Conference held in Pretoria*. 28, p. 29.

- Magingxa, L.L. and Kamara, A.B. 2003. October. Institutional perspectives of enhancing smallholder market access in South Africa. In *41st Annual Conference of the Agricultural Economic Association of South Africa held in Pretoria*.
- Magingxa, L.L., Alemu, Z.G. and van Schalkwyk, H.D. 2009. Factors influencing access to produce markets for smallholder irrigators in South Africa. *Development Southern Africa*, 26(1), pp.47-58.
- Mahesh, V., Pawar, D.A., Kumar, A. and Prakash, P. 2017 [Online] Matrix Ranking-An important PRA tool to assess farmers preferences and priorities. *Agricultural Science Digest*, 37(2), pp.100-105.
- Malefane, S.R. and Mashakoe, E. 2008. Integrated development planning (IDP) and local economic development (LED) in South Africa: the power-twins. *Journal of Public Administration*, 43(Special issue 2), pp.473-482.
- Maponya, P. I., Venter, S., Du Plooy, C., Modies. S. D., and Van Den Heever E. 2016. An Evaluation of Market Participation Challenges of Smallholder Farmers in Zululand District, Kwazulu Natal, South Africa. *African Journal of Business and Economic Research*. *African Journal of Business and Economic Research (AJBER)*, 11(1), pp. 117-142.
- Maponya, P.I., Modise, D., Van Den Heever, E., Mahlangu, S., Baloyi, T., Maluleke, A., Carsten, J., Van Der Walt, M., Chauke, D., Mkhari, R., Sole, L., Duba, M., Malebana, J. and Mphahlele, M. 2014. Establishment of Fruits and Vegetables Markets: A case of Waterberg District in Limpopo province. *Journal of Agricultural Science*. 6 (6).
- Maponya, Phokele & Venter, Sonja & Du Plooy, Christian & D. Modise, S & van den Heever, Erika. 2016. An Evaluation of Market Participation Challenges of Smallholder Farmers in Zululand District, Kwazulu Natal, South Africa. *African Journal of Business and Economic Research*. In Press.
- Mathevet, R., Peluso, N.L., Couespel, A. and Robbins, P. 2015. Using historical political ecology to understand the present: water, reeds, and biodiversity in the Camargue Biosphere Reserve, southern France. *Ecology and Society*, 20(4), pp. 17.
- Matthews, S and Nqaba, P. 2017. *Rethinking the Role of NGOs in Struggles for Social Justice*. In *NGOs and Social Justice in South Africa and Beyond*. pp. 1-14.
- Matthews, S. 2017. *The role of NGOs in Africa: are they a force for good?* [Online]. Available at: <https://theconversation.com/the-role-of-ngos-in-africa-are-they-a-force-for-good-76227> (Accessed 5 November 2019).

- Matthews-Njoku, E.C., Odii, M.A.C.A. and Odirin, J.O. 2002. Role of Non-Governmental Organizations in Agriculture and Development in Rivers State, Nigeria. *International Journal of Agriculture and Rural Development*, 3(1), pp.70-77.
- Mazibuko, D.M., 2000. The role of Non-Governmental Organisations (NGO's) in educational advancement in developing countries: The South African Experience. *Journal of International Cooperation in Education*, 3(1), pp.1-8.
- Mazibuko, S. 2013. Understanding underdevelopment through the sustainable livelihoods approach. *Community Development*. 44 (2), 173-187.
- McNamara, P. and Bohn, A. 2017. *Opinion: 3 ways extension services can engage and empower rural youth* [Online]. Available at: <https://www.devex.com/news/sponsored/opinion-3-ways-extension-services-can-engage-and-empower-rural-youth-90463> [Accessed 27 February 2019].
- Medani, S. 2016. *Why urban and rural classifications matter* [Online]. Available at: <https://www.ee.co.za/article/urban-rural-classifications-matter.html> [Accessed 2 May 2019].
- Mehta, A. 2018. *Gender gap in land ownership* [Online] Available at: http://www.ncaer.org/news_details.php?nID=252 [Accessed 5 January 2019].
- Meissner, H.H., Scholtz, M.M. and Palmer, A.R. 2013. Sustainability of the South African Livestock Sector towards 2050 Part 1: Worth and impact of the sector. *South African Journal of Animal Science*, 43(3), pp.282-297.
- Melick, M.D. 2003. The relationship between crime and unemployment. *The Park Place Economist*, 11(1), p.13.
- Miller, R. 2013. More than “not urban”: Seeking a quantifiable definition of rural. *Berkeley Planning Journal*, 26(1).
- Mitchell, B. 2002. Gender and Development, in Mitchell, S. (ed), *Resource and Environmental Management*. Second Edition. Singapore: Pearson Education. .p. 244-267
- Mkhabela, T. 2007. Linking farmers with markets in Rural South Africa: Rural Development and poverty alleviation through supply chain management. *Pretoria: National Agricultural Marketing Council (NAMC), Market and Economic Research Centre (MERC)*.
- Mlambo, V. 2018. An overview of rural-urban migration in South Africa: its causes and implications. *Archives of Business Research*, 6(4).
- Moeng, J.K. 2013. *Land reform policies to promote women's sustainable development in South Africa* (Doctoral dissertation, University of Pretoria).

- Moleko, N. 2018. *Women must be the focus of land redistribution* [Online]. Available at: <https://www.news24.com/Columnists/GuestColumn/women-must-be-the-focus-of-land-redistribution-20180720> (Accessed 3 October 2019).
- Moletsane, R. and Ntombela, S. 2010. Gender and Rurality in southern African contexts: An introduction. *Agenda*, 24(84), pp.4-8.
- Morse, S., McNamara, N. and Acholo, M. 2009. Potential for clean yam miniset production by resource-poor farmers in the middle-belt of Nigeria. *The Journal of Agricultural Science*, 147(5), pp.589-600.
- Mosana, R. 2013. *The State of Agriculture in South Africa* [Online]. Available at: <https://www.sablog.kpmg.co.za/2013/12/state-agriculture-south-africa/> [Accessed 13 March 2018].
- Mthembu, N. 2010. *Perceptions of barriers to market participation among three farmer groups in rural KwaZulu-Natal* (Doctoral dissertation).
- Muhwava, W., Hosegood, V., Nyirenda, M., Herbst, K. and Newell, M.L. 2010. Levels and determinants of migration in rural KwaZulu-Natal, South Africa. *African Population Studies*, 24(3).
- Muijs, D. 2010. *Doing quantitative research in education with SPSS*. London: Sage.
- Mushawevato, E. 2016. *Land preparation vital to successful cropping* [Online]. Available at: https://www.thepatriot.co.zw/old_posts/land-preparation-vital-to-successful-cropping/ (Accessed 1 November 2019).
- Muula, A.S. 2007. How do we define 'rurality' in the teaching on medical demography? *Rural & Remote Health*, 7(1).
- Naderifar, M., Goli, H. and Ghaljaie, F. 2017. Snowball sampling: A purposeful method of sampling in qualitative research. *sdmej*, 14(3).
- Nagai, P. 2012. *Community gardens – Where people and plants come together*. USA: University of Wisconsin – extension
- Napoli, M., De Muro, P. and Mazziotta, M. 2011. Towards a food insecurity Multidimensional Index (FIMI). *Master in Human Development and Food Security*.
- National Agricultural Marketing Council. 2017. *Food Basket Price Monthly*. South Africa: National Agricultural Marketing Council.

- National Geographic. 2014. *Staple Food Crops of the World* [Online]. Available at: <https://www.nationalgeographic.org/maps/wbt-staple-food-crops-world/> [Accessed 15 March 2019].
- National Planning Commission. 2011. *Our future – make it work: National Development Plan 2013* [Online]. Available at: <https://www.poa.gov.za/news/Documents/NPC%20National%20Development%20Plan%20Vision%202030%20-lo-res.pdf> (Accessed 4 November 2019).
- Ndlovu, M. 2017. *Op-Ed: Rural transformation as a solution to poverty in South Africa* [Online]. Available at: <https://www.dailymaverick.co.za/article/2017-08-28-op-ed-rural-transformation-as-a-solution-to-poverty-in-south-africa/#.WmGuCaiWbIV> [Accessed 10 January 2018].
- Ndungu, J., De Groote, H. and Danda, K. 2005. Non-governmental organizations and agricultural development in the coastal region of Kenya. *Eastern African Journal of Rural Development*, 21(1), pp.174-191.
- Nelson Mandela Foundation. 2005. *Emerging Voices: A report on Education in South African Rural Communities*. South Africa: HSRC Press.
- Neuman, W. L. 1997. *Social research methods: qualitative and quantitative approaches*. Boston: Allyn and Bacon.
- Neves, D. and Toit, A. 2013. Rural livelihoods in South Africa: Complexity, vulnerability and differentiation. *Journal of Agrarian Change*, 13(1), pp.93-115.
- Ngcukana, L. 2017. *Food Prices to Rocket Farmers Warn* [Online]. Available at: <https://www.news24.com/SouthAfrica/News/food-prices-to-rocket-farmers-warn-20171125> [Accessed 03 January 2018].
- NGO Pulse. 2018. *Non-Governmental Organisations (NGOs) play a significant role in today's society* [Online]. Available at: <http://www.ngopulse.org/article/2018/02/01/non-governmental-organisations-ngos-play-significant-role-today%E2%80%99s-society> [Accessed 20 April 2019].
- Ngqangweni, S., Mmbengwa, V., Myeki, L., Sotsha, K., and Khoza, T. 2016. Measuring and tracking smallholder market access in South Africa. South Africa: NAMC
- Nikkhah, H.A. and Redzuan, M.R.B., 2010. The role of NGOs in promoting empowerment for sustainable community development. *Journal of Human Ecology*, 30(2), pp.85-92.
- Nwosu, C. and Ndinda, C. 2018. *Female household headship and poverty in South Africa: an employment-based analysis*.

- Nyamathi, A.M., William, R.R., Ganguly, K.K., Sinha, S., Heravian, A., Albarran, C.R., Thomas, A., Greengold, B., Ekstrand, M., Ramakrishna, P. and Rao, P.R. 2010. "Perceptions of Women Living with AIDS in Rural India Related to the Engagement of HIV-TRAINED Accredited Social Health Activists for Care and Support," *Journal of HIV/AIDS and Social Services*, 9:, pp. 85-404.
- Nyamota, G. 2016. *Farm Africa Blogs* [Online]. Available at: <https://www.farmafrica.org/latest/postcard-from/post/794-access-to-markets-is-key-to-empowering-women-farmers-> [Accessed 6 May 2019].
- Ogun, T.P. 2010, August. Infrastructure and poverty reduction: Implications for urban development in Nigeria. In *Urban Forum*, 21 (3), pp. 249-266
- Olsen, W. 2004. Triangulation in social research: qualitative and quantitative methods can really be mixed. *Developments in sociology*, 20, pp.103-118.
- Olsen, W. 2012. *Data collection: Key debates and methods in social research*. London: Sage.
- Oluwatayo, I.B. 2019. Towards assuring food security in South Africa: Smallholder farmers as drivers. *AIMS Agriculture and Food*, 4(2), p.485.
- O'Neil, P. 2011. *The problem with rural transport is that it is rural, the solution is in branding* [Online]. Available at: <http://blogs.worldbank.org/transport/the-problem-with-rural-transport-is-that-it-is-rural-the-solution-is-in-branding> [Accessed 14 May 2019].
- Palinkas, L.A., Horwitz, S.M., Green, C.A., Wisdom, J.P., Duan, N. and Hoagwood, K. 2015. Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), pp.533-544.
- Paul, R. 2013. *Participatory Rural Appraisal (PRA) Manual*. Castries, Saint Lucia: FAO
- Peet, R. and Watts, M. 1996. *Liberation Ecologies: environment, development, social movements*. London: Routledge.
- Pienaar, L. and Traub, L. 2015. *Understanding the smallholder farmer in South Africa: Towards a sustainable livelihoods classification*.
- Pienaar, L. and Traub, L.N. 2015. Understanding the smallholder farmer in South Africa: Towards a sustainable livelihoods classification. In *Int. Conf. Agric. Econ* (p. 36).
- Pierskalla, J.H. 2016. The politics of urban bias: Rural threats and the dual dilemma of political survival. *Studies in Comparative International Development*, 51(3), pp.286-307.
- Polity. 2013. *Rural areas in the Eastern Cape Province, South Africa: The right to access safe drinking water and sanitation denied?* [Online]. Available at: <https://www.polity.org.za/article/rural->

areas-in-the-eastern-cape-province-south-africa-the-right-to-access-safe-drinking-water-and-sanitation-denied-2013-01-24 [Accessed 3 May 2019].

Poole, N. 2017. *Smallholder agriculture and market participation*. Practical Action Publishing.

Porter, G. 2002. Living in a walking world: rural mobility and social equity issues in sub-Saharan Africa. *World development*, 30(2), pp.285-300.

Porter, G. and Blaufuss, K. and Owusu Acheampong, F. 2007. 'Youth, mobility and rural livelihoods in sub-Saharan Africa : perspectives from Ghana and Nigeria.'. *Africa insight*, 37 (3). pp. 420-431.

Porter, G., Hampshire, K., Dunn, C., Hall, R., Levesley, M., Burton, K., Robson, S., Abane, A., Blell, M. and Panther, J. 2013. Health impacts of pedestrian head-loading: A review of the evidence with particular reference to women and children in sub-Saharan Africa. *Social Science & Medicine*, 88, pp.90-97.

Posel, D. 2004. Have migration patterns in post-apartheid South Africa changed? *Journal of Interdisciplinary Economics*, 15(3-4), pp.277-292.

Pouliquen, L. 2000. Infrastructure and poverty. *Background paper to the World Bank's, 2001*.

Pretty, J. N. and Vodouhê, S. D. 1997. *Using rapid or participatory rural appraisal* [Online] Available at: <http://www.fao.org/docrep/W5830E/w5830e08.htm> [Accessed 1 April 2018].

Provincial Review. 2016. *Provincial Review 2016: KwaZulu – Natal*. South Africa: South African Government.

Quisumbing, A.R., Brown, L. R., Feldstein, H. S., Haddad, L. and Pena, C. 1995. *Women: The Key to Food Security*. Washington DC: The International Food Policy Research Institute.

Rahman, M.Z., Yamao, M. and Alam, M.A. 2007. Barriers faced by small farmers in adopting the integrated plant nutrient system for sustainable farming development. *Sabaragamuwa University Journal*, 7(1), pp.3-21.

Raidimi, E.N. 2014. The roles and activities of women in the six selected agricultural projects in Thulamela Local Municipality of Vhembe District Municipality in the Limpopo Province. *South African Journal of Agricultural Extension*, 42(2), pp.10-23.

Rakolojane, M.J. 2013. *The gender dimensions of land reform in South Africa: a case study of Daggakraal rural housing and resettlement project* (Doctoral dissertation).

Reardon, T., Tschirley, D., Dolislager, M., Snyder, J., Hu, C. and White, S. 2014. *Urbanization, diet change, and transformation of food supply chains in Asia*. Michigan: Global Center for Food Systems Innovation.

- Reed, H.E. 2013. Moving across boundaries: migration in South Africa, 1950–2000. *Demography*, 50(1), pp.71-95.
- Renkow, M., Hallstrom, D.G. and Karanja, D.D. 2004. Rural infrastructure, transactions costs and market participation in Kenya. *Journal of Development Economics*, 73(1), pp.349-367.
- Riesgo, L., Louhichi, K., Gomez y Paloma, S., Hazell, P., Ricker-Gilbert, J., Wiggins, S., Sahn, D.E. and Mishra, A.K. 2016. Food and nutrition security and role of smallholder farms: challenges and opportunities. In *Workshop proceedings. JRC Conference and workshop reports, European Union*. (Vol. 10, p. 653314).
- Rocheleau, D.E. 1995. Gender and biodiversity: A feminist political ecology perspective. *IDS bulletin*, 26(1), pp.9-16.
- Roehr, U. 2007. Gender, climate change and adaptation. Introduction to the gender dimensions. United Nations: UNEP.
- Rogan, M. 2014. *Poverty May Have Declined But Women and Female-headed Households Still Suffer The Most* [Online]. Available at: <http://www.econ3x3.org/article/poverty-may-have-declined-women-and-female-headed-households-still-suffer-most> [Accessed 14 March 2018].
- Sachs, C.E. 2018. *Gendered fields: Rural women, agriculture, and environment*. Routledge.
- Salkind, N.J. 2010. *Encyclopedia of research design*. London: Sage.
- Schatz, E., Madhavan, S. and Williams, J., 2011. Female-headed households contending with AIDS-related hardship in rural South Africa. *Health & place*, 17(2), pp.598-605.
- Schmitt, M.T., Branscombe, N.R., Kobrynowicz, D. and Owen, S. 2002. Perceiving discrimination against one's gender group has different implications for well-being in women and men. *Personality and Social Psychology Bulletin*, 28(2), pp.197-210.
- Scholtz, C. 2017. *Villages, townships and small 'dorpies' are the focus of development* | *Global Africa Network* [Online]. Available at: <https://www.globalafricanetwork.com/2017/06/24/company-news/villages-townships-and-small-dorpies-are-the-focus-of-development-2/> [Accessed 18 March 2019].
- Scoones, I. 1998. *Sustainable Rural Livelihoods: A framework for analysis*. IDS Working Paper 72. IDS University of Sussex: Sussex.
- Seery, B. 2017. *The Shocking Facts and Figures of how food Prices Have Risen* [Online]. Available at: <https://citizen.co.za/news/south-africa/1619664/food-prices-driving-inflation/> [Accessed 01 January 2018].

- Serrat, O. 2017. The sustainable livelihoods approach. In *Knowledge solutions* (pp. 21-26). Singapore: Springer.
- Shah, A. 2013. *Structural Adjustment—a Major Cause of Poverty* [Online]. Available at:
- Sewell, S.J. and Desai, S.A. 2016. The impacts of undeveloped roads on the livelihoods of rural community: Case study of Nyamana community. *Review of Social Sciences*, 1(08), 15-29.
- Shozi, P. 2018. *Is the unemployment rate to blame for crime stats?* [Online]. Available at: <https://www.news24.com/SouthAfrica/Local/Hillcrest-Fever/is-the-unemployment-rate-to-blame-for-crime-stats-20180918> [Accessed 9 March 2019].
- Simelton, E., Fraser, E.D., Termansen, M., Benton, T.G., Gosling, S.N., South, A., Arnell, N.W., Challinor, A.J., Dougill, A.J. and Forster, P.M. 2012. The socioeconomics of food crop production and climate change vulnerability: a global scale quantitative analysis of how grain crops are sensitive to drought. *Food Security*, 4(2), pp.163-179.
- Sineke, G. M. 2012. *Ubuhlebezwe Municipality IDP 2012-2017*. KwaZulu-Natal: Ubuhlebezwe Municipality.
- South African Department of Agriculture, Forestry and Fisheries. 2018. *Economic review of the South African agriculture 2017/18*. South Africa: Department of Agriculture, Forestry and Fisheries.
- South African Government (2019). *Agriculture | South African Government*. [online] Available at: <https://www.gov.za/about-sa/agriculture> [Accessed 5 May 2019].
- South African History Online. 2011. *The South African Government passes the Group Areas Act* [Online] Available at: <http://www.sahistory.org.za/dated-event/south-africangovernment-passes-group-areas-act> [Accessed on the 29 October 2018].
- Spangenberg, J.H. 2002. Institutional sustainability indicators: an analysis of the institutions in Agenda 21 and a draft set of indicators for monitoring their effectivity. *Sustainable Development*, 10(2), pp.103-115.
- Statistics South Africa. 2017. *Rising Food Prices: Where Are the Most Vulnerable?* [online]. Available at: <http://www.statssa.gov.za/?p=6135> [Accessed 08 January 2018].
- Statistics South Africa. 2019a. *Five facts about poverty in South Africa* [Online]. Available at: <http://www.statssa.gov.za/?p=12075> (Accessed 1 November 2019).
- Statistics South Africa. 2019b. *Mid-year population estimates 2019* [Online]. Available at: <http://www.statssa.gov.za/publications/P0302/P03022019.pdf> (Accessed 1 November 2019).

- Sundberg, J. 2016. Feminist political ecology. *International Encyclopaedia of Geography: People, the Earth, Environment and Technology: People, the Earth, Environment and Technology*, pp.1-12.
- Sustainabledevelopment.un.org. (n.d.). *Sustainable Development Goals: Sustainable Development Knowledge Platform* [Online] Available at: <https://sustainabledevelopment.un.org/?menu=1300> [Accessed 19 May 2019].
- Texeira, J. 2017. *Why education infrastructure matters for learning* [Online]. Available at: <http://blogs.worldbank.org/education/why-education-infrastructure-matters-learning> [Accessed 6 January 2019].
- Thet, K.K. 2012. *Pull and push factors of migration: A case study in the urban Area of Monywa Township, Myanmar*. Monywa: Department of Statistics at the Institute of Economics.
- Tibane, E. 2016. *South African Yearbook 2016/2017*. 24th Edition. South Africa: Government Communications.
- Tibesigwa, B. and Visser, M. 2016a. Assessing gender inequality in food security among small-holder farm households in urban and rural South Africa. *World Development*. 88, pp.33-49.
- Tibesigwa, B. and Visser, M., 2016b. *Small-holder Farming, Food Security and Climate Change in South Africa: Male-Female and Urban-Rural Differences*. Environment for Development Initiative.
- Tongco, M.D.C. 2007. Purposive sampling as a tool for informant selection. *Ethnobotany Research and applications*, 5, pp.147-158.
- United Nations Women. 2000. *The Feminization of Poverty* [Online]. Available at: <http://www.un.org/womenwatch/daw/followup/session/presskit/fs1.htm> UN women 2000 (Accessed 1 August 2018).
- United Nations Women. 2013. *The role of women in rural development, food production and poverty eradication* [Online]. Available at: <http://www.unwomen.org/en/news/in-focus/rural-women-food-poverty/2013> [Accessed 8 June 2018].
- United Nations Women. 2013. *The role of women in rural development, food production and poverty eradication* [Online]. Available at: <http://www.unwomen.org/en/news/in-focus/rural-women-food-poverty/2013> (Accessed 8 February 2019).
- United Nations Women. 2013. *Women's land rights are human rights, say new UN report* [Online] Available at: <http://www.unwomen.org/en/news/stories/2013/11/womens-landrights-are-human-rights-says-new-un-report> [Accessed 2 August 2017].

- United Nations. 1987. *Our Common Future - Brundtland Report*. Oxford University Press, p. 204.
- United Nations. 2015. *Sustainable development goals* [Online]. Available at: <https://sustainabledevelopment.un.org/?menu=1300>. (Accessed 10 November 2019).
- United Republic of Tanzania (2001). *The national policy on non-governmental organizations*. , Dar es salaam, Tanzania : Vice President's Office 76pp.
- Van Willigen, M. 2014. Multiple Roles and Women's Health. In: *The Wiley Blackwell Encyclopaedia of Health, Illness, Behaviour, and Society*. USA: John Wiley & Sons Inc.
- Van Wyk, C. 2016. *Top 5 Trends for Agriculture 2016* [Online]. Available at <http://www.bizcommunity.com/Article/196/718/139397.html> [Accessed 01 January 2018].
- Varshney, A., 1993. *Introduction: urban bias in perspective*.
- Vodacom. n.d. *Facebook Flex Terms | Vodacom* [Online]. Available at: <https://www.vodacom.co.za/vodacom/terms/facebook-flex-terms-and-conditions> [Accessed 24 February 2019].
- Walker, G. 2012. *Environmental justice: concepts, evidence and politics*. Routledge.
- Walker, P.A. 2005. Political ecology: where is the ecology? *Progress in human geography*, 29(1), pp.73-82.
- Watts, N. and Scales, I, R. 2015. Seeds, Agricultural systems and socio-natures: Towards an actor-network theory informed political ecology of agriculture. *Geography Compass*, 9 (5), 225-236.
- Weideman, M. 2004. *Land reform, equity and growth in South Africa: A comparative analysis* (Doctoral dissertation, Department of Political Studies, Faculty of Arts, University of the Witwatersrand).
- Wennerholm, C.J. 2002. *The "Feminisation of Poverty": The Use of a Concept*. SIDA.
- Wondimagegnhu, B.A., Huluka, A.T. and Nischalke, S.M. 2019. Determinants of farm livelihoods of smallholder farmers in Yayu biosphere reserve, SW Ethiopia: a gender disaggregated analysis. *Cogent Economics & Finance*, 7(1), p.1645583.
- World Health Organization. 2014. *HIV and youth* [Online]. Available at: https://www.who.int/maternal_child_adolescent/topics/adolescence/hiv/en/ [Accessed 9 February 2019].
- World Vision International. n.d. *About Us* [Online]. Available at: <https://www.wvi.org/south-africa/about-us> [Accessed 9 Feb. 2019].
- World Vision. n.d. *Removing The Barriers To Education | World Vision Australia* [Online]. Available at: <https://www.worldvision.com.au/education-barriers> [Accessed 5 January 2019].

- World Wildlife Fund. 2016. *Agriculture: Facts and Trends South Africa* [Online]. Available at: http://awsassets.wwf.org.za/downloads/facts_brochure_mockup_04_b.pdf [Accessed 01 January 2018].
- Wyse, S. E. 2011. *What is the Difference between Qualitative Research and Quantitative Research?* [Online] Available at: <http://www.snapsurveys.com/blog/what-is-the-difference-between-qualitative-research-and-quantitative-research/> [Accessed 20 May 2019]
- Yang, X. 2014. Rural–urban migration and mental and sexual health: A case study in Southwestern China. *Health Psychology and Behavioral Medicine: An Open Access Journal*, 2(1), pp.1-15.
- Zhang, Y. 2015. *Impacts of Rural-urban Migration on Demographic Transition, Human Capital Investment and Agricultural Productivity in China's Rural Areas*. PhD diss., Universitäts-und Landesbibliothek Bonn.
- Zulu, S. 2018. *Ramaphosa Kicks Off Thuma Mina Campaign in KZN* [Online]. Available at: www.ewn.co.za/2018/07/07/Ramaphosa-kicks-off-thuma-mina-campaign-in-kzn [Accessed 1 December 2019].

Appendix 1: Questionnaire



School of Agriculture, Engineering and Science
Discipline of Geography
P/Bag X01 Scottsville
Pietermaritzburg, 3209
South Africa

HSSREC Research Office
University of KwaZulu-Natal
Research Office: Ethics
Govan Mbeki Centre
Tel +27312604557
Fax +27312604609

IMVUME TO IQHAZA UCWANINGO

Ukuhlola indlela i-LIMA Farmer Support Programme eye yasize ngayo abalimi abancinci besifazane ukuba bafinyelele ezimakethe nabalimi besifazane abangenawo lolu hlelo.

Ucelwa ukuba uhlanganyele ocwaningweni locwaningo olwenziwa nguLilala Hansrod, ovela eMnyangweni weGeography eNyuvesi yaseKwaZulu-Natali, eMgungundlovu Campus. Ucwaningo luqhutshwa njengengxenye yocwaningo lokuhlola ngobuchwepheshe. Ukuhlanganyela kwakho ekutadisheni kungukuzithandela. Ngaphambi kokuvuma ukubamba iqhaza, sicela ufunde ulwazi olungezansi bese ubuza imibuzo nganoma yini ongayayiqondi.

INJONGO YEZIFUNDO

olu cwaningo luhlose ukuphenya ukuthi izinhlelo ezisekela abalimi abaphumelelayo kanjani ekuthuthukiseni ukufinyelela kwamakethe kanye nokwehlisa ubumpofu emapulazini abancane abathintekayo besifazane. Imiphakathi esetshenziwe i-Emazabekweni, iNokweja, Hopewell kanye Nemiphakathi yaseCarletown, KwaZulu-Natali

IZINQUBO

Uma uzitholela ukuhlanganyela kulolu cwaningo, uzocelwa ukuba wenze okulandelayo:

- Umhlanganyeli kulindeleke ukuthi aphendule uhlu lwemibuzo esekelwe emibhalweni efanele mayelana nemibuzo yocwaningo.
- Umhlanganyeli kulindeleke ukuthi abambe iqhaza ekuzivocavoceni okubambe iqhaza njengokungabonakali kwe-matrix, amaqembu okugxila ekuqaliseni izingxoxo, amabalazwe engqondo azofuna ukudweba izimpendulo zakho, ukuhamba ngezinyawo ukuze abacwaningi bakwazi ukuqonda impilo yakho yansuku zonke, noVenn imidwebo yokubonisa ubukhosi naphakathi komphakathi.

Isikhathi esilinganisiwe sokubandakanya kuyoba amahora angu-1 kuya kwangu-2

IZINQUBO ZEMPAKATHI NOKUTHUTHUKISA

Ngeke kube khona izingozi ezikhona noma ezibonakalayo, futhi ngeke kube khona ukukhathazeka ngesikhathi sokuhlanganyela kulolu cwaningo.

UKUPHILA

Noma yiluphi ulwazi olutholakala ngokuphathelene nalolu cwaningo futhi olungabonwa nawe luzohlala luyimfihlo futhi luzodalulwa kuphela ngemvume yakho noma njengoba kudingwa umthetho. Ukugcinwa kwemfihlo kuzolondolozwa ngokusebenzisa incwadi yokuvuma esayiniwe kanye nabahlanganyeli abagcinwa engaziwa kulo lonke ukubandakanya kwabo isifundo. Idatha yocwaningo izogcinwa eMnyangweni weGeography of the University of KwaZulu-Natali iminyaka emihlanu.

UKUPHATHISWA KUNYE NOKUBHALA

Ukuhlanganyela kwakho kulolu cwaningo kungukuzithandela. Uma uzivolontiya ukuba ube kulolu cwaningo, ungase uhoxise nganoma yisiphi isikhathi ngaphandle kweminye imiphumela. Futhi ungenqaba ukuphendula noma yimiphi imibuzo ongafuni ukuyiphendula. Uma ukhetha ukuhoxisa kulolu cwaningo, ngeke kube khona inhlawulo.

UKUZIWA KWABASEBENZI

Uma unemibuzo noma ukukhathazeka ngalolu cwaningo, sicela uxhumane no Dkt. Desai ngo - 072 548 1410 noma uLaila Hansrod ku - 060 974 0220.

Mina.....(amagama agcwele womhlanganyeli) ngalokhu ngiyaqinisekisa ukuthi ngiyaqonda okuqukethwe kwale dokhumenti kanye nemvelo yocwaningo lokucwaninga, futhi ngiyavuma ukuhlanganyela emsebenzini wokucwaninga. Ngियाqonda ukuthi ngingenkululeko yokukhipha iphrojekthi nganoma yisiphi isikhathi uma ngifisa.

Igama elifakiwe le ndaba

Isignesha yendaba

usuku

Isignesha yobufakazi

usuku



School of Agriculture, Engineering and Science
 Discipline of Geography
 P/Bag X01 Scottsville
 Pietermaritzburg, 3209
 South Africa

HSSREC Research Office
 University of KwaZulu-Natal
 Research Office: Ethics
 Govan Mbeki Centre
 Tel +27312604557
 Fax +27312604609

Research survey

The effectiveness of the LIMA Farmer Support Program: A comparison study within the Ubuhlebezwe Local Municipality

Survey Details

Date:	
Enumerator Name:	
Village:	
Broiler or crop farm?	

Personal observations of the Enumerator while conducting survey

Does this household have a rainwater tank?	
Is this household in close proximity to a transport route?	
List any visible infrastructure or technology within or surrounding the household:	

Assisted by LIMA Farmer Support Programme?

Yes	
No	

Please tick the appropriate boxes and answer the longer questions where necessary. Multiple responses are allowed where indicated.

1. Demographic Information:

1.1 Gender

1. Male	
2. Female	

1.2 Under which category does this household fall?

1. Male headed	
2. Female headed	
3. Other (specify)	

1.3 Age of respondent

1. 18-25 yrs	2. 26-35 yrs	3. 36-45 yrs	4. 46-55 yrs	5. 56-65 yrs	6. > 65 yrs
--------------	--------------	--------------	--------------	--------------	-------------

1.4 Race classification

1. African	
2. White	
3. Coloured	
4. Indian	
5. Other (specify)	

1.5 Nationality

1. South African	
2. Zimbabwean	
3. Nigerian	
4. Mozambiquan	
5. Other (specify)	

1.6 Home language

1. English	
2. IsiZulu	
3. Xhosa	
4. Afrikaans	
5. Other (specify)	

1.7 Disability

1. Yes	
2. No	

1.7.1 If yes, what disability do you have?

1.8 Education level

1. None	
2. Left in primary school	
3. Left in secondary school	
4. Matriculated	
5. Tertiary qualification (specify)	
6. Other (Specify)	

1.9 Marital status

1. Married	
2. Single	
3. Widowed	
4. Separated	
5. Living with a partner	

1.9.1 Is your spouse a migrant labourer?

1. Yes	
--------	--

2. No	
-------	--

1.10 Is small scale farming your primary source of income?

1. Yes	
2. No	

1.10.1 If not, what type of employment do you hold?

1. Unemployed	
2. Domestic	
3. Labourer	
4. Business owner	
5. Technician	
6. Manager	
7. Artisan	
8. Professional	
9. Grant holder (specify type of grant)	

1.11 Do you suffer from any health issues? (multiple responses)

1. TB	
2. Influenza	
3. Diabetes	
4. High blood pressure	
5. Skin rashes	
6. Cholera	
7. Bilharzia	
8. Asthma	
9. Cancer	
10. Other (specify)	

1.12 How far away is the nearest clinic?

1. <500 m	
2. 0-1 km	
3. 2-5 km	
4. 6-10 km	
5. 11-15 km	
6. 16-20 km	

1.13 Are you the head of your household?

1. Yes	
2. No	

1.13.1 If not, who is the head of your household?

2. Household background information

2.1 Number of people living within your household

0	1	2	3	4	5	6	7	8	9	10	>10

2.2 Main sources of monthly income

<u>Source</u>	<u>Average monthly income received (R)</u>
1. Selling farm harvests at the market	
2. Pensions	
3. Remittances	
4. Wages	
5. Informal income	
6. Broiler sales at the market	
7. Disability grants	

8. Salary of migrant labourer	
9. Other state grant (specify)	

2.3 Does your household own any land?

1. Yes	
2. No	

2.3.1 If not, please identify who the owner of the land is

2.4 Do you own any land?

1. Yes	
2. No	

2.4.1 How did you obtain the land?

2.5 Does your family own any livestock?

1. Yes	
2. No	

2.6 Does your household have access to land for the following?

	<u>Yes</u>	<u>No</u>
Grazing of livestock		
Crop cultivation		

2.6.1 Which activity makes use of most of your land?

1. Grazing of livestock	
2. Cultivation of crops	
3. Other (specify)	

2.7 What are your duties within the household?

2.7.1 Does your family have the number of members that it needs to carry out chores or farming?

1. Yes	
2. No	

2.7.1.1 If no to the above question, please explain how this affects you

2.7.1.2 How does your family cope with this?

2.8 How long have you been living in this area?

1. 1-5 years	
2. 6-10 years	
3. 11-15 years	
4. 16-25 years	
5. 26-30 years	
6. More than 30 years	

2.9 Have you or your family lived elsewhere previously?

1. Yes	
2. No	

2.9.1 If yes, why did you move here?

1. Forced removal	
2. Better prospects	
3. Other (specify)	

2.10 Do any of your family members work in another town?

Yes (specify where)	
No	

2.10.1 If yes, please specify the gender of that individual

1. Male	
2. Female	

2.10.1.1 Please specify the age of that individual

1. 18-25 yrs	2. 26-35 yrs	3. 36-45 yrs	4. 46-55 yrs	5. 56-65 yrs	6. > 65 yrs
--------------	--------------	--------------	--------------	--------------	-------------

2.10.1.2 Please specify the occupation of that individual

1. Domestic	
2. Farm Labourer	
3. Business owner	
4. Technician	
5. Manager	
6. Artisan	
7. Professional	
8. Security guard	
9. Other (specify)	

2.10.1.3 List the most important reason why your family member relocated for employment

2.11 Main source of domestic water

1. Tap water within dwelling	
2. Tap water on site	
3. Public tap	
4. Communal borehole	
5. Rainwater tanks	
6. Flowing stream/river	
7. Dam	
8. Other (specify)	

2.12 Main source of water used for irrigation of crops

1. Hose	
2. Tap water on site	
3. Public tap	
4. Communal borehole	
5. Rainwater tanks	
6. Flowing stream/river	
7. Dam	
8. Irrigation system	
9. Other (specify)	

2.13 Do you have immediate access to water?

1. Yes	
2. No	

2.13.1 If you do not have immediate access to water, how far do you have to travel to access water?

1. <500 m	
2. 0-1 km	
3. 2-5 km	
4. 6-10 km	
5. 11-15 km	
6. 16-20 km	

2.13.2 Do you think that walking further to acquire water puts you more at a risk of being attacked?

1. Yes	
2. No	

2.14 What sources of energy do you use within your household? (Multiple responses)

1. Electricity from public supply	
2. Gas	
3. Paraffin	
4. Wood	
5. Coal	
6. Candles	
7. Dung	
8. Other (specify)	

2.14.1 Do you ever have any challenges with these forms of energy?

1. Yes	
2. No	

2.14.1.1 If yes, what are the challenges?

2.15 Type of dwelling

1. Formal house that is owned by you	
2. Traditional house that is owned by you	
3. Shack or informal housing	
4. RDP Housing	
5. BNG Housing	
6. Other (specify)	

2.16 What type of sanitation does your dwelling have?

1. Septic tank	
2. Chemical toilet	
3. Pit latrine	
4. Bucket toilet	
5. Other (specify)	

2.17 Who owns the house that you live in?

1. Respondent	
2. My family	
3. Employer	
4. Other (specify)	

2.18 Do you own a car?

1. Yes	
2. No	

3. Crop and livestock production

3.1 Do you participate in crop or livestock production?

1. Crop production	
2. Livestock production	

3.2 Where do you grow your crops?

1. Homestead garden	
2. Keyhole garden	
3. Community garden	
4. Fields	
5. Other	

3.2.1 If you have chosen fields for the question above, how many fields do you make use of?

1. 1 field	
2. 2 fields	
3. 3 fields	
4. 4fields	
5. > 4 fields	

3.3 Which crops do you grow in your fields? Please rate their importance according to the legend below:

Importance Rating	Description
1	Use most of the space in my fields to grow this crop / it is very important crop
2	Use quite a lot of the space in my fields for this crop / it is an important crop
3	Use some space in my fields if it is available / do not depend much on this crop
4	Do not grow this crop very often / do not rely much on this crop

<u>Crops</u>	<u>Importance</u>
1. Maize	
2. Wheat	
3. Beans	
4. Potatoes	
5. Sorghum	
6. Fodder	
7. Cabbage	
8. Cauliflower	
9. Other (specify)	

3.3.1 Why do you grow these specific crops?

3.4 Do your crops ever get stolen?

1. Yes	
2. No	

3.4.1 How does this affect you?

3.5 Please estimate the amount (kg) per crop that you harvest in one year

<u>Crops</u>	<u>Amount per year (Kg)</u>
--------------	-----------------------------

1. Maize	
2. Wheat	
3. Beans	
4. Potatoes	
5. Sorghum	
6. Fodder	
7. Cabbage	
8. Cauliflower	
8. Other (specify):	

3.6 Which seasons do you usually plant crops?

1. December – February	
2. March – May	
3. June – August	
4. September - November	

3.7 Do you ever have crops left over for personal consumption?

1. Yes	
2. No	

3.7.1 If no, please elaborate

3.7.1.1 Which crops do you grow for your personal consumption and why?

3.8 Do you grow any fruit?

1. Yes	
2. No	

3.8.1 If yes to the question above, please specify what types of fruit you grow and your choice for growing them

<u>Type of fruit</u>	<u>Reason</u>

3.9 Do you fertilize your fields?

1. Yes	
2. No	

3.9.1 If yes, what do you use as fertilizer?

1. Manure	
2. Stover from crops	
3. Store bought fertilizer	
4. Other (specify)	

3.9.2 Do you buy or receive this fertilizer?

1. Buy	
2. Receive	

3.9.2.1 Please specify where you purchase or receive it from

3.10 Have there been any changes in the conditions of your fields?

1. Fertility	
2. Erosion	
3. Other (specify)	

3.10.1 Please list the causes of these changes?

- 1.
- 2.
- 3.

3.11 Have you received any inputs for your crops?

1. Yes	
2. No	

3.11.1 If yes, who provided you with these inputs?

1. Government	
2. Non-Governmental Organisation (specify)	
3. Community members	

4. Other (specify)	
--------------------	--

3.11.2 What form of inputs did you receive?

1. Seeds	
2. Fertilizer	
3. Pest or disease control	
4. Small implements (such as spades)	
5. Large implements	
6. Tractor	
7. Livestock for ploughing	
8. Conservation agriculture	
9. Other (specify)	

3.12 Have you received any training?

1. Crop production	
2. Marketing skills	
3. Record keeping	
4. Small business management	
5. Other (specify)	

3.12.1 Please specify who has provided you with this training

1. Government	
---------------	--

2. Non-Governmental Organisation (specify)	
3. Community members	
4. Other (specify)	

3.13 Does your household own any livestock? (multiple responses)

Type of Livestock	
1. Cattle	
2. Sheep	
3. Goats	
4. Chickens	
5. Pigs	
6. Horses	
7. Ducks	
8. Donkeys	

3.13.1 How do these livestock benefit you?

<u>Type of Livestock</u>	<u>Benefit</u>
1. Cattle	
2. Sheep	
3. Goats	
4. Chickens	
5. Pigs	
6. Horses	
7. Ducks	
8. Donkeys	

3.13.2 Have any of your livestock died from thirst or hunger in the past 3 years?

1. Yes	
2. No	

3.13.2.1 If yes to the question above, please provide a reason for your livestock deaths.

3.14 How do you prepare your land for the planting season?

1. Tractor provided by the government	
2. By hand	
3. Using livestock	
4. Others (specify)	

3.14.1 Do you face any problems with your chosen method above?

4. Broiler production

4.1 Do you participate in broiler production?

1. Yes	
2. No	

4.1.1 If you do grow broilers, do you receive any inputs?

1. Yes	
2. No	

4.1.1.1 If yes to the above question, please state who provides you with these inputs

1. Government	
2. Non-Governmental Organisation (specify)	
3. Community members	
4. Other (specify)	

4.1.1.2 What type of inputs have you received? (multiple responses)

1. Feed	
2. Chicks	
3. Vaccines	
4. Loan (specify)	
5. Other (specify)	

4.1.1.3 Have you received any training?

1. Yes	
2. No	

4.1.1.3.1 Who has provided you with this training?

1. Government	
2. Non-Governmental Organisation (specify)	
3. Community members	
4. Other (specify)	

4.1.1.3.2 What type of training have you received?

1. Broiler life cycle training (how to raise broilers)	
---	--

2. Marketing skills	
3. Record keeping	
4. Small business management	
5. Other (specify)	

4.2 Where do you grow broilers?

1. Within my household	
2. Structure built by a funder (specify)	
3. Built a structure myself	
4. Renting from someone in the community	
5. Other (specify)	

4.3 Do you sell your broilers in the marketplace?

1. Yes	
2. No	

4.3.1 How much do you sell the broilers for?

1. > R10.00	
2. R11.00 – R25.00	
3. R26.00 – R35.00	
4. R36.00 – R45.00	
5. > R45.00	

5. Climate change

5.1 Have you heard of climate change?

1. Yes	
2. No	

5.1.1 If yes to the above question, please elaborate on your understanding of climate change

5.1.2 Do you think that climate change poses a problem to rural farmers like you?

1. Yes	
2. No	

5.1.2.1 If yes to the question above, please elaborate

5.1.2.2 Have you received any environmental education?

1. Yes	
2. No	

5.2 Have you experienced any effects of changes in our climates?

1. Drought	
2. Extreme hot and cold temperatures	
3. Floods	
4. Other (specify)	

5.3 Have you noticed a decrease in your crop yields in the past 5 years?

1. Yes	
2. No	

5.3.1 If yes to the above question, what do you think has caused this decrease in crop yields?

5.4 How do you cope with the effects of changes in our climates?

1. Planting resistant crops	
2. Jojo tanks to harvest rainwater	
4. Livestock herd management	
5. Crop rotation practices	
6. Rainwater harvesting	
7. Other (Specify)	

5.5. Did you experience any impacts of the recent drought?

1. Yes	
2. No	

5.5.1 When did you start experiencing the effects of the drought?

5.5.2 If yes to the above questions, please describe how the drought impacted on you and your household.

5.6 How do you cope with these challenges that drought imposes on you?

5.7 Does the drought in this area impact on other socioeconomic issues such as unemployment, poverty, and education within your household.

1. Yes	
2. No	

5.7.1 Please elaborate by listing what socioeconomic issues have arisen?

6. Food Security

6.1 How often does your family eat a proper meal?

1. 3 meals every day	
2. 1 meal a day	
3. A few times a week	
4. At school, through feeding schemes	
5. Other (specify)	

6.2 What is your current main source of food?

1. Grown by household	
2. Bought from other local households	
3. Purchased from shops	
4. Collected from the wild (e.g. wild harvested fruits and foods)	
5. Sent by family members	
6. Exchanged with neighbours	
7. Other (specify)	

6.3 In the past 3 years, has the main source of your household food supply changed?

1. Yes	
--------	--

2. No	
-------	--

6.3.1 If yes to the question above, please state how it has changed.

6.3.2 Is there ever a period in the year where there are shortages of food within your household?

1. Yes	
2. No	

6.3.2.1 If yes to the above question, please state when this occurs and how long it lasts for.

6.4 What does most of your meals comprise of?

1. Maize	
2. Vegetables (Bought or grown)	
3. Meat (Bought or grown)	
4. Combination all of the above	
4. Other (specify)	

6.5 What are the reasons for your food choices?

1. Cannot afford anything else	
2. Other food sources are not available in the community	
3. This is what my family prefers	
4. Other (specify)	

6.6 Do you practice food preservation?

1. Yes	
--------	--

2. No	
-------	--

6.6.1 If yes to the question above, what type of foods do you preserve and how do you preserve it?

<u>Food type (such as fruit and veg)</u>	<u>Preservation practice</u>

7. Infrastructure and market access

7.1 Do you have access to the following:

1. Public communication methods (radio or newspaper)	
2. Private communication methods (cellphone)	
3. Television with DSTV	
4. Television without DSTV	

7.1.1 If you have access to any of the above, do you face any challenges with these forms of communication?

1. Yes	
2. No	

7.1.2 If yes to the question above, please describe the challenges that you face.

7.2 How far do you have to travel to get to the nearest transport route (such as national routes, regional routes, informal roads)

1. <500 m	
2. 0-1 km	
3. 2-5 km	
4. 6-10 km	
5. 11-15 km	
6. 16-20 km	

7.2.1 What form of roads do you have within your community?

1. Formal roads	
2. Informal roads	
3. No roads	

7.3 Do you use public transport

1. Yes	
2. No	

7.3.1 If no to the above question, how do you travel?

7.3.2 If yes, what type of transport do you use?

1. Taxis	
2. Busses	
3. Trains	
4. Other (specify)	

7.4 How far do you have to travel to access the closest **village**?

1. <500 m	
2. 0-1 km	
3. 2-5 km	
4. 6-10 km	
5. 11-15 km	
6. 16-20 km	

7.5 How far do you have to travel to access the closest **town**?

1. <500 m	
2. 0-1 km	
3. 2-5 km	
4. 6-10 km	
5. 11-15 km	
6. 16-20 km	

7.6 How far do you have to travel to access the nearest market?

1. <500 m	
2. 0-1 km	
3. 2-5 km	
4. 6-10 km	
5. 11-15 km	
6. 16-20 km	

7.6.1 Please name the closest market to you

7.6.2 Do you trade your crops at this market?

1. Yes	
2. No	

7.6.3 How do you access this market?

1. Walk	
2. Public transport	
3. Catch a lift	
4. Use private car	
5. Other (specify)	

7.6.3.1 If you walk to markets in the question above, do you feel that you are more prone to being attacked?

1. Yes	
2. No	

7.6.3.2 Approximately how much does it cost you to access the market in your chosen mode of transport?

1. > R10.00	
2. R11.00 – R25.00	
3. R26.00 – R35.00	
4. R36.00 – R45.00	
5. > R45.00	

8. Market participation

8.1 Do you have access to markets in which to sell your crops?

1. Yes	
2. No	

8.2 How often do you trade at/ supply these markets?

1. Once a week	
2. Twice a week	
3. Three times a week	
4. Four times a week	
5. > Five times a week	

8.3 Please select the crop(s) that are purchased the most (multiple responses)

1. Maize	
2. Wheat	
3. Beans	
4. Potatoes	
5. Sorghum	
6. Fodder	
7. Cabbage	
8. Cauliflower	
9. Other (specify):	

8.4 How much do you sell these crops for? (R)

1. Maize	
----------	--

2. Wheat	
3. Beans	
4. Potatoes	
5. Sorghum	
6. Fodder	
7. Cabbage	
8. Cauliflower	
9. Other (specify):	

8.5 Does your profit from market participation allow you to maintain your livelihood?

1. Yes	
2. No	

8.6 Are you prone to gender discrimination in the market place?

1. Yes	
2. No	

8.6. 1 If yes to the above question, please elaborate:

8.6.2 How do you access the financial resources that allow market participation? (multiple responses)

<u>Type of loan</u>	
Bank loans	
Loans from neighbours	
Loans from NGOs	
Other (specify)	

8.6.2.1 Please explain how you pay back these loans

9. Extension services

9.1 Have you received any extension support, training or development workshops?

1. Yes	
2. No	

9.1.1 What type of extension support, training or workshops have you received?

9.1.2 If yes to the above question, has this assistance been from LIMA?

1. Yes	
--------	--

2. No	
-------	--

9.1.2.1 If yes to the above question, please elaborate

9.1.3 Do you feel that these extension services have improved living conditions within your household?

1. Yes	
2. No	

9.1.3.1 Please elaborate:

9.1.4 Did this programme create jobs within your community?

1. Yes	
2. No	

9.1.5 What kind of jobs has this programme created?

1. Permanent	
2. Seasonal	
3. Temporary	

9.1.6 Do you employ fellow community members to assist you?

1. Yes	
2. No	

9.1.7 What type of employment do you provide to your fellow community members?

1. Permanent	
2. Seasonal	
3. Temporary	

9.1.8 Are there LIMA personnel who check up on the site?

1. Yes	
2. No	

9.1.8.1 Do these personnel interact with the community by providing advice and conveying community messages back to LIMA?

1. Yes	
2. No	

9.1.9 Do you feel as if the skills you have learnt from LIMA have been beneficial?

1. Yes	
2. No	

9.1.10 Is there good communication between the community, the facilitator and LIMA personnel?

1. Yes	
2. No	

9.1.10.1 How do community members convey their needs to LIMA?

10. Suggestions

10.1 Has your community had intervention from Non-Governmental Organisations (NGOs)

Yes	
No	

10.1.1 , Do you think it has made a difference amongst your community?

Yes	
No	

10.1.2 Please elaborate

10.2 Do you think that there needs to be more government interventions?

Yes	
No	

10.2.1 Please list the types of interventions that you think the government needs to provide:

The end. Thank you for your participation.

Appendix 2: Ethical Clearance



25 April 2018

Ms Laila Hansrod (213504378)
School of Agricultural, Earth & Environmental Sciences
Pietermaritzburg Campus

Dear Ms. Hansrod,

Protocol reference number: HSS/0326/018M

Project Title: The effectiveness of a non governmental farmer support programme in increasing access to agricultural markets and reducing poverty amongst female-headed farms: A comparison between subsidised farms and non-subsidised farms within the Ubuhlebezwe Local Municipality

Approval Notification – Expedited Application

In response to your application received 17 April 2018, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Professor Shenuka Singh (Chair)

/ms

Cc Supervisor: Dr Sumalya A Desai and M: Lucky Nkomo
Cc Academic Leader Research: Professor Hussein Shimelis
Cc School Administrator: Ms Marsha Manjoo

Humanities & Social Sciences Research Ethics Committee

Professor Shenuka Singh (Chair)

Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X5400, Durban 4000

Telephone: +27 (0) 31 292 3597/8336/4347 Facsimile: +27 (0) 31 292 4809 Email: ethics@ukn.ac.za / ethics@ukn.ac.za / ethics@ukn.ac.za

Website: www.ukn.ac.za



100 YEARS OF ACADEMIC EXCELLENCE

Five Campus: ■ Edgewood ■ Howard College ■ Medical School ■ Pietermaritzburg ■ Westville