

**AGRICULTURE LAND ABANDONMENT AND RURAL
DEVELOPMENT IN SOUTH AFRICA**

APHIWE MGUSHELO

2019

**AGRICULTURE LAND ABANDONMENT AND RURAL DEVELOPMENT
IN SOUTH AFRICA**

By

APHIWE MGUSHELO

Student nr: 211167673

Submitted in partial fulfilment of the requirements for the degree of Master of
Philosophy in Development Finance

In the

**FACULTY OF BUSINESS MANAGEMENT, DEPARTMENT OF DEVELOPMENT
STUDIES**

At the

NELSON MANDELA UNIVERSITY

Supervisor: Dr A. Bara


April 2019

DECLARATION

NAME: Aphiwe Mgushelo
STUDENT NUMBER: 211167673
QUALIFICATION: Master of Philosophy in Development Finance
TITLE OF RESEARCH: Agriculture Land Abandonment and Rural Development in South Africa

I, Aphiwe Mgushelo (211167673), in accordance with Rule G4.6.3, hereby declare that the above-mentioned treatise is my own work and that it has not previously been submitted for assessment or completion of any postgraduate qualification to another University or for another qualification.

Intention and permission to submit this research has been granted and is attached as Annexure D and Annexure E.

Signature: 

Aphiwe Mgushelo

Date:9/1/19.....

DEDICATION AND ACKNOWLEDGEMENT

To God, my Father and my Lord and Saviour, Jesus Christ.

I would like to thank the following people:

- Dr Bara, my supervisor, for his demonstrated commitment from the onset as well as his continuous guidance and constructive criticism throughout the entire research work;
- Anathi “Shubalala” Mahanana, for assisting me to collect the primary data;
- Mnu. Groto Ndabayithethwa, uMbhele, the headmen of Julukuqu, for granting us the permission to conduct this study in the village and further making data collection a possibility through the seating of *Imbizo* at his place;
- Mr Cyril Sandla Tokwana, the councillor of ward 18 (including Julukuqu) for availing himself and his contribution to the study;
- People of Julukuqu for their time, space and contribution to this study;
- Dr Busisiwe “mam’Tussy” Lujabe, umakhulu, for encouragement, providing a conducive environment for learning and living, and for preparing me for data collection and handling;
- The rest of my family and friends for allowing me to pursue the MPhil in Development Finance and granting me a conducive environment for living and learning. I am also grateful for the counsel and prayers rendered to complete the programme; and
- I acknowledge the vital, awakening and effective intervention of ORGANO™ BLACK – with its sophisticated taste, unmatched quality and PH balancing effect. It’s Premium and for Royalty. I recommend *Organo™ with Amos* for every student. Every students needs ORGANO™, not the energy that ‘coffee’ and ‘energy drinks’ provide with dire health consequences. The work must be done, but your health is still important. For me, it became God’s wisdom to finishing two Masters degrees at a go. Nonetheless, even ORGANO™ cannot replace water.

ABSTRACT

Vast amounts of agriculture lands have been abandoned over the last decades, worldwide – phenomenally in rural areas (Filho et al., 2016). In South Africa, Agriculture Land Abandonment (ALA) is apparent even to the human eye, but little or nothing is known about it, especially regarding its causes and implications for rural socio-economic development. Agriculture Land Abandonment is critical and highly topical given the ongoing debate on the land issue in South Africa (Friedman, 2018; Maromo, 2018). Moreover, the National Development Plan (NDP) identifies agriculture as the main economic activity in rural areas, with the potential to create nearly 1 million new jobs and as a primary means to achieve rural development by 2030 (National Planning Commission (NPC), 2011). To this end, the land must be cultivated to provide work and to banish poverty.

This research focuses on Julukuqu, a rural village in the former Transkei homeland, within the O.R. Tambo District in the Eastern Cape province. This research intends to indent and propose a solution for rural development by understanding the causes and consequences of Agriculture Land Abandonment and identifying measures to address this issue. By analysing satellite imagery of the study area over a 15-year period, we are able to establish the extent of Agriculture Land Abandonment. Individual interviews and a focus group discussion were conducted and analysed to provide an understanding of the official positions and grassroots lived experiences. Altogether, the data that was collected yielded 17 usable interviews, which were subjected to thematic analyses.

The findings of this research are that: the croplands of Julukuqu were once totally cultivated, but they are now almost (all) totally abandoned with only one person still cultivating their now reduced cropland. The causes of ALA in Julukuqu are socio-economic, environmental and political in nature. Due to schooling, children are no longer herding the livestock and it is free-ranging and grazing within the people's croplands – in season and out of season. Coupled with an irrigation system, because of drought, fencing has thus become a principal determinant of cultivation of the croplands.

The abandonment of the croplands has left the households insecure and depending mainly on social grants for income and food, including the very maize they once produced and sold a surplus. Hunger has become a rural denominator – striking both the people and their livestock, and crime has risen with unemployment. Moreover, child schooling and youth reluctance, threaten the succession and sustainability of agriculture as a rural livelihood and business.

Despite the abandonment of the croplands, agriculture is still seen as a key to poverty alleviation and socio-economic development in Julukuqu. Given the experienced consequences of ALA, there exists a strong desire and will among the people of Julukuqu to cultivate their abandoned croplands once again. Fundamentally, for the people to meet their common socio-economic needs and challenges, they need to address ALA in Julukuqu through the development of an agricultural co-operative, which needs financial and non-financial support to develop and succeed.

Keywords: Agriculture, Agriculture Land Abandonment, Cropland, Cultivation, Crop Production, Rural Development, Julukuqu, Eastern Cape, South Africa

LIST OF FREQUENTLY USED ABBREVIATION

ALA	Agriculture Land Abandonment
CRDP	Comprehensive Rural Development Programme
DGDS	District Growth and Development Strategy
DRDLR	Department of Rural Development and Land Reform
ECSECC	Eastern Cape Socio Economic Consultative Council
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FGDR	Focus Group Discussion Respondent
GDP	Group Domestic Product
GOSA	Government of South Africa
KSDLM	King Sabata Dalindyebo Local Municipality
NDP	National Development Plan
Ntinga	Ntinga O.R. Tambo Development Agency
PGDS	Provincial Growth Development Strategy
PGEC	Provincial Government of the Eastern Cape
O.R. Tambo DM	O.R. Tambo District Municipality
RSA	Republic of South Africa
Stats SA	Statistic South Africa

LIST OF FIGURES

	Page
Figure 1: Provincial and Regional Location of KSDLM; geographic location of the study area	5
Figure 2: Average growth rate in agriculture in O.R. Tambo DM.....	24
Figure 3: Sustainable (rural) livelihoods analysis framework	29
Figure 4: Arial view of Julukuqu with some of its croplands	62
Figure 5: With Official 1 (on the left), the headmen of Julukuqu, after an interview – a day before Imbizo	64
Figure 6: The headmen’s place.....	67
Figure 7: Main source of income of respondents, and in Julukuqu in general..	75
Figure 8: Agriculture Land Abandonment in Julukuqu, 2002-2017.....	81
Figure 9: Headmen’s fenced and cultivated cropland	82
Figure 10: Money spending.....	91
Figure 11: Livestock and the fence protecting Mokolweni croplands on the right	100

LIST OF TABLES

	Page
Table 1: Impacts of agricultural land abandonment, according to FAO.....	38
Table 2: Estimated Eastern Cape migration streams, 2001 – 2016.....	51
Table 3: Individually interviewed respondents	74
Table 4: Overview table of themes and sub themes	77

LIST OF APPENDICES

	Page
Annexure A: Permission to conduct academic research.....	136
Annexure B: Consent form	138
Annexure C: Interview guide.....	139
Annexure D: Intention to submit.....	146
Annexure E: Letter for proof of treatise edit	147
Annexure F: Turnitin Report	148

TABLE OF CONTENTS

DECLARATION.....	I
DEDICATION AND ACKNOWLEDGEMENT	II
ABSTRACT	III
LIST OF FREQUENTLY USED ABBREVIATION	V
LIST OF FIGURES.....	VI
LIST OF TABLES.....	VII
LIST OF APPENDICES.....	VIII

CHAPTER ONE

INTRODUCTION AND CONTEXT

1.1 INTRODUCTION	1
1.2 BACKGROUND AND CONTEXT TO THE STUDY	2
1.3 STUDY AREA.....	4
1.4 THE RESEARCH PROBLEM	7
1.5 RESEARCH AIMS, OBJECTIVES AND QUESTIONS	8
1.5.1 Research aim.....	8
1.5.2 Research objectives.....	8
1.5.3 Research questions	9
1.6 SCOPE AND SCALE OF RESEARCH	9
1.7 RESEARCH METHODOLOGY.....	9
1.8 STUDY OUTLINE	10
1.9 CHAPTER SUMMARY	11

CHAPTER TWO

SOUTH AFRICAN POLICY AND CONTEXT OF AGRICULTURE LAND ABANDONMENT AND RURAL DEVELOPMENT

2.1 OVERVIEW	12
--------------------	----

2.2	RURAL DEVELOPMENT, AGRICULTURE AND LAND IN SOUTH AFRICA: CURRENT LANDSCAPE AND INSTITUTIONAL FRAMEWORK.....	12
2.2.1	Rural development.....	13
2.2.2	Agriculture and land	13
2.2.3	Situational analysis	14
2.2.4	Institutional framework	17
	2.2.4.1 <i>National departments and agencies</i>	17
	2.2.4.2 <i>Provincial government and municipalities (local government)</i>	18
2.3	RURAL AND AGRICULTURAL DEVELOPMENT STRATEGY AND PROGRAMMES	19
2.3.1	District growth and development strategy of the O.R. Tambo Region	19
	2.3.1.2 <i>Crop (grain and vegetables) production</i>	20
	2.3.1.3 <i>Ntinga OR Tambo Development Agency</i>	21
2.4	CHAPTER SUMMARY	24

CHAPTER THREE

LITERATURE REVIEW

3.1	OVERVIEW	26
3.2	DESCRIPTION OF KEY CONCEPTS	26
3.2.1	Agriculture and Agriculture Land Abandonment.....	26
3.2.2	Depopulation	27
3.2.3	Rural, livelihoods and rural development	27
	3.2.3.1 <i>Rural</i>	27
	3.2.3.2 <i>Rural in descriptive and socio-economic terms</i>	27
	3.2.3.3 <i>Livelihoods</i>	28
	3.2.3.3.1 Defining the livelihoods concept	28
	3.2.3.3.2 Understanding sustainable livelihoods	28

3.2.3.3.3	Explanation of the sustainable livelihoods framework	29
3.2.3.3.4	Understanding rural livelihoods	30
3.2.3.4	<i>Rural development</i>	30
3.2.4	Poverty.....	31
3.2.5	Food security	31
3.3	THEORETICAL LITERATURE REVIEW	32
3.3.1	Theoretical concept.....	32
3.3.2	The process of Agriculture Land Abandonment: static versus dynamic	32
3.3.3	Change in use: abandonment of agriculture versus land abandonment	33
3.4	EMPIRICAL LITERATURE REVIEW	34
3.4.1	Agriculture (land) abandonment and rural development	34
3.4.1.1	<i>Decline of agriculture and Agriculture Land Abandonment</i> ...	35
3.4.2	Causes and consequences of Agriculture Land Abandonment in Europe	36
3.4.2.1	<i>Causes of Agriculture Land Abandonment</i>	36
3.4.2.2	<i>Consequences of agricultural land abandonment</i>	37
3.4.3	Agriculture Land Abandonment in South Africa	39
3.4.3.1	<i>Occurrence and extent</i>	39
3.4.4	Causes and consequences of Agriculture Land Abandonment in South Africa	41
3.4.4.1	<i>Socio-economic and political</i>	43
3.4.4.1.1	Land dispossession and marginalisation of Africans	43
3.4.4.1.2	Migrant-labour system.....	44
3.4.4.1.2.1	The people and the land: origin	45
3.4.4.1.3	Decline of agricultural production, de-agrarianisation	
	and dependency on employment and	
	non-agricultural incomes	47
3.4.4.1.4	Food security and dependency on supermarkets.....	48

3.4.4.1.5	Rural-urban migration and rural population decline	49
3.4.4.1.6	The triple challenge: inequality, poverty and unemployment	51
3.4.4.1.6.1	The geography of poverty: rural poverty and urban pressure.....	52
3.4.4.2	<i>Environmental</i>	53
3.4.4.2.1	Region and capability: land suitability and fertility, and climate conditions.....	53
3.4.5	Policies and instruments for Agriculture Land Abandonment.....	54
3.5	CHAPTER SUMMARY	56

CHAPTER FOUR

METHODOLOGY, RESEARCH DESIGN AND METHODS

4.1	INTRODUCTION	58
4.2	METHODOLOGY	58
4.3	RESEARCH DESIGN	59
4.3.1	Research paradigm.....	59
4.4	SCOPE AND SCALE OF THE STUDY.....	60
4.4.1	Study area.....	61
4.5	STUDY POPULATION AND SAMPLING	63
4.5.1	Study population and sample.....	63
4.5.2	Sampling technique.....	63
4.6	DATA COLLECTION METHODS	64
4.6.1	Primary data.....	65
4.6.1.1	<i>Individual interviews</i>	65
4.6.1.2	<i>Focus group discussion (Imbizo)</i>	66
4.6.3	Secondary data.....	68
4.6.3.1	<i>Satellite imagery</i>	68
4.7	DATA ANALYSIS.....	69
4.8	DATA VALIDATION.....	70
4.9	ETHICAL CONSIDERATIONS	70

4.10	CHAPTER SUMMARY	71
------	-----------------------	----

CHAPTER FIVE

FINDINGS AND INTERPRETATION OF DATA

5.1	OVERVIEW	72
5.2	DEMOGRAPHIC INFORMATION OF THE RESPONDENTS	72
5.3	THEMES AND SUB THEMES	76
5.4	THEME 1: EXTENT OF AGRICULTURE LAND ABANDONED	78
5.4.1	Subtheme 1: history of crop production in Julukuqu	78
5.4.2	Subtheme 2: extent of Agriculture Land Abandonment in Julukuqu..	79
5.5	THEME 2: CAUSES OF AGRICULTURE LAND ABANDONMENT.....	82
5.5.1	Subtheme 1: socio-economic.....	83
5.5.1.1	<i>Infrastructure:Livestock, schooling and fencing</i>	83
5.5.1.2	<i>Old-age and health</i>	84
5.5.1.3	<i>Abandonment of indigenous practice called ilima and the rise of individualism.....</i>	84
5.5.1.4	<i>Rural-urban migration and employment.....</i>	85
5.5.1.5	<i>Youth reluctance.....</i>	86
5.5.2	Subtheme 2: environmental	86
5.5.2.1	<i>Climate change: drought.....</i>	86
5.5.3	Subtheme 3: political.....	88
5.5.3.1	<i>Withdrawal and lack of government support.....</i>	88
5.6	THEME 3: SOCIO-ECONOMIC CONSEQUENCES OF AGRICULTURE LAND ABANDONMENT	89
5.6.1	Subtheme 1: decline in cultivated agriculture land area, crop production; loss of livelihood, heritage and income.....	89
5.6.2	Subtheme 2: consumption without production	90
5.6.2.1	<i>Food insecurity and dependency on social grants and supermarkets for food</i>	90

5.6.3	Subtheme 3: de-agrarianisation, dependence on employment and rural population decline	92
5.6.4	Subtheme 4: Poverty, Unemployment and Crime	94
5.6.5	Subtheme 5: Lack of Livelihood/Business Succession	96
5.6.6	Subtheme 6: Dependency on Government Projects and Support.....	97
5.7	THEME 4: TOWARD REVIVING AGRICULTURE AND RURAL SOCIO-ECONOMIC DEVELOPMENT	98
5.7.1	Subtheme 1: Desire and will to cultivate the abandoned croplands again	98
5.7.2	Subtheme 2: agri-infrastructure and implements	98
	5.7.2.1 <i>Fencing and irrigation system</i>	98
	5.7.2.2 <i>Land tillers and tractors</i>	101
5.7.3	Subtheme 3: Leadership and Agri-Training.....	101
5.7.4	Subtheme 4: community pro-activism and co-operation	102
5.7.5	Subtheme 5: intensification of production for commercial purpose .	103
5.7.6	Subtheme 6: reversing rural population decline	104
5.8	CHAPTER SUMMARY	104

CHAPTER SIX

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

6.1	OVERVIEW	106
6.2	SUMMARY OF THE RESEARCH CHAPTERS AND CONCLUSIONS	106
6.3	RESEARCH FINDINGS, CONCLUSIONS AND RECOMMENDATIONS....	107
6.3.1	Summary of research findings	107
6.3.2	Conclusions	108
6.3.3	Recommendations	109
	6.3.3.1 <i>Co-operative development and support</i>	109
	6.3.3.2 <i>Agri-infrastructure</i>	111
	6.3.3.3 <i>Leadership</i>	111

6.3.3.4	<i>Bring back abandoned cropland into cultivation</i>	111
6.3.3.5	<i>Agri-training</i>	112
6.3.3.6	<i>Policy measures against Agriculture Land Abandonment: direct agricultural subsidies</i>	112
6.3.3.7	<i>Intensification of agriculture for commercial purposes</i>	112
6.3.3.8	<i>Youth participation in agriculture</i>	113
6.3.3.9	<i>Family livelihood/business succession plans</i>	113
6.3.3.10	<i>Education and community service</i>	114
6.3.3.11	<i>Gender</i>	114
6.4	RECOMMENDATIONS FOR FUTURE RESEARCH	115
6.5	SUMMARY	115
	REFERENCE LIST	117
	ANNEXURES	135
	Annexure A: Permission to conduct academic research	136
	Annexure B: Consent form	138
	Annexure C: Interview guide	139
	Annexure D: Intention to submit	146
	Annexure E: Letter for proof of treatise edit	147
	Annexure F: Turnitin Report	148

CHAPTER ONE

INTRODUCTION AND CONTEXT

1.1 INTRODUCTION

Agriculture Land Abandonment (ALA) is a global phenomenon with vast amounts of land having been abandoned over the last decades worldwide and it is even more serious in Africa (Filho, Mandel, Al-Amin, Feher. & Jabbour, 2016). In South Africa, ALA is apparent even to the human eye, but little or nothing is known about it, especially the causes and implications it has for rural socio-economic development. In Europe, where most studies are conducted, drivers of ALA range between environmental and socio-economic changes (Cramer, Hobbs & Standish, 2008). Moreover, several studies conducted from and on other continents, particularly on Europe, reveal that land abandonment is a major hindrance to the efforts towards achieving sustainable development in rural areas. It also means potential livelihood and income losses to people living in such areas (Filho et al., 2016).

Rural development is a national imperative in South Africa, as declared in the National Development Plan (NDP), the country's blueprint for poverty and inequality reduction as well as economic growth. To this end, the NDP identifies agriculture as the main economic activity in rural areas, with the potential to create nearly 1 million new jobs and consequently, as a primary means, to achieve rural development by 2030 (NPC, 2011). Therefore, as a major hindrance to sustainable development in rural areas, ALA needs to be addressed.

This study aims to address ALA in the rural areas of South Africa by determining its extent, causes and consequences. The study uses Julukuqu, a village located in the former homeland within the Eastern Cape Province, as a case study area. The motivation for using this village is that the croplands evidently lay fallow while people are poor and increasingly urbanising. In addition to this, some background and empirical literature research exist on ALA in the Eastern Cape, though it is predominantly ecological. Satellite imagery is analysed to establish the extent of ALA in Julukuqu.

1.2 BACKGROUND AND CONTEXT TO THE STUDY

The rural areas of South Africa are apparently and widely acknowledged as poor and underdeveloped. This is mainly attributed to the history of colonialism and the apartheid regime/system/era. Whether passing by or travelling in or across or over the rural areas of South Africa, it is almost impossible to overlook or to not see the vast amounts of lands that have been left uncultivated as well as desolate and lying in waste. For the inhabitants, this is an everyday sight and a source of poverty, lack, hunger, despair, depression, suffering and hardship. These lands used to be tilled and sown as even the contour lines attest to this.

Land remains critical to humanity, even in biblical terms, for it is evident that the restoration of man is not complete without the restoration and revitalisation of the land and their livelihoods.

“And the desolate land shall be tilled, whereas it lay desolate in the sight of all that passed by. And they shall say, This land that was desolate is become like the garden of Eden” (Ezekiel, King James Version, 36:34-35).

Moreover, the land should be cultivated and replanted, because “He who tills the land will have plenty of bread” (Proverbs, King James Version, 12:11; 28:19).

Notwithstanding this observation, agriculture retains a crucial role in the socio-economic development in the country, as enshrined in the NDP. The NDP was accepted and launched in 2012 by the Government of South Africa (GOSA), as the blueprint of how the country intends to tackle poverty and inequality in the country through inclusive economy and sustainable economic growth by 2030. The NDP acknowledges agriculture as the primary rural economic activity with the potential of the sector to create close to 1 million new jobs by 2030. It also acknowledges an increase in agricultural production as a key requirement to address, mainly, rural poverty and food insecurity (NPC, 2011). Essentially, this means that agriculture is the main key to sustainable rural socio-economic development.

To achieve rural development, the NDP recommended, amongst other things, a re-focus on agricultural research, complemented by improved and extended skills development and training in the agricultural sector (Oberholster, 2014). This study is

in line with this recommendation and is encouraged to achieve South Africa's rural development goal, which is also declared in the NDP.

Preceding the NDP, in 2009, GOSA declared rural development and land reform as one of the five priorities on the national agenda. The Department of Rural Development and Land Reform (DRDLR) was established in May the same year (DRDLR, 2013). The department was tasked to constructively reform patterns of land ownership and to create jobs and provide infrastructure in order "to develop vibrant and sustainable rural communities" (DRDLR, 2013). This became the vision of the Comprehensive Rural Development Programme (CRDP) of South Africa (Gwanya, 2010). *Comprehensive rural development and land reform* was also encapsulated in the NDPs' national outcomes.

The President of South Africa, at the time, mandated the new DRDLR to come up with and implement a CRDP countrywide and this led to the development of "a fresh approach to rural development" (Spatial Planning and Information, 2009). In fulfilling its mandate, the department produced the strategy of 'agrarian transformation', intended for "a rapid and fundamental change, in the use and control (patterns of ownership across race, gender, and class) of land, livestock and cropping" (DRDLR, 2013:3). Social cohesion and development was the declared objective and the CRDP was conceptualised as the principal policy and implementation framework to realise this. The focus of the programme is on enabling/empowering rural people to take charge of their destiny. This is done with government support, thereby dealing effectively with rural poverty through maximum natural resources use and management (DRDLR, 2013).

Finally, this study occurs at the time when the Parliament of South Africa, the law-makers, have passed a motion for 'land expropriation without compensation', sparking the national debate on the land issue (Friedman, 2018; Maromo, 2018). This is also attracting international interest and anxiety. It also takes place at the time when over 60% of the population is living in urban areas where urbanisation is an ongoing process (The Presidency of the Republic of South Africa (The Presidency), 2014). It takes place at a time when unemployment seats at 26.7% in the fourth quarter of 2017 (Stats SA, 2018). Of the estimated 9.3 million unemployed citizens in South Africa in 2017, 6 million are under the age of 35 (Pepper, 2018). On average, South Africa's

youth unemployment rate has been 51.95% from 2013 until 2017, reaching an all-time high of 55.90% in the second quarter of 2017 (Trading Economics, 2018).

Questions arise, such as – who will work the land and what is the hope for rural areas when the young and skilled are leaving these areas? Who will work the land and maintain the socio-economic infrastructure when the youth is currently unemployed, yet abandoning available lands and agriculture? When the very land on which agriculture ought to take place is being abandoned, will the NDP be achieved?

Based on the above, it can be said that for agriculture to thrive along with the sustainable development of rural areas, ALA must be addressed.

1.3 STUDY AREA

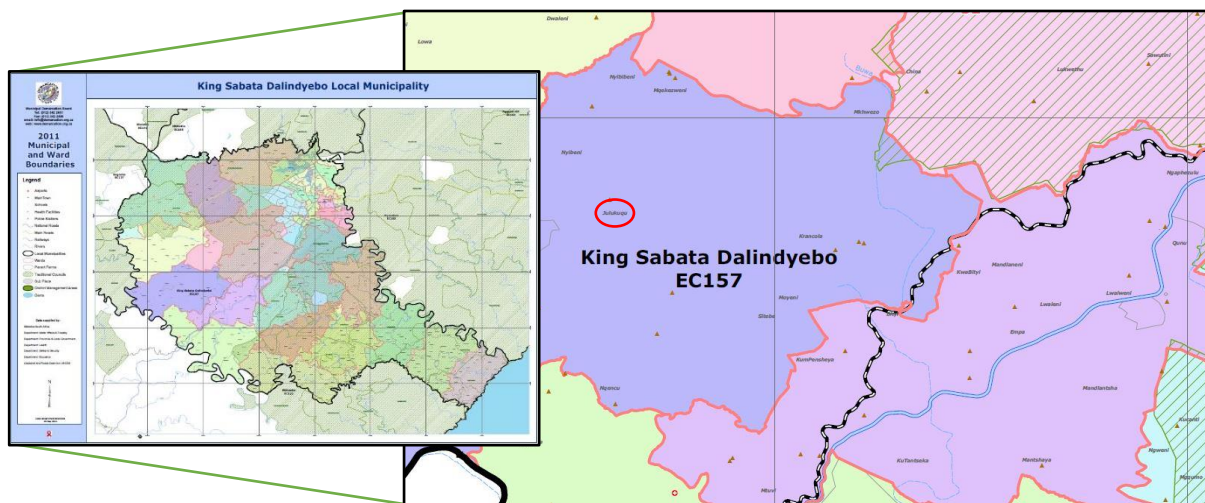
The area of focus of this study is Julukuqu, a village in the province of the Eastern Cape. This village was chosen as a case study because of the vast fallow and desolate hectares of lands that it possesses. Moreover, it was also chosen because of its familiarity to the researcher's upbringing. The Eastern Cape is often characterised as a 'rural province' (Mlomzale, 2014). About 60% of the land in the province is rural (Stats SA, 2009). This designation automatically puts the focus on issues of land (Mlomzale, 2014). The province integrates the two former homelands of Transkei and Ciskei, fragmented reserves designed under apartheid and systematically underdeveloped by depriving them of their sustainable investment and the continuous outmigration of its productive workforce (Provide Project, 2005). A number of difficulties face the province. Such difficulties include a high rate of unemployment, poverty, purchasing food commodities at high prices and poor infrastructure ((Hemson, Meyer & Maphunye, 2004; Mlomzale, 2014).

Little to nothing is known, written or published about Julukuqu rural village, the study area. Geographically, Julukuqu is located in the Eastern Cape Province's former Transkei homeland in Mthatha, under the King Sabata Dalindyebo Local Municipality (KSD LM) (see Figure 1, below). The King Sabata Dalindyebo Municipality is a category B municipality that is situated within the O.R. Tambo District Municipality (O.R. Tambo DM or District) in the Eastern Cape Province. It is the largest of the five municipalities in the district, covering an area of 3027km² of the 12087km² of the

entire O.R. Tambo District, thus accounting for a quarter of its geographical area (KSD LM, 2016).

The municipality has 36 wards. Julukuqu is located in ward 18, including among others, Bityi and Mqhekezweni, which is part of the 8 surrounding and far wards in the municipality with a significantly high rate of unemployment. In terms KSD LM 2016/17 Integrated Development Plan, roads, water & sanitation, RDP houses, electricity, Local Economic Development (LED) and agriculture were the ward priorities (KSD LM, 2016).

Figure 1: Provincial and Regional Location of KSDLM; geographic location of the study area



Source: Demarcation Board, 2011

The majority of the municipality resides in the rural areas, where they still practice cultural tradition and agriculture, although agriculture is of a more subsistence nature (KSD, 2016; Eastern Cape Socio Economic Consultative Council (ECSECC), 2017). The main Cities and Towns are Mqanduli and Mthatha (previously Umtata) (ECSECC, 2017).

In terms of demographics, of all the other regions (King Sabata Dalindyebo, Ngquza Hill, Port St Johns, Nyandeni and Mhlontlo) within the O.R. Tambo DM, the KSD LM was the most populous local municipality in 2016. In 2016, the KSD LM had a population of 488 349 constituting 99.1% Black Africans (Africans). The dominant language is isiXhosa as a home language to 97.9% of the KSD LM population. The females are more than the males and they constitute 53.5% of the population, while

46.5% is males (ECSECC, 2017). With 74% of the people aged 1 to 35 years, KSD LM has a very youthful population. This also means that the majority of the population are at school going ages (KSD LM, 2016). Yet the level of education is not commendable as a large number of people either have some secondary (37.4%), grade 12/matric (22.2%) or no schooling (15.9%) (ECSECC, 2017).

In 2016, agriculture was practiced by 37 168 of the total of 115 894 households (32.1% of the KSD LM households), farming cattle and goats, mostly between 1 and 10, and sheep mostly between 11 and 100. The types of agricultural activities include livestock production, poultry production, vegetable production and other. Economically, the KSD LM contributed 64.93% (more than all the other municipalities) to the O.R. Tambo DM GDP of R37.9 billion in 2016 and an increase in the share from 63.64% in 2006. The main economic sectors are community services (which includes government), finance and trade, contributing 35%, 24% and 23% respectively towards the Gross Value Added (GVA). Manufacturing (4%), construction (4%), agriculture ((1% as formal employment sector) and mining (0%), respectively are the minor economic sectors (ECDECC, 2017).

The KSD Local Municipality had an unemployment rate of 30.0% (about 30 200 people) in 2016, from 28.6% (about 20 900) in 2006. In 2016, the total number of people who are unemployed within the KSD LM, constitutes 37.47% of the total number of unemployed people in the O.R. Tambo District. The unemployed accounts for all people between 15 and 65 who are currently not working, but who are actively looking for work. The community services (35%) and trade (25%) sectors recorded the largest number of total employment while agriculture (2%), mining (0%) and electricity (0%) recorded the lowest number of total employment (i.e. formal and informal employment) in 2016 (ECSECC, 2017). Moreover, the dependency ratio seat at 61.8%, in 2016 (ECSECC, 2017), indicates a considerable degree of reliance on government support. Historically, during the colonial and apartheid period, but also since the dawn of the constitutional democracy, the District has seen high migration levels both from the Local Municipality to other parts of the country, and within the District, from rural to urban and peri-urban areas. This migration is reported to be for mainly economic and life style reasons (KSD LM, 2016).

Development in the KSD Local Municipality is a matter of serious concern. According to ECSECC (2017), in 2016, the Human Development Index (HDI) of KSD LM was 0.571 in comparison to the O.R. Tambo DM with a HDI of 0.53, 0.596 of Eastern Cape and 0.653 of National total as a whole. In the same year, in terms of the percentage of people living in poverty for each of the regions within the O.R. Tambo DM, Port St Johns local municipality had the highest percentage of people living in poverty, with a total of 81.7%. The lowest percentage of people living in poverty, can be observed in the KSD LM, though it is still high with a total of 67.0% - this is a 7.53% decrease from 74.56% in 2006. There were 331 000 people living in poverty across KSD LM in 2016 and this is 1.56% higher than the 326 000 people in 2006. The population group with the highest percentage of people living in poverty, were Africans with a total of 75.2% people living in poverty. The Municipality used the upper poverty line definition. The upper poverty line is defined by Stats SA as the level of consumption at which individuals are able to purchase both sufficient food and non-food items without sacrificing one for the other (ECSECC, 2017). The implication therefore is that the number and percentage of people actually living in poverty, may be understated.

1.4 THE RESEARCH PROBLEM

Given the above socio-economic realities in the Eastern Cape and KSD Municipality, the need to eliminate poverty and reduce inequality, and to bring about sustainable socio-economic development in rural communities, cannot be ignored. The problem of vast amounts of agriculture lands that are abandoned in these areas, is visible to the human eye, especially throughout the rural territories of the Eastern Cape Province, yet, this is seemingly overlooked. Yet Anríquez and Stimoulis (2007) maintain that agriculture is still necessarily the starting point for rural development and it is the main means to ensure poverty alleviation (Cervantes-Godoy & Dewbre, 2010).

Noting that agriculture is a critical rural socio-economic activity and a key to rural development and poverty alleviation, there is a need to address the problem of Agriculture Land Abandonment in order to improve the socio-economic conditions of each rural household, so as to build sustainable rural communities which are free from poverty, food secure, economically included, active, contributing and benefiting from the economy. Yet whilst the NDP acknowledges the criticality of agriculture in unlocking and achieving rural development, the abandonment of agriculture land is

essentially the abandonment of agriculture (vice versa). Consequently, ALA is the forfeiture of rural development, potential job creation, poverty and inequality reduction and food security. This is a challenge for policy-makers, particularly those responsible for agriculture development and the general macro-economic policy of South Africa. Therefore, it is reasonable to believe that rural development through agriculture cannot be achieved if ALA is not effectively and appropriately addressed. Yet it is necessary, in the first instance, to first establish the extent, causes and consequences of the ALA that is apparently prevalent in the rural areas of South Africa, towards a solution for this issue and rural development.

1.5 RESEARCH AIMS, OBJECTIVES AND QUESTIONS

1.5.1 Research aim

Given the problem statement, the aim of this study is:

To establish the extent and, causes and socio-economic consequences of Agriculture Land Abandonment on rural areas in Eastern Cape, so as to create sustainable and food secure rural communities.

1.5.2 Research objectives

To achieve the aim of the study, the following objectives were identified:

- To determine the extent of Agriculture Land Abandonment in the rural community of Julukuqu in the Eastern Cape.
- To examine the causes of Agriculture Land Abandonment in Julukuqu.
- To assess the socio-economic impact of Agriculture Land Abandonment on rural development in Julukuqu.
- To provide recommendations on how to address Agriculture Land Abandonment and achieve rural development.

1.5.3 Research questions

Given the aim and objectives of the study, the main research question is:

What is the extent, causes and consequences of Agriculture Land Abandonment and what can be done to address it?

To achieve the study objective or respond to the study question, the study will attempt to answer the following research sub-questions, with particular reference to the selected rural community:

- What is the extent of abandoned agriculture land?
- What are the causes of Agriculture Land Abandonment?
- What is the socio-economic impact of Agriculture Land Abandonment?
- What can be done to address Agriculture Land Abandonment?

1.6 SCOPE AND SCALE OF RESEARCH

This study was delimited by the research subject (Agriculture Land Abandonment) and geographic area (Julukuqu village within the Eastern Cape) and to some extent, time. Julukuqu is just one example of the many rural villages, particularly in the Eastern Cape, that is experiencing the abandonment of croplands. Therefore, the experience of Julukuqu and the study recommendations are not entirely exclusive to Julukuqu – hence becoming a basis for attending to ALA in other similar villages.

1.7 RESEARCH METHODOLOGY

The study utilised a qualitative methodological approach in assessing Agriculture Land Abandonment and rural development within the Eastern Cape in South Africa. A case study-based research strategy was used to conduct the study. Seventeen respondents were sampled and interviewed using an interview guide with semi-structured questions that were designed to illicit qualitative primary data. The purposive sampling technique was used to take a sample from the study population. As provided by Maxwell (1997) and Tongco (2007), purposive sampling allows the researcher to deliberately choose a particular group of respondents and area to provide significant/insightful/ expert in information to feed into the study objectives and to address the research question.

A thematic analysis was used to generate and present study findings from the collected data. As the study involved people, it was essential to understand the ethical duties of conducting a research (McMillan & Schumacher, 2010). Accordingly, ethical clearance was obtained from the Nelson Mandela University, and permission and consent to conduct the research was obtained from the relevant authorities and from all the interviewed respondents.

1.8 STUDY OUTLINE

The study is organised into six chapters:

Chapter 1: Introduction and context

Presents the introduction and background/context to the study, which entails the research problem statement and the purpose of the study.

Chapter 2: South African policy and context of agriculture land abandonment and rural development

Looks at the policy and context of agriculture land abandonment and rural development of South Africa, at a national to a district level.

Chapter 3: Literature review

Presents a synthesis of the relevant literature that has been consulted in this study.

Chapter 4: Methodology, research design and methods

Explains the methodology, research design and methods, including all the processes that were undertaken to generate and present the study findings.

Chapter 5: Findings and interpretation of data

Provides the interpretation of the data that has been collected and presents the findings of the study.

Chapter 6: Summary, Conclusions and recommendations

As a last chapter, it presents the summary, conclusions and recommendations of the study.

1.9 CHAPTER SUMMARY

Chapter one provides an introduction and background to the study, which entails the research problem statement and the purpose of the study. This study aims to address ALA in the rural areas of South Africa by determining its extent, causes and consequences. It uses Julukuqu, a rural village in the former Transkei homeland in the Eastern Cape Province, as a study area. Despite the overlooked abandonment of vast amounts of agriculture lands throughout the rural territories of the Eastern Cape, agriculture is still the starting point for rural development. It is the main means to ensure poverty alleviation and retains a crucial role in the socio-economic development in South Africa, as enshrined in the NDP. Therefore, there is a need to address the problem of ALA in order to improve the socio-economic conditions of each rural household. This is critical to building sustainable rural communities which are poverty free, food secure, economically included, active, contributing and benefiting from the economy.

Seventeen respondents were sampled and interviewed using an interview guide with semi-structured questions that were designed to illicit qualitative primary data. Moreover, satellite imagery was analysed to establish the extent of ALA in Julukuqu. The purposive sampling technique was used to take a sample from the study population and thematic analysis was used to generate and present study findings from the collected data. The policy and context of agriculture land abandonment and rural development of South Africa is looked at in the following chapter (Two).

CHAPTER TWO

SOUTH AFRICAN POLICY AND CONTEXT OF AGRICULTURE LAND ABANDONMENT AND RURAL DEVELOPMENT

2.1 OVERVIEW

Chapter One provided an introduction and context to the study as well as the outline of the study. This chapter looks at the policy and context of agriculture land abandonment and rural development of South Africa, at a national to a district level. It provides the situational analysis, responsible institutions and the strategies employed by the country's government to advance agriculture and rural development.

2.2 RURAL DEVELOPMENT, AGRICULTURE AND LAND IN SOUTH AFRICA: CURRENT LANDSCAPE AND INSTITUTIONAL FRAMEWORK

Filho et al. (2016:1) notes that the sustainable use of land is a major concern to any country in the world. South Africa also subscribes to the Sustainable Development Goals (SDGs) and sustainable land use, is brought up across many of the SDGs (UN, 2015). Yet one of the biggest enemies to sustainable land use and the fight against poverty and ultimately socio-economic development in rural areas, is the issue of Agriculture Land Abandonment (Filho et al., 2016). Land abandonment and the resulting decrease in cultivated agriculture land area, is a matter of great concern, especially in rural areas. It relates to many important issues in rural areas, including the decline and ageing of rural population and an inefficient use of land which, itself, limits the competitiveness of the agricultural sector (Corbelle-Rico & Crecente-Maseda, 2008). Moreover, addressing land abandonment is not only critical for the realisation of the NDP, but also for achieving the goals of the SDGs by 2030.

Unless stated otherwise, the following relevant key insight on rural development, agriculture and land in South Africa, is from the review of the provincial Budgets and Expenditure Review: 2010/11 – 2016/17 (National Treasury of the Republic of South Africa (National Treasury), 2014):

2.2.1 Rural development

The government's commitment to rural development is affirmed by a host of policy papers and programmes. The process began in 1995 with the national Rural Development Strategy (RDS), which describes the core rural problems and needs. Yet, soon after its release, the document was criticised for merely providing a wish list and for not interrogating material opportunities and constraints for rural development. To a certain extent, these criticisms were addressed in the national Rural Development Framework (RDF), which was produced in May 1997 by the National Department of Land Affairs and the Rural Development Task Team (attached to the Reconstruction and Development Programme (RDP) Office before its closure in 1995). The RDF outlines the national policy framework for framing rural development strategies and reveals how imperatives of rural development can be incorporated into overarching policy frameworks (such as the RDP and Growth, Employment and Redistribution framework (GEAR)). Key issues in the RDF include poverty alleviation, local economic development (LED), integrating rural and urban development, job creation and the provision of infrastructure, local democracy and institutional sustainability. Moreover, while the RDF provides a fairly coherent policy framework, it provides less clarity about how this framework can inform implementation. This rests within the competency of provincial governments which have been fairly slow off the mark in producing provincial rural development strategies.

The President of the Republic of South Africa mandated the new DRDLR, established in 2009, to produce and implement a Comprehensive Rural Development Programme (CRDP) countrywide and this led to the development of "a fresh approach to rural development" (Spatial Planning and Information, 2009). Social Cohesion and development was the declared objective and the CRDP was conceptualised as the principal policy and implementation framework to realise this. The focus of the programme is on enabling/empowering rural people to take charge of their destiny. This is with the government's support, thereby dealing effectively with rural poverty through a maximum natural resources use and management (DRDLR, 2013).

2.2.2 Agriculture and land

A well-developed agricultural sector plays a vital role in socio-economic development. The same is true with South Africa's commercial (large-scale) agricultural sector,

which is responsible for the country's thriving agricultural sector. Strongly supported by mechanisation and commercialisation, agricultural production has increased considerably in recent years while also being strongly supported by mechanisation and commercialisation. Agriculture was identified by government as one of the major sectors that can ensure the realisation of the Accelerated and Shared Growth Initiative of South Africa (AsgiSA produced in 2006 after the Growth, Employment and Redistribution Framework (GEAR) – which followed the RDP). As things stand, it is primarily the thriving commercial sector that can support many of the government's 14 outcomes, particularly Outcome 7: Vibrant, equitable, sustainable rural communities with sufficient food for all.

The NDP, the current overarching policy framework, aims to eliminate poverty and to reduce inequality by drawing on the people's collective energies, growing an inclusive economy, building capabilities, enhancing state capacity and promoting leadership and partnerships all over society. Through the NDP, the government intends to achieve a food trade surplus of which one-third should be produced by small-scale farmers or households to ensure household food security and nutrition security. This is in addition to maintaining and supporting the value chain of agriculture which is one of the priorities in the government's New Growth Path that targets opportunities for 300 000 households in agriculture smallholder schemes and 145 000 jobs in agro-processing by 2020.

Despite numerous such programmes and plans which come with huge rural development opportunities and possibilities, 23.1% of South Africans, especially in rural households, remain vulnerable to food insufficiency or deficit. In October 2013, the government launched the Fetsa Tlala integrated food production initiative to respond to this. This aims to promote food security and deal with its structural causes while also ultimately eradicating hunger.

2.2.3 Situational analysis

South Africa has a land area of 1 220 813 km². The Eastern Cape (168 966 km²) is the second largest province after Northern Cape (372 889 km²) (Statistics South Africa (Stats SA), 2011) and it is also the least populous province with a population share of 2.29% (Stats SA, 2014), while Gauteng is the smallest province with a land area of 18

178 km² (Stats SA, 2011), but it is viewed as the most populous province, with a population share 23.9% according to 2014 mid-year estimates (Stats SA, 2014). 80% of South Africa's agricultural land is suitable for animal production. Accordingly, the greater part of South African agriculture takes the form of animal production. Grains and cereal occupied more than 41.9% of cultivated land in 2011.

As the most important crop with regards to its contribution to food security and as an input into animal food manufacturing, maize is grown commercially on more than 8000 large farms, located primarily in North West, Mpumalanga, Free State and KwaZulu-Natal, while creating at least 150 000 jobs in periods of good rainfall. The Eastern Cape, despite being the second largest province and third most populated province (with a 12.6% population share) after Gauteng and KwaZulu-Natal (with a 19.8% population share) in South Africa (Stats SA, 2011), is not listed in this top four maize growing provinces in the country.

Agricultural production is divided broadly into three categories:

- **Subsistence agriculture:** this is practised by approximately 4 million households.
- **Smallholder agriculture:** this covers about 14 million hectares, comprising between 300 000 to 400 000 mostly black farmers. It is mainly located in the former homelands, which not only lack good soil, but also water and infrastructure. Production efficiency as a result is generally low.
- **Commercial production:** this covers approximately 82 million hectares that consists of about 40 000 farming units and produces about 99% of the country's agricultural output that is formal marketed. Farm holding sizes have increased in his subsector as farms that are smaller and less efficient, fail to continue profitably.

The National Treasury (2014) makes a point that both smallholder and subsistence farmers can play a greater role than they presently do, in providing food for both urban and rural households. The 2013 General Household Survey reveals that 18.9% of South African households are involved in agricultural production, with most crop production occurring in backyard gardens. According to Fraser, Monde and van Averbeké (2003), the average size of the household or home gardens in the Eastern

Cape, typically located on residential sites, is 0.4ha (including both the former Transkei and Ciskei). Yet the average size of household gardens in the former Transkei have a tendency to be several times larger than those in the former Ciskei. Fraser et al. (2003) also adds that there appears to be little difference between the average smallholdings size in the former Transkei and Ciskei, with smallholdings in the former Ciskei estimated to range between 8.4ha and 10.4ha, which they argued was less than 1% of the average size of a farm in the former White East Cape part of the province.

Moreover, South African households who are practicing agriculture are responsible for the production of grains (51.7%), fruit and vegetables (45.2%), poultry (40.8%) and livestock (51.5%). 10% of the country's formal employment is from agriculture. With an enhanced, efficient and effective smallholder and subsistence farming, this might increase.

An important factor in agricultural expansion, is broadening the access to land. Post-1994 South Africa inherited highly racially-skewed land ownership patterns, with whites owning 87% of agricultural land and with blacks owning only 13%. The focus of South Africa's land reform, is on land restitution, tenure reform and land redistribution. Through its land reform programme, in place since 1994, the aim of the government has been to transfer about 25 million (30% of the total) hectares of farmland to black communities by 2014. Yet land redistribution has moved at a slow pace as only 7.4 million hectares of farmland had been transferred under this programme by 2010, representing 29% of the 2014 target.

The lodgement of claims were reopened as a result of an evaluation of the land restitution programme – as proposed in the Restitution of the Land Rights Amendment Bill, 2013. It is opened to all deserving people and communities who did not take part in the original restitution programme either because they did not lodge their claims by the deadline of 31 December 1998, or because they had lost their land before 19 June 1913 (the day the 1913 Native Land Act was passed in to law).

South Africa's land dispossession and the banishment of Africans, particularly Africans to poverty-stricken lands (reserves), makes land reform relevant to this study – of land abandonment. Attention will be given to this in Chapter Three, which is the literature review chapter.

2.2.4 Institutional framework

2.2.4.1 National departments and agencies

Overall, the aim of South Africa's agricultural policies is to enhance the sustainable use of resources, increase economic growth, increase food production for domestic consumption and export, create jobs and to promote rural development and transformation.

The national Department of Agriculture, Forestry and Fisheries (DAFF) is responsible for, among other areas, agriculture policy and regulatory framework formulation. Moreover, the department is responsible for creating an enabling environment for equitable access to opportunities, establishing norms and standards and providing financial assistance and other support to farmers. The DRDLR, on the other hand, is responsible for the country's land reform programme and it is tasked with redressing this inequality of land ownership to make sure that every South African gets equal and equitable access to land. The land reforms programme is a joint venture with the DAFF. The national DRDLR is tasked with the purpose of creating and maintaining an equitable and sustainable land dispensation and with acting as a catalyst for rural development, to ensure rural livelihoods and decent work. To this end, the intention of land reform programmes is to catalyse rural development and to empower rural communities.

The DRDLR has introduced reforms to improve the access to land and to redress skewed land ownership patterns. In 2009, the new DRDLR was tasked to constructively reform patterns of land ownership and to create jobs and to provide infrastructure in order "to develop vibrant and sustainable rural communities" (DRDLR, 2013). This became the vision of the Comprehensive Rural Development Programme (CRDP) of South Africa: Comprehensive rural development and land reform, which was later encapsulated in the NDP as national outcome 7. The CRDP is the department's produced strategy of 'agrarian transformation' that is intended for "a rapid and fundamental change, in the use and control (patterns of ownership across race, gender, and class) of land, livestock and cropping" (Gwanya, 2010; DRDLR, 2013:3). Ultimately, the aim of the land and agrarian reform project is to have more black entrepreneurs in agribusiness; to provide access to agricultural support services for

emerging black farmers and increase their agricultural production; and to increase trade by previously disadvantaged people (which include blacks and predominantly Africans).

A range of state agencies that provide services to provincial departments of agriculture and farmers, support the agricultural sector. They include the Agricultural Research Council (ARC), which advances research and innovation; the National Agricultural Marketing Council (NAMC), which provides statutory instruments and advisory services in the marketing of agricultural products; and the Land Bank of South Africa, which provides wholesale and retail funds to farmers, historically disadvantaged people and rural entrepreneurs. With this range of support, it seems possible to develop and raise rural communities into vibrant, equitable and sustainable rural communities with sufficient food for all, even to achieve inclusive economic growth – through agribusiness.

2.2.4.2 Provincial government and municipalities (local government)

The responsibility for the implementation of agricultural policies and programmes, rests mainly with the provincial departments of agriculture. Provincial departments labour to improve the use of agricultural land and to deliver extension services to land distribution beneficiaries. They also assist the DAFF to identify land distribution beneficiaries for agricultural purposes. Yet there are no departments at a provincial level that are dedicated to land affairs, but the DRDLR has regional offices that work with agriculture departments of the province.

The municipality provides water services and allocates the land that it owns for agriculture. Local governments are also involved in regulating abattoirs, fresh produce markets and food safety standards. The three spheres of government (national, provincial and local government) work together to ensure that land and agricultural priorities are integrated into municipal Integrated Development Plans (IDPs).

2.3 RURAL AND AGRICULTURAL DEVELOPMENT STRATEGY AND PROGRAMMES

2.3.1 District growth and development strategy of the O.R. Tambo Region

The O.R. Tambo DM endorses and formulates its District growth and Development strategy (DGDS) in line with the Provincial Growth and Development Strategy (PGDS) of the Eastern Cape. The PGDS provides a ten-year vision or strategic framework as well as sector-based strategies and programmes that are aimed at rapidly improving the quality of life for the poorest people of the province – by setting out a vision for growing the economy, creating employment and eradicating and redistributing income. The vision of the PGDS is to make the Eastern Cape a compelling place to live, work and invest in. It has a set of quantified targets and focus areas (Provincial Government of the Eastern Cape (PGEC), 2004). For example, the PGDS 2004-2014, amongst others, identified the following strategic focus areas for intervention (PGEC, 2004):

- The systematic eradication of poverty.
- The transformation of the agrarian economy.
- Infrastructure, including the eradication of backlogs and development of enabling infrastructure for economic growth and development.

The O.R. Tambo Municipal District forms the greater part of the former Transkei and it forms part of the six Districts of the Eastern Cape. The District is predominantly rural, a characteristic that provides a basis for the assumption that the people's livelihood in the region depends on agriculture. Research and experience has confirmed that there is a huge potential for agricultural production in the region, so much so that it is believed that it would be able to sustain its inhabitants. Thus, rural development is linked to agriculture development. Where there is cessation of agriculture land use (i.e. cultivation) and management, any idea or strategy for rural development is not likely to materialize (O.R. Tambo DM, 2007).

Agricultural development is a priority within the O.R. Tambo DM, as determined by the PGDS. It is considered as both central to, as well as an integral part of rural community development in the O. R. Tambo Region since agriculture and its development is the foundation and basis for the development of rural communities, particularly the ones in O.R. Tambo. The issue in the rural areas, in so far is land and rural development,

particularly within the O.R. Tambo Municipal District in Eastern Cape, is not the lack of availability of land, but the abandonment of agriculture and subsequently land (O.R. Tambo DM, 2007).

In terms of the DGDS (O.R. Tambo DM, 2007) assessment, because of the available natural resources, the potential and prospects for the development of agriculture in the region lies, amongst and above other areas, on:

2.3.1.2 Crop (grain and vegetables) production

The following advantages are due to crop production in the region:

- Good fertile soils
- Favourable climatic conditions
- Some land availability to every household
- Suitable terrain on river valleys providing irrigable land
- Abundant water resource along rivers for irrigation
- Huge local market and local consumption

With regards to grain production, the O.R. Tambo DM initiated a program to revive agricultural activity, which is called the Primary Agriculture Resuscitation Programme (PARP). The Ntinga O. R. Tambo Development Agency implemented such program in the following manner:

- **Grain production projects**
- **Massive food production.** Department of agriculture: O.R. Tambo District 2006/07. A total budget of R25 025 820-53 was allocated towards massive food production (through a grand total of 7075 projects), of which R4 346 99-93 was allocated to the KSDLM (including Mthatha and Mqanduli) towards 1268 projects.
- **Human resource.** According to the Department of Agriculture, the human resource requirements for crop and vegetable production included extension officers, agricultural economist, agricultural scientists and agricultural engineers, of which all had a shortfall (-38, -5, -8, and -3, respectively).

The above-mentioned information presented an indication of the potential areas and opportunities for agricultural development in the O.R. Tambo District (O.R. Tambo DM, 2007). Moreover, agriculture is critical for the Eastern Cape, where a huge number and percentage of people who are living below the poverty line, has increased significantly especially in the rural areas. This is besides the accounting for the greatest cattle and sheep flocks in South Africa (Nowers 2008). According to Fraser et al. (2003), “the Eastern Cape province is characterised with fertile soils that have high for potential for agricultural production to mitigate the high levels of poverty”. Thus, socio-economic development in the Eastern Cape can be linked back to agriculture (land) abandonment.

The Ntinga O.R. Tambo Development Agency (Ntinga) initially functioned as a special purpose vehicle (SPV) for the implementation of the DGDS of the Region, while focusing on agriculture among tourism, forestry and mari-culture (Ntinga news, 2010).

2.3.1.3 *Ntinga OR Tambo Development Agency*

The Ntinga O.R. Tambo Development Agency (Ntinga) was established in January 2003 and it is fully owned by the O.R. Tambo DM as a Municipal Entity. Ntinga was about spearheading sustainable development in the O.R. Tambo Region and it phrased itself as an entity that delivers local economic development (LED) to its people (Ntinga news, 2010). Key to the study, Ntinga’s mandate was to be the implementing agent of the O.R. Tambo DM’s programmes while focusing on strategic infrastructure such as dams, rail, electrification, (priority surfaced and rural access) roads, agriculture and food production, as well as social infrastructure and services. It promoted Green Revolution in the agricultural sector (Ntinga news, 2010).

Green Revolution refers to a series of initiatives, undertaken between 1943 and the late 1970s in Mexico, which increased the industrialised agriculture production in several developing nations (Ameen & Raza, 2017). According to Fitzgerald-More and Parai (1996), in the 1940s, the Rockefeller Foundation cooperated with the government of Mexico and embarked on a wheat development programme. William Gaud, the former USAID (United States of Agency for International Development) director, first used the term “Green Revolution” in 1968 (Ameen & Raza, 2017). The Green Revolution was a technological response to the threatening global food

shortage post WWII. The initiatives transformed the practice of agriculture where the main food crop were rice, wheat and maize (Fitzgerald-Moore & Parai, 1996) and involved the development of high-yielding cereal grains, the distribution of hybridised seeds, synthetic fertilizers and pesticides to farmers.

It is stated that the goal of the Green Revolution was to increase the efficiency of the processes of agriculture in order to increase the productivity of crops and that this helps developing nations to meet the needs of their growing populations (Ameen & Raza, 2017). It was the transformation from subsistence to commercial agriculture. Yet the Green Revolution also had ecological consequences and socio-economic consequences. An increased grain production encountered problems in hot countries, as heavily fertilized traditional plants would shoot up to an unnatural height and then collapse. Overtime, the Green Revolution also led to diminishing returns, increased reliance on scarce and costly foreign resources and inputs, as the Green Revolution's "miracle seeds" were diminishing in productivity. Moreover, the Green Revolution is suggested, with plausibility, to have been pushed by American interest as an alternative to land reform and its requirement for social change (Fitzgerald-Moore & Parai, 1996).

In 2016, Ntinga was converted from a Service Utility type of a Municipal Entity to a State Owned (Private) Company to improve its operation, enhance service delivery and to make sure that its mandate is more aligned with the core function of its parent municipality, the O.R. During the same time, the Kei Fresh Produce Market (KFPM), a Section 221 Company that was established in 2002 by the then Department of Agriculture (now known the Department of Rural Development and Agrarian Reform (DRDAR)) and which was transferred to the O.R. Tambo DM in 2004, was disestablished. This was to streamline service delivery and to ensure that the available resources are used effectively, efficiently and economically (O.R. Tambo DM, 2016).

The converted Ntinga received a fresh mandate, vision, mission and values – central is promotion of sustainable socio-economic development (Ntinga, 2017).

- **Vision:** being a result oriented special purpose vehicle (SPV) leading in sustainable LED in the O.R. Tambo Region to develop vibrant and sustainable communities. Thus, it is now aligned to the Department of Rural Development

and Land Reform mandate, which is to develop vibrant and sustainable rural communities (DRDLR, 2013).

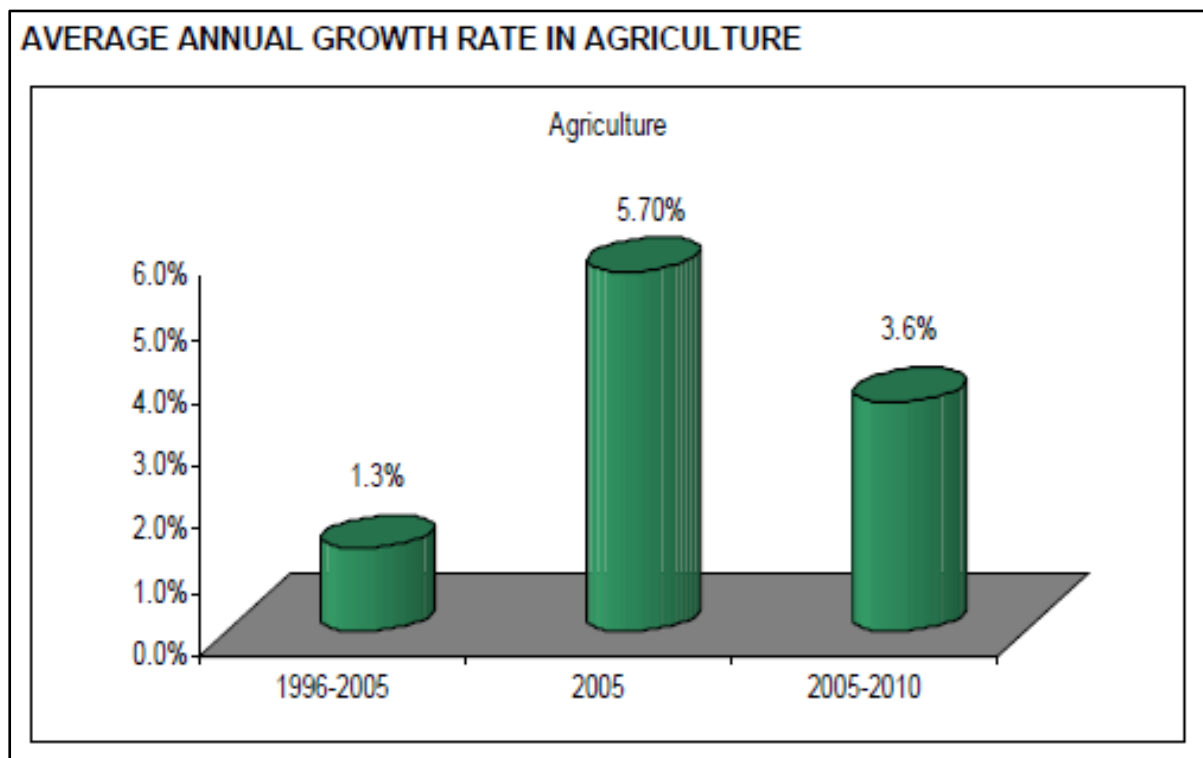
- **Mission:** being a catalyst for innovation in promoting socio-economic development and sustainable services to communities, through strategic partnerships and new investments.
- **Value proposition:** to promote socio-economic development.

Maintaining nurturing as its top value, Ntinga has embraced and added to it caring – to nurture and care.

Beginning of the year in 2010, Ntinga reported its achievements as a development agency in the past year. Its milestones included the purchase of seven Adom Kok farms in 2008 and the success of the Ematolweni Vegetable Project and Baziya. Adam Kok farms were bought because they had a potential to produce commodities such as maize, potatoes, beans and vegetables (including cabbage, carrot, butternut and onion). Ninety hectares of maize were planted and the total target for the season was met, along with a target of more than 80 hectares of potatoes for the season. The KFPM took farm produce, such as fresh fruits and vegetables which would otherwise had been transported to the market in Durban (outside the province), from such a project. Moreover, Ntinga spent R1.4 million on a trench funding back-up and this assisted in various vegetable production in trenches. Employment for 40 farmworkers per annum was created by the Ematolweni Vegetable Project and it created a rural employment opportunity and provided household rural income (Ntinga news, 2010).

Finally, despite all the above facts on agricultural potential, the sector has not become the economic driver of the District. Its performance in the economic development of the region is poor (O.R. Tambo DM, 2007). Figure 2 below indicates that situation.

Figure 2: Average growth rate in agriculture in O.R. Tambo DM



Source: O.R. Tambo DM, 2007

2.4 CHAPTER SUMMARY

The government has affirmed its commitment to rural development by a host of policies and programmes, beginning in 1995 with the national Rural Development Strategy (RDS). In 2009, the President of the Republic of South Africa mandated the new DRDLR to produce and implement a Comprehensive Rural Development Programme (CRDP) to enable/empower rural people to take charge of their destiny. Realising that a well-developed agricultural sector plays a vital role in socio-economic development, the NDP, the current overarching policy framework, aims to eliminate poverty and to reduce inequality. However, despite resultant huge rural development opportunities and possibilities, 23.1% of South Africans, especially in rural households, remain vulnerable to food insufficiency or deficit.

Overall, the aim of South Africa's agricultural policies is to enhance the sustainable use of resources, increase economic growth, increase food production for domestic consumption and export, create jobs and to promote rural development and transformation. To this end, agricultural development is also priority within the O.R.

Tambo DM, as determined by the PGDS. It is considered as both central to, as well as an integral part of rural community development in the O. R. Tambo Region since agriculture and its development is the foundation and basis for the development of rural communities, particularly the ones in O.R. Tambo. Moreover, agriculture is critical for the Eastern Cape as a huge number and percentage of people who are living below the poverty line has increased significantly especially in the rural areas. This is besides the accounting for the greatest cattle and sheep flocks in South Africa.

The O.R. Tambo Region employed the Ntinga O.R. Tambo Development Agency (Ntinga), initially, as a special purpose vehicle (SPV) for the implementation of the DGDS of the Region. Ntinga's mandate was to be the implementing agent of the O.R. Tambo DM's programmes, while focusing on strategic infrastructure such as dams, rail, electrification, (priority surfaced and rural access) roads, agriculture and food production, as well as social infrastructure and services. In 2016, Ntinga was converted from a Service Utility type of a Municipal Entity to a State Owned (Private). The converted Ntinga received a fresh mandate, and focused promoting sustainable socio-economic development. However, despite all the agricultural potential and effort, the sector has not become the economic driver of the District. Its performance in the economic development of the region remained poor with declining agricultural land use and production. Notwithstanding this, The 2013 General Household Survey reveals that this is a national problem as only 18.9% of South African households are involved in agricultural production, with most crop production occurring in backyard gardens.

In the following chapter (Chapter Three), attention is given to the review of the relevant literature.

CHAPTER THREE

LITERATURE REVIEW

3.1 OVERVIEW

Chapter Three covers the theoretical framework and literature review. The chapter commences with the description of key concepts that are used in the study. The information that was gathered and reviewed on the research topic is from secondary sources such as previous research studies, journal articles, books, conference papers, etc. Maritz (2003) provides that information that are obtained from these sources can be most valuable as it drives the research in the right direction and serves as a term of reference against which certain findings can be tested or verified.

3.2 DESCRIPTION OF KEY CONCEPTS

The following concepts and the meaning attached to them, apply:

3.2.1 Agriculture and Agriculture Land Abandonment

- **Agriculture** is the art, science and farming practice or occupation of cultivating the soil, ploughing, growing and harvesting (i.e. active production) of crops (useful plants for food) for human needs. This entails the sustenance of life and economic gain and in varying degrees the preparation and marketing of such products for the man's use and their disposal (Republic of South Africa (RSA), 2014).
- **Agriculture land (also referred to as farmland or cropland)** refers to rural land that is or was primarily used or useful for crop production and at times for livestock pasturing or grazing. Where *rural land* simply refers to land found in a rural area, it could be part of a rural community/village or unclaimed land in a rural area. With this in mind, Agriculture Land Abandonment (ALA) describes the cessation of using and managing agriculture land (Weissteiner et al., 2014), and the degradation of farmland facilities to the extent that they cannot easily be used again (FAO, 2006a), together with the natural restoration of vegetation (Díaz, Nahuelhual & Echeverría, 2011). From this description, the opposite of

ALA can be coined as agriculture land use (ALU), describing the using and management of agriculture land.

3.2.2 Depopulation

Depopulation is a major consequence of Agriculture Land Abandonment and refers to a process whereby the resident population is leaving the area and the density of the population that is falling below a critical level in such a way that any socio-economic activity is impeded by the lack of people to maintain infrastructure and basic services (FAO, 2006a).

3.2.3 Rural, livelihoods and rural development

3.2.3.1 *Rural*

Though the rural and urban sectors are often analysed separately, the processes that are common to both, need not to be overlooked. The urban centres generally function as the transmitters of change to the rural areas. The major influences on bringing the rural and urban areas closer together, with regards to their characteristics, are high levels of temporary and permanent migration (Dixon, 1990).

According to the Rural Development Framework (RDF, 1997), **rural areas** are sparsely populated areas wherein people practice agriculture or depend on natural resources such as land.

3.2.3.2 *Rural in descriptive and socio-economic terms*

Halfacree (1993) identifies a descriptive approach and socio-cultural approach in defining the 'rural' concept.

- Descriptively, rural is defined according to its socio-spatial characteristics such as population, land use and employment patterns. Furthermore, two dimension components exist and they represent structural rurality and demographic rurality. The structural component is used to describe the physical features of rural areas and it focuses on the distance from town and city as well as the lack of better facilities and services. The domination of a rural community by old

people, while young people are gone to work in the city as migrant labourers, is described by the demographic component.

- The focus of the socio-cultural approach is on the social characteristics, including traditional cultures that are deep and the sense of belonging within the community. This is embedded in kinship and cultural values. Rural areas are always perceived as a natural environment upon which most rely for living. In the past, in cultivating land, rural communities used collective action while taking advantage of their kinship formation that existed in a certain community. This caused people to develop the need to care and it encouraged them to respect and care for each other.

3.2.3.3 Livelihoods

3.2.3.3.1 Defining the livelihoods concept

A livelihood is widely agreed to entail the various means that a person may use to make a living (Chambers & Conway, 1992; Ellis, 2000; Radoki, 2002). According to Chambers and Conway (1992), a livelihood comprises of assets and abilities that are required to make a living. This is why, for some researchers, a livelihood is beyond the matter of finding food or shelter and it involves components of the ownership of assets, identity and belonging to a particular group or community. The concept of livelihood can therefore be said to involve people and their resources such as land and water as well as livestock and so on. Yet the ability of people to make a living out of the resources at their disposal, is the most critical issue. Too often conflict exists between people and their access to resources where a particular group may claim ownership over the resources (Mlomzale, 2014).

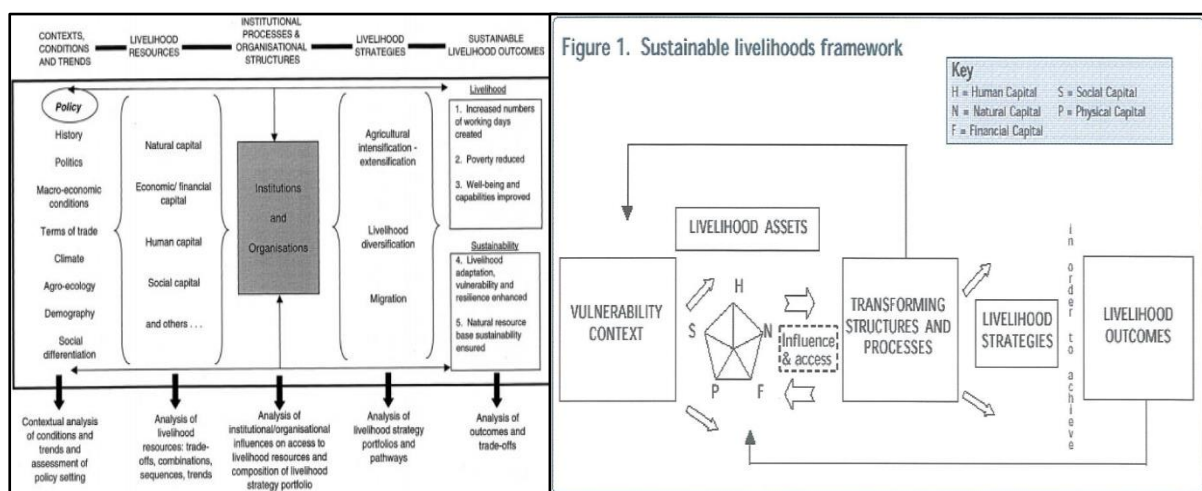
3.2.3.3.2 Understanding sustainable livelihoods

Arun, Heeks and Morgan (2004) provide that a person's livelihood has to be sustainable by using the resources they own in a manner that ensures that they (including the future generation) will be able to continue making a living out of these resources. The researchers argue that a livelihood is only sustainable when it is able to deal with and overcome the stress and shock that accompanies life and maintaining or enhancing its assets and abilities for the present and future generations without depleting the natural resource base. Livelihoods have been strongly linked to human

rights in this century. The sustainable livelihoods and human rights approach, intends to make sure that all people have an equal opportunity to a decent life. Through the human right based approach, the vulnerable are protected from exploitation and abuse and it ensures that all people have an access to basic services such as water, sanitation and health.

Figure 3 below provides for a better understanding of the livelihoods of rural people. It shows the different issues affecting their livelihood.

Figure 3: Sustainable (rural) livelihoods analysis framework



Source: Scoones, 1998; Department for International Development (DFID), 1999

3.2.3.3.3 Explanation of the sustainable livelihoods framework

According to DFID, assets, vulnerabilities, transforming structures or institutions and processes, strategies and outcomes constitute the core principles of the Sustainable Livelihoods (SL) framework. Livelihood assets are described as various resources that people use or rely on, for their livelihood. People can either use and control the resources they own or have access to and use resources that they do not own and thus have no control over. Moreover, Chambers and Conway (1992) consider social assets to be institutions or social networks, while natural resources such as land, livestock, infrastructure and equipment are viewed as material assets.

3.2.3.3.4 *Understanding rural livelihoods*

Certain tools are used to understand the livelihoods of people within a community. The SL framework is an important tool for this purpose, especially regarding the livelihoods of the rural poor. The Sustainable Livelihoods (SL) framework provides an excellent scope to capture the multifaceted impact of extension programmes on the clients' livelihoods in terms of an increase in their asset base and a decrease in vulnerabilities. This framework expounds on the core issues or factors that are affecting or influencing people's livelihoods and discusses the relationships that exist between these issues. It is mostly used by development organisations to assess the impact of their intervention to the livelihoods of people and the necessary planning that are involved in these interventions (DFID, 1999). To this end, the SL framework will not be used to investigate and assess the outcomes of agriculture as a sustainable rural livelihood in Julukuqu. This is because it is not particular any of the objectives of this study to assess the impact of any intervention or extension programme by government or a development organisation on the livelihoods of rural people. Chapter Three provides a literature review which served as a base against which to test or verify the findings of the study. This is explained in detail in Chapter Five, sub-section 5.8.

3.2.3.4 ***Rural development***

Rural development is described as the key tool by which the diversification and innovation in rural areas is encouraged. Its objective is to reverse the processes of depopulation, stimulate equal opportunities and employment opportunities, respond to the growing needs for better quality, health and safety, personal development and leisure, and ultimately to improve the quality of life of the rural populations, in particular. It entails improving the economic and social infrastructure (Spatial Planning and Information, 2009). In a similar vein, describing the nature of rural development, the World Bank (1975) described rural development as a strategy that is aimed at improving the economic and social life of a group (i.e. small-scale farmers, tenants and the landless). It entails the extension of the benefits of development to the poorest among those in the quest of a livelihood in the rural areas. This may also entail the sole or inclusive use of agriculture as a means to achieve development in rural areas. Ultimately, rural development as expressed in the RDF (1997) include poverty alleviation, local economic development (LED), integrating rural and urban

development, job creation and the provision of infrastructure, local democracy and institutional sustainability.

Sustainable rural development is recognised generally as the product of those human activities that utilise the resources of rural areas with the aim of increasing the welfare or well-being – that is extending the benefits of development. Like rural development, it also entails basic infrastructural and social services investment, together with the required regulatory, financial and technical tools, which all contribute to improving the standard of living of the local/rural population. Development, including rural, can be considered as sustainable if it meets the needs of the present generation without disabling the future generations from meeting their own needs (Alpine Convention, 2011).

3.2.4 Poverty

Triegaardt (2006) provides that the definitions of poverty are a matter of debate. Notwithstanding this, the ECSECC (2017) defines poverty – rural or urban – in basic terms, as the denial of those things that determine the quality of life, including food, safe drinking water, clothing and shelter. Similarly, the World Bank describes poverty as basically hunger; lack of shelter; being sick and not being able to see a doctor; not having access to school and not knowing how to read; not having a job; fear for the future and living one day at a time (Dáil, 2015).

3.2.5 Food security

Food security, as described by RSA (2014), refers to a constant physical, social and economic access by people, to adequate, safe and nutritious food which meets their dietary requirements and food preferences for an active and healthy life, and is comprised of the following four dimensions:

- Sufficient availability of;
- access to;
- use of; and
- stability of,
- an affordable food supply.

3.3 THEORETICAL LITERATURE REVIEW

3.3.1 Theoretical concept

What can be considered as abandonment? There is no universal definition of land abandonment or abandoned land as each scientific or legal text uses its own definition. Differences of interpretation generally come down to two categories: first, land abandonment as a state of land or as a process (i.e. a static-in-time versus a dynamic approach); secondly, whether it is the merely the activity of agriculture or the land itself that is being abandoned (Baudry, 1991; Pinto, 1993). Below, these different approaches are explored, which makes it highly necessary to approach it in more detail, from different scientific fields.

3.3.2 The process of Agriculture Land Abandonment: static versus dynamic

There is evidence of more and more agriculture lands (farms) that are being abandoned with the total amount of the population working in agriculture. As more and more people continue to cease to cultivate their farms, one would suppose that the land they used to cultivate would be available to be taken over by those who are still active. Yet this is hardly the case and in practice, most of this land does not support any kind of activity and thus it generates no livelihood or income for its owners (López, 1996). This state of land abandonment is generally called “total abandonment” (Dienst Landelijk Gebied (DLG), 2005), and among its effects are the growth of natural vegetation and the deterioration of the structures such as fences, rights of way, irrigation systems and the very own parameters of the land parcels. One of the problems with these effects, is the fact that, after some years have passed, it becomes almost impossible to return the land to cultivation because of economic reasons (Baldock, Beaufoy, Brouwer & Godeschalk, 1996; FAO, 2006a).

Notwithstanding what has been said, it is also a reality that many of the farms that are categorised as not viable by theory, continue to be active for a period of time, much longer than expected. There are various reasons for this, including that sometimes the farm is legally transferred to the youngest spouse, there are external sources of income and sometimes it is even as simple as a case where the landowner continues working even at old-age (i.e. further than the retirement age) (López, 1996; Sineiro; López; Lorenzana & Valdés, 2004). It happens also, that in some of these cases, the

owner has less time available to labour in the farm and in some cases, the owner is too old to do the same work as he/she used to, while for some reason, the manner in which the farm is managed, frequently changes (Baldock et al., 1996):

- There is a shift towards less intensive productions.
- There is maintenance of the same production, but in a less intensive way.
- There is maintenance or even intensifies the use in the most productive land, but cessation of activities in the less productive, less accessible land parcels.

Any of the above-mentioned strategies can be regarded as a form of passive resistance and it is an indicator of decline in cultivated agriculture land area and, ultimately, of its foreseeable total abandonment in the near future. While total abandonment does not occur, the level of land management becomes occasional and generally very low. This situation has usually been categorised as a form of “hidden abandonment” or “semi-abandonment”, where land is not strictly abandoned, but it is near to being abandoned (DLG, 2005).

Hidden abandonment, as supposed by its name, is not easy to identify on the landscape because the growing of natural vegetation is subject to relative control by the limited activities that are undertaken. Total abandonment, on the other hand, is relatively easier to identify. An intermediate option would be to consider the lack of current use, but also the condition of a recent agricultural past, such as by including it under the definition of uncultivated land: land that is currently covered by shrubs, but has supported agricultural activities in a recent past. Definitions of this kind are applied in Eastern European countries such as Poland, for instance, where all agriculture land that has not been cultivated for nearly two years, is regarded as abandoned land (DLG, 2005).

3.3.3 Change in use: abandonment of agriculture versus land abandonment

It is obvious, although not expressed explicitly, that the cessation of agricultural activities sometimes give way to other uses, among which afforestation and urbanisation might be the prime. With this in mind, there is an evident need to differentiate between the broader concept “abandonment of agricultural activities” and the narrower “land abandonment”, the narrower term being reserved for those cases

in which no economic activity is being supported or undertaken at all (Corbelle-Rico & Crecente-Maseda, 2008).

3.4 EMPIRICAL LITERATURE REVIEW

3.4.1 Agriculture (land) abandonment and rural development

Land has been a source of wealth and the panacea of development in rural areas. As in the days of Adam, agriculture has been the main source of livelihood for the majority of the Third World people. Anríquez and Stimoulis (2007), and Skoufias, Rabassa, Olivieri and Brahmhatt (2011), provide that many of the rural people are relying on agriculture and other related livelihood activities such as livestock, forestry and fisheries, for their living. Mlomzale (2014) tells a historical narrative and provides that for most African countries and their communities, agriculture has been the key economic activity. The production of food crops by subsistence and small-scale farmers for survival and income generation often dominated the rural communities. In South Africa, about 40% of the country's poor population lived in rural areas and they were dependent on small-scale subsistence agriculture (which is a type of rural livelihood activity/agriculture, in which most of the subsistence crop-produce is for household consumption) (Madzwamuse, 2010). The province also practices communal agriculture on the biggest scale (Nowers 2008).

Whilst the focus of this study is on agriculture, the broader structure of the rural sector is worth noting. To some degree, rural households also engaged in other activities and they derived their income from a wide range of sources, such as livestock sales, wage labour, trading and others. Moreover, there were often some comparatively wealthy landowners, as well as people who engaged in a range of manufacturing, processing, trading and service activities (Dixon, 1990). Dixon (1990) notes that some writers refer to some of these non-agricultural attempts to cope with changing conditions, as 'household survival strategies'.

Furthermore, Fraser et al. (2003) argued that agricultural growth is as essential for economic growth, rural development and poverty alleviation in South Africa as it is in other developing countries. According to Anríquez and Stimoulis (2007), agriculture has a much greater impact on the poverty and hunger reduction in rural areas and it

therefore plays a leading role in rural development. Goldblatt (2010) asserts that an agricultural revolution is Africa's only viable course. This is because of the spatial distribution of the population, the widespread poverty and the structure of most African national economies structure (Goldblatt, 2010). In addition to this, Goldblatt (2010) provides that agricultural development is a prime pre-condition for broad-based economic growth, food security and poverty reduction in Africa. To this end, Anríquez and Stimoulis (2007) also asserted that agriculture is still a necessary starting point for rural development.

3.4.1.1 *Decline of agriculture and Agriculture Land Abandonment*

The relative importance of agriculture has generally declined even some twenty years preceding 1990 (Dixon, 1990). Moreover, vast agricultural areas were abandoned worldwide even over the last decades, which is a testament that Agriculture Land Abandonment (ALA) is a global phenomenon (Filho et al., 2016). In Europe, where most studies are conducted (Filho et al., 2016), the issue of land abandonment is regarded as one of the main environmental threats to territorial unity and organisation (Zakkak, Radovic, Nikolov, Shumka, Kakalis, Kati, 2015), as considerable areas have been impacted by agricultural abandonment (Pointereau, Coulon, Girard, Lambotte, Stuczynski, Sánchez Ortega & Del Rio, 2008). Brining it home, according to Mlomzale (2014), rural areas (in the Eastern Cape of South Africa) were previously viewed as spaces where agricultural production was the major livelihood alternative through either food production from the croplands and household gardens, or through livestock sales.

The causes and consequences of Agriculture Land Abandonment in Europe and South Africa, are discussed in detail in the following section. The importance of isolating the South Africa experiencing from that of (countries in) Europe is to be as contextual as possible. Although dominantly ecological/environmental, some background and empirical literature research on and relating to ALA in South Africa (i.e. Eastern Cape Province) exist (Kakembo, 2001; Kakembo & Rowtree, 2003; Davis, Ainslie & Finca, 2008; Kakembo, 2009; Mlomzale, 2014).

3.4.2 Causes and consequences of Agriculture Land Abandonment in Europe

The causes and consequences of ALA across rural Europe, where most studies out of the little, are conducted in and based on, are diverse and depend on the area and the period under consideration (Pointereau et al., 2008; Terres, Scacchiafichi, Wania, Ambar, Anguiano, Buckwell, Coppola, Gocht, Källström and Pointereau, 2015) and it is the same case in Asia (i.e. Nepal) (Khanal & Watanabe, 2006; Chidi, 2015).

3.4.2.1 Causes of Agriculture Land Abandonment

In Europe, where most studies are conducted (including Filho et al., 2016), the majority of the studies reveal that the drivers/causes of ALA range between environmental and socio-economic changes (Cramer et al., 2008; Filho et al., 2016). Based on the examination of results of 51 studies, Benayas, Martins, Nicolau and Schulz (2007) also advances this and they assert that the scientific literature provides three major categories of drivers of ALA as mentioned (social, economic, and environmental).

Benayas et al., (2007) further concludes that the abandonment of agriculture land is a global phenomenon that is largely driven by rural–urban migration in areas where new economic opportunities are presented to rural residents, while ecological and mismanagement drivers are of secondary significance. To this end, socio-economic, ecological and mismanagement drivers have a bearing on the abandonment of agriculture land. For example, agriculture land whose production is limited by environmental elements such as the productiveness or rainfall, is more likely to be abandoned if the socio-economic elements work (Benayas et al., 2007).

Moreover, as observed across the European Union (EU), the implications of ALA are very diverse and they have serious effects on the biodiversity and the functioning of the ecosystem (Munroe, van Berkel, Verburg, Olso, 2013). Yet, notwithstanding this, it is worth noting that at the same time, the implications or consequences can be considered as possibly negative or positive (Eurostat, 2013).

3.4.2.2 Consequences of agricultural land abandonment

Several studies that conducted on other continents, particularly Europe, provide that land abandonment is a major hindrance to the efforts towards achieving sustainable development in rural areas. This is for three primary reasons: (i) uncultivated land gives way to the uncontrolled shrubs growth and many unwanted plants, rather than organised biodiversity planning, (ii) it causes the land to be more susceptible to fire, and in some cases, to soil erosion (Filho et al., 2016). Filho et al. (2016) further explains that (iii) land abandonment also means potential income losses to the people living in rural areas.

Moreover, land abandonment may lead to depopulation and generally to a degradation of the ecological and economic value of an area (FAO, 2006a). This problem, therefore, needs to be urgently addressed in order to make it possible for its consequences in the medium and long-term to be avoided and to make a way for rural socio-economic development. To this end, the mechanisms or measures that are most appropriate for addressing ALA, are largely dependent on government decision, whether to back up the positive environmental impacts or to deal with the negative consequences (Filho et al., 2016).

There is also a cost attached to ALA. The opportunity cost of ALA, since it also means agriculture abandonment, is economic growth. In Europe for example, Todorova and Sârbu (2014) provide that in addition to continuing to play an important role in rural areas and in some regions, agriculture also contributes to economic growth. Yet rural areas are facing major challenges which are resulting mainly from globalisation, the change of demographics and the rural out-migration of young and well-trained people (Todorova & Sârbu, 2014).

FAO (2006a) identifies positive and negative social and economic impacts of ALA: Economically, land abandonment can significantly reduce the value of land. Socially, land abandonment and emigration can result to the further marginalisation of rural and remote areas and exacerbate the social problems in urban areas. Moreover, a certain degree of land abandonment, as advocated and pressured by some by environmentalists and the general public in the EU and Switzerland, can have a positive impact on the environment and landscape.

Table 1 (in the next page) tables these negative socio-economic impacts of land abandonment as well as its positive impacts.

Table 1: Impacts of agricultural land abandonment, according to FAO

Negative impacts			Positive impacts
<i>Economic impacts:</i>	<i>Social impacts:</i>	<i>Environmental impacts</i>	<i>Environmental benefits</i>
Substantially reduce the (agricultural and other) values of land	Further isolation and marginalisation of vulnerable rural populations	uncontrolled shrubs growth and many unwanted plants, rather than organised biodiversity planning	Water accumulation and flood control
Can render use for agricultural restoration impossible or too costly overtime	Unbalanced demographic structure (e.g. mostly aged population) (due to rural-urban migration)	Land more susceptible to fire, and in some cases, to soil erosion	Nutritional cycling and fixation
Loss of infrastructure related to agriculture (e.g. rural roads, irrigation systems etc.)	Loss of knowledge and tradition of land management	degradation of the ecological	Soil formation
Decrease tourist and recreational activities potential	Disappearance of social community values and structures		Carbon sequestration by trees and soil

Loss of livelihood and income (including economy)	Increased health issues including depression and alcoholism		Wildlife and biodiversity protection
Loss of potential farmers, innovators and work force (Rural out-migration of young and well-trained people brain drain).	Increase in social problems and costs in urban areas		Provision of recreational services and the enhancement of aesthetic value
Depopulation and hindrance of any economic activity	Increase in cost of social services in rural areas and discontinuity in providing such services for budgetary constrains		
	Decreasing of social welfare at the social level		

Source: compiled by researcher

From the table above, the positive effects of ALA seem to be only environmental related, while the negative consequences are mostly socio-economic.

3.4.3 Agriculture Land Abandonment in South Africa

3.4.3.1 Occurrence and extent

Whilst found and extensively studied in Europe, as illustrated by the many number of studies, according to Tesfaye and Seifu (2016) Agriculture Land Abandonment is also present in Africa. Despite the limited literature that focuses on the extent, causes and

socio-economic consequences of Agriculture Land Abandonment in South Africa, the practice is rife. Existing research mostly entails a variety of geomorphological studies which focus on and illustrate ecological or environmental impacts such as vegetation changes and degradation and gully and soil erosion as well as a need for sound environmental or land management (Kakembo, 2001; Kakembo & Rowtree, 2003, Kakembo, 2009).

Making use of a series time data that were derived from aerial photos that started from 1938, Kakembo and Rowtree (2003) noted changes in the use and erosion of land over time in the Peddie town surrounding area that is located in the former Ciskei part of the Eastern Cape. They establish that in 1938, there was relatively little arable land abandonment and that during this time, gully erosion occurred mostly on this class of land. There was a striking increase in the abandonment of cultivation in the period from 1954 to 1988 and 60%–70% of all gullying was continuously found on arable land (Kakembo & Rowtree, 2003). Moreover, this reveals that even arable land is not immune to abandonment or that it can also be abandoned.

In 2008, the Eastern Cape Communal Arable Lands Project (ECCAL) also studied abandoned arable lands. Their focus was on coming to grips with 'abandoned arable' land in an effort to enhance communal grazing systems in the Eastern Cape Province, South Africa (Davis et al., 2008). The ECCAL project is a collaborative research project between agricultural research bodies in Australia and South Africa, the Eastern Cape in particular. It began in July 2006 with the goal of improving the livelihoods of the communal pastoral households of the Eastern Cape by substantially and measurably increasing livestock production from improved pastures on abandoned arable lands (Howieson 2006).

Kakembo (2009) also provides an important foundation and useful background – empirical literature in his study on land abandonment in the Eastern Cape, South Africa. Kakembo (2009) found that the abandonment of cultivated lands is a widespread phenomenon in South Africa, particularly in the Eastern Cape, mostly in the croplands – especially since the early 1950s. The current research builds closely on a study by Kakembo & Rowtree (2003), which noted changes in land use and the consequential effects over time in the Peddie town surrounding area. Kakembo (2009)

noted a predominance of gullying on abandoned lands, with 80% of the total gullied area lying on abandoned lands.

The most recent study, entitled '*The decline of agricultural production in rural areas of Eastern Cape*', that was conducted by Mlomzale (2014), also details what the researcher frames as a 'shift of rural livelihoods and agricultural decline'. Mlomzale (2014) provides that small-scale farming in the province has been on the decline over the past years, to an extent where it is currently contributing little to province's GDP and rural households (Mlomzale, 2014). Such rural households and areas are regarded as poor and particularly food insecure because they spend most of their money on purchasing food, as opposed to making food, among other essentials. There is an evident trend where most rural households of the Eastern Cape are not depending on agriculture as a major source of food supply even though they seem to have the means to farm on a subsistence level. Consequently, in rural areas, family owned farms are underutilised. The Eastern Cape is also characterised by a minimum usage of the fertile arable land because many households have abandoned crop production (Mlomzale, 2014). Moreover, households who used to rely on agricultural activities for sustenance, seem to be reliant on other sources of income other than agricultural production, such as government grants. Thus, agriculture has ceased to be the major rural household's supporter and it is contributing less or playing a minor role in the local economy (ECSECC, 2012). The decline in agricultural production and the dependence on supermarkets for food supply, drove 68% of the population in the Eastern Cape to poverty (ECSECC, 2012). It is to this effect, that the NDP has targeted to eliminate poverty and achieve rural development through agricultural production by 2030.

3.4.4 Causes and consequences of Agriculture Land Abandonment in South Africa

In the former Transkei sub-district of Shixini, a part of the Eastern Cape, Andrew and Fox (2004) observed and demonstrated a parallel decline (to Kakembo & Rowntree, 2003), between 1962 and 1982, in the area of the agriculture land that were being cultivated. The causes have been attributed to cultivation intensification in gardens, the diminishing fertility of croplands and damage from livestock as well as compulsory schooling that removed child herders from the rangeland. The number of households

increased by about 50% in both these sites. Increasingly difficult was cultivation of the land and there was diminishing return on effort at a time of increase in the population of the community (Andrew and Fox, 2004). The population increase occurred in the context of the national relocation of 4.5 million to 11 million Africans to Homelands – which happened between 1960 and 1980 (Percival & Homer-Dixon, 1995). In other words, complex political and social changes occurred, leading in increased populations living on the communal lands while at the same time, the cultivation of lands that were designated for that purpose, was steadily declining (Davis et al., 2008).

Davis et al. (2008), noted that these abandoned lands attract public attention due to both the loss in agricultural production and the great soil erosion that is often visible on them. The project builds closely on the prior and ongoing work of the Agriculture Research Council (ARC), Eastern Cape Department of Agriculture (ECDoA) and the National Woolgrowers' Association (NWGA) to increase wool production by communal sheep-farmers. It also aligned with the strategic plan of the Eastern Cape Provincial Government so as to support previously disadvantaged farmers (Davis et al., 2008).

According to Mlomzale (2014), there are various reasons that are provided by respondents from Cata rural community in the former Ciskei homeland in the Eastern Cape, for not practicing crop production. The majority of the people complained of poor health and old age, while others attributed it to laziness in the community, especially from the youth. The problem of the lack of interest of the youth in agricultural activities, was also raised. Old people used to plough during their time, but now due to old age and not having oxen to plough their croplands, they were no longer ploughing them. Other reasons included no labour, high production costs (i.e. tractors), lack of fencing, global warming (i.e. climate change which possibly also caused erosion) and agricultural infrastructure (i.e. water problems especially for rain-fed or reliant crops). The unavailability of agricultural inputs (such as fertilizer and seeds) in the village was also highlighted as the biggest problem facing the rural communities. This is because of their affordability, the unavailability of funds and the cost and unavailability of transport.

As a result, the respondents highlighted that their households were now experiencing poverty and that they had to pay higher prices for vegetables that were often of poor quality. High levels of unemployment and the high cost of inputs and transport, also

became a major problem in sourcing inputs. Their households also depended on their social pension/grants as their children were not working and they had to buy groceries with the money.

The causes and consequences of ALA are considered and discussed in detail under the following subheadings.

3.4.4.1 Socio-economic and political

3.4.4.1.1 Land dispossession and marginalisation of Africans

It is widely acknowledged that agriculture in South Africa was originally built on the foundation of dispossession of the African population and their marginalisation – socially, economically and politically (Gwanya, 2010). Given the history of the invasion, brutality, dispossession and marginalisation of Black people, especially Africans in South Africa, it seems reasonable to say that poverty and the socio-economic inequalities that exist in South African today, can mostly be attributed to colonialism and apartheid. To this end, underdevelopment, often demonstrated by poverty and various socio-economic inequalities, remain a clear problem in the rural areas of South Africa. This is a regime and system whose objective it was to create a “first class capitalist economy for a few” – Europeans/whites in particular – on one hand, while leaving the majority and creating a legacy of underdevelopment and poverty in the rural areas. Gwanya (2010: 2) insists on this and attributes rural underdevelopment mostly to apartheid.

Ultimately, three kinds of geographic spaces in South Africa, with its own systems of the political, social and economic, were effectively defined by the geographic differentiation apartheid system, including: the major urban areas; the commercial farming regions and the connected small towns; and the so-called Homelands (Gwanya, 2010), where, according to De Klerk, Fraser and Fullerton (2013), small-scale farming are located. Thus, the dispossession and exploitation of Africans – under racist land laws such as the 1984 Glen Grey – resulted in the current dual agricultural sector comprising of two components. This is a well-developed commercial farming and a smaller-scale ‘communal’ farming (Greenberg, 2010; Goldblatt, 2010).

The land issue and poverty worsened during the programme of dispossession that were given effect by the 1913 Natives' Land Act and it was exacerbated during the dark days of apartheid under laws such as the 1950 Group Areas Act. This legislation and similar legislation effectively impoverished the black population and cast them out to the least fertile areas of the country. Releasing the first South African land audit, the former Minister of Rural Development and Land Reform (RDLR), Honourable Gugile Nkwinti, declared that this was particularly hard on rural communities, who were acclimatised to using the land they occupied over centuries for agricultural and economic purposes. This was effectively a birth right and taking that right away was disempowering, shattering and demoralising. On trial, standing for his life for trying to correct this devastation, Nelson Mandela said (DRDLR, 2013: 3):

"I am without land because the white minority has taken a lion's share of my country and forced me to occupy poverty-stricken reserves, over-populated and over-stocked. We are ravaged by starvation and disease!"

To this end, Dixon (1990) observed and argued that explanations of rural poverty often totally ignore the nature of rural production systems and how they responded to externally induced change. Likewise, during the colonial era, in particular, poverty was often portrayed as self-inflicted. Dixon (1990) noted that some of those explanations were blatantly racist and generally agreed to be valid at a very superficial level only. It was said that individual households and consequently communities, were poor because of idleness, ignorance, lack of intelligence, incompetence, drunkenness, gambling and even unwise expenditure. Furthermore, most of the time the problems of the Third World (which includes South Africa) in agriculture, are blamed on agricultural practices and the environment, with little consideration of how the present situation came about. There is also a long recognised one-way causal relationship between a poor environment and poverty. Certainly some of the most impoverished rural communities dwell in the environments that are poor (Dixon, 1990).

3.4.4.1.2 Migrant-labour system

The shortage of labour supply has been a major feature of South Africa's colonial economy history, particularly on white farms and plantations – since the days of colonialism. With the discovery of diamonds and gold, in the 1860s and 1880s respectively, the demand for labour and the labour supply shortage, also grew. To

generate the workforce that is required for the mining industry and other sectors of the colonial and apartheid economy, poverty, diseases and neglect were deliberately perpetuated. As the result, the native reserves, later referred to as Homelands, became the face of this great concentration (South Africa History Online (SAHO), 2014). The latent effects of the migrant-labour systems are further detailed under 3.4.4.1.6.

Essentially, land dispossession, marginalisation and the migrant labour system resulted in the endurance of a great decline for Africans: decline of land, agriculture (production) self-sufficiency and rural development. Thus, the responsibility of the democratic GOSA is to 'undo' this damage that Nelson Mandela Spoke about and to bring about restoration (DRDLR, 2013). To this end, Gwanya (2010) submits that the task of development in South Africa, is one of reconstruction, healing a nation so deeply scarred and wounded by centuries of exploitation of its people and natural resources. The masses of people seek inclusion and a rightful share of prosperity on a richly endowed land. Thus, since the dawn of democracy in 1994, efforts have been targeted towards dealing with the negative consequences of economic, social and political exclusion and the marginalisation of the rural dwellers. Several policy and institutional measures have been set up towards improving the lives of the rural communities and to revive rural economies, but they have had limited successes (Gwanya, 2010).

It has become clear, that the migrant labour system managed to break the bond of co-existence that Africans have enjoyed with land: from once successful farmers to consumers without production, but dependent on the capitalist economy and supermarkets. To comprehend the damage of colonialism and apartheid on Africans, it is necessary to consider the origin of the bond between man and land.

3.4.4.1.2.1 The people and the land: origin

Nothing is new under the sun. Concerning land and the people, the Word of God – contained in the Bible – as an unchanging, long-living, enduring and all-encompassing account of heaven and earth (and the fullness thereof) declares that:

“In the beginning, God created the heavens and the earth” (King James Version (KJV), Genesis, 1:1).

*“Heaven belongs to the Lord alone, but he gave the earth to us humans.”
(Good News Translation (GNT), Psalm 115:16).”*

The history of people and land, worldwide, is as old as the creation of the first man (human being). Apart from His very life, land is God’s first gift to man: fundamentally to dominate therein and to manage it: over everything that moves on it – the food producing; the swimming, the beast, the flying and the creeping; to live, work and eat from. Therefore, man and land co-exist. In fact, the very man is formed of and originates from land – dust from the ground. From land, to land he shall return upon physical death, as the saying goes, “dust to dust”. With this in mind, it is evident that there is a life-long bond/relationship between man and land. Without land of their own, men are not free. Like the Israelites, although brought by God out of captivity from Pharaoh in Egypt by God, they are not entirely free until they get Canaan, a land of their own (KJV, Leviticus, 25:28).

Agriculture pre-dates humanity. It is an enduring practice that was passed to man by God. For Adam, the first man, God established the Garden of Eden, wherein he worked and lived as God had intended. For man, God established this garden and endowed it with mineral wealth (i.e. good gold, bdellium and onyx stone), food security and bulk infrastructure in light and water supply (four rivers, one of them flowing around the entire land of Cush (also known as Ethiopia)). The man was settled/accommodated there. Given this account, it seems that this garden was huge and not a typical garden. Moreover, God provided the rain to irrigate the garden (KJV, Genesis, 1-2). Therefore, God was the first to establish and support a farm, is the founding father of agriculture and Adam is the first man to practice it. Adam was a full-time farmer and he was not left wanting, because he had good land. To this end, it is evident also that man were born for agriculture – it was their first and original occupation.

Given the bond between man and land, land dispossession, marginalisation and migrant labour became a system through which the bond of co-existence that Africans had with (good) land, their dependency on land (for work, life and living) and agricultural capacity. Not only was the Africans’ bread taken from them, the means to get it has also been lost.

In an attempt to deal with poverty, it is important to understand its very foundation in the first instance. Wisdom warns and instructs humanity:

“Love not sleep, lest you come to poverty; open your eyes, and you will have plenty of bread” (Revised Standard Version, Proverbs, 20: 13)

“He who tills the land will have plenty of bread” (KJV, Proverbs, 12:11; 28:19)

From this, it seems that man has two fundamental needs: good land and to work it. Therefore, any attempt – anywhere in the world – to deal with poverty that does not start here or neglects this, is bound to fail. To buttress the point, Fallon (1862 cited in Goldblatt, 2010) also submitted that, “the whole of creation depends upon the soil, which is the ultimate foundation of our existence.”

3.4.4.1.3 Decline of agricultural production, de-agrarianisation and dependency on employment and non-agricultural incomes

Agriculture Land Abandonment is the reduction of agricultural activities. According to FAO (2006a), the reduction of agricultural activities itself, leads to, in many cases, the abandonment of other economic activities such as shops, health services and other services in rural areas, particularly in remote rural areas. This is to such an extent that ALA may lead to depopulation and generally to a degradation of the ecological (environmental) and economic value of an area (FAO, 2006a).

According to Mlomzale (2014), at this point in time, most rural dwellers in the Eastern Cape province are deriving their livelihood from a variety of off-farm or non-agricultural activities. Agriculture’s current contribution to household income has dropped drastically over the past few years. The province’s GDP per person is less than the national average (Stats SA, 2009). The reported average income from an agricultural household is R17 729 and was less than that of non-agricultural households, which amounted to R32 204 (Provide Project, 2005).

Poverty has been noticed to be increasing as agricultural production decreases in rural areas. This trend of agricultural production decrease is described as a phenomenon of de-agrarianisation. Bryceson (1993:33) describes de-agrarianisation as a “process of economic activity reorientation, occupational adjustment and spatial realignment of human settlement away from agrarian patterns”. The process of de-agrarianisation manifests itself in various ways, particularly in shortages of food in households, declining agricultural output in the national economy and a reduced rural population (Bryceson, 1993).

Backing up the de-agrarianisation theory, the World Bank claims that the percentages of rural population has decreased from 66% to 50% between 1990 and 2009. By 2014 in South Africa, over 60% of the population resided in urban areas (The Presidency, 2014). Agricultural production has now virtually collapsed and now rural people consequently depend on non-agricultural incomes, which include wages, social pensions, remittances and, to a lesser extent, informal economic activities. Instead of subsistence agricultural production, this situation places an increasing dependency on employment. A number of arable agriculture lands are being turned into residential lands and grazing lands. Rural areas have now become 'retirement villages' for people who are tired of urban life and places for those wanting freedom from bonds and urban rates (Hemson et al., 2004).

3.4.4.1.4 Food security and dependency on supermarkets

The Eastern Cape Province is also facing a problem of food shortage (PGEC, 2004). Livestock is sometimes sold to make income for purchasing food since there is little crop production practices that are taking place (Bank and Meyer, 2006). The province spends the largest amount on food, despite having the largest population in the lowest income category. Of the household budget, food expenditure accounts for 60% to 80% and it is argued that agricultural production could assist with long-term food security (Baiphethi & Jacobs, 2009). There has been no significant change in the poverty profile with nearly every 7 out of 10 people living in poverty (Bureau of Market Research (BMR), 2009; Mlomzale, 2014). According to the Provide Project (2005), the agricultural households, which are mainly found in the rural areas, are financially worse-off in comparison to the non-agricultural households, which occupy the urban areas. Moreover, Perret (2002) noted that poverty was mainly a rural phenomenon with agricultural households experiencing the highest levels and depth of poverty.

Rural areas in South Africa account for approximately 40% of the country's' poor population, which depends on land as a source of livelihood through agriculture. Yet, rural South Africa is a consumer society (Ngomane, 2012). According to a NISS (2011 citen in Ngomane, 2012) Study, 95% of rural population indicated supermarkets as their source of food supply. This means that about 40% of the population who are living in rural areas, are not producers and instead depend on supermarkets for food

and other sources of income such as social grants to buy it and possibly other essential goods and services.

Moreover, De Klerk et al. (2013), notes that South Africa fundamentally differs from most other countries in the region, because of both the extent of its large-scale commercial agriculture (which alone produces about 95% of the country's farm output) and the well developed services that provide for the financial needs of this sector. Yet the small-scale component of agriculture is mainly found in the former Homeland areas, with the main lot being described by Goldblatt (2010) as marginal farmers who are dependent on subsidies and "soft" funding from government and institutions such as the Land and Agricultural Bank of South Africa (Land Bank).

Related to de-agrarianisation, is rural-urban migration and depopulation, as discussed below.

3.4.4.1.5 Rural-urban migration and rural population decline

Fundamentally, in South Africa, rural-urban migration (also commonly referred to as urbanisation) is itself a consequence of colonial and apartheid-induced land dispossessions, racial segregation, deprivation and exploitation. Land dispossession (including through land laws such as the 1894 Grey Act and 1913 Native Land Act) is thus at the heart of urbanisation in South Africa and the overcrowding in its cities (Bosman, 2014). This process left Africans confined and overcrowded in homelands and segregated African townships, like Mamelodi, Khayelitsha, kwaLanga, Dimbaza and Ibhayi (Bakker, Parsons & Rauch; 2016; Even-Zahav, 2016; Harrison, Todes & Watson, 2007; Western 1981). These outskirts are still home to a number of Africans and location to a majority of the governments' low-cost housing and informal settlements (Tshikotshi, 2010).

With the introduction of racial and unjust land and segregation laws, Africans were "robbed of their (inalienable) birthright to land by a form of governments founded on injustice and inequality" and from once successful and independent farmers, they were forced to become unprecedentedly dependent on their participation in colonial and European ('White') economy, predominantly in urban areas (ANC, 1955; Reddy, 1985; Peires & Dooling, 2004; Turok, 2012). While Africans were driven out of the urban areas, young people, predominantly males, were forced to provide servant or cheap

and intensive labour in farms, mines and urban industries under European control. Cheap labour became a premium to the developing colonial economy and more especially with the discovery of what was documented as the world's largest gold in 1886 and diamond deposits in 1867 in Kimberly.

In fact, colonial and apartheid economies were dependant on the large-scale labour of which only Africans could provide. In spite of the establishment of native reserves, it is reported that the number of Africans living in urban areas, increased, since the introduction of apartheid in 1948, as a result of a huge economic boom caused, primarily, by cheap African labour (Tagg, 2012; Turok, 2012; ZeroEightyFour; 2017). Yet the only space that were reserved for Africans in urban areas, were small and overcrowded African townships that were located in the outskirts of the urban areas and established as reservoirs of African labour, known as migrant-labour (Dyantyi, 2015; Pepeteka, 2013). Yet, when th Africans were too old or sick to work, they were sent back to the native reserves, which were also known to be reservoirs of surplus-labour (Beinart & Dubow, 1995).

Ultimately, the advent of democracy in 1994 and the repeal of several colonial and apartheid laws, like the pass laws (intended to force Africans off the land and to direct them to colonial labour markets while controlling their movements into and around urban areas of South Africa, the so called 'influx control' of Africans in cities in accordance to the Abolition of Influx Control Act 68 of 1986), led to the freedom of movement and a new urbanisation outbreak (South African Institute of Race relations (SAIRR), 2013; Setswe, 2010; Beinart & Dubow, 1995). Since 1994, the population of rural areas have been declining due to rural-urban migration or ongoing urbanisation since the advent of democracy in 1994. Stats SA (2011) reveal that more people have been leaving the Eastern Cape Province for the Western Cape and Gauteng provinces, than arriving. Table 2 below, shows an extract of the provincial migration streams for Eastern Cape from between 2001 and 2016.

Table 2: Estimated Eastern Cape migration streams, 2001 – 2016

2001-2006												
	EC	FS	GP	KZN	LIM	MP	NC	NW	WC	Out-migrants	In-migrants	Net Migration
EC	-	8 943	66 767	42 029	6 476	8 068	3 658	17 919	75 579	229 440	153 145	-76 294
2006-2011												
	EC	FS	GP	KZN	LIM	MP	NC	NW	WC	Out-migrants	In-migrants	Net Migration
EC	-	9 388	70 057	44 114	6 813	8 484	3 852	18 799	79 244	240 751	164 859	-75 892
2011-2016												
	EC	FS	GP	KZN	LIM	MP	NC	NW	WC	Out-migrants	In-migrants	Net migration
EC	-	9 421	70 302	44 387	6 850	8 531	3 883	18 813	79 570	241 758	176 821	-64 937

Source: Stats SA, 2014

The Twenty Year Review, published by Presidency, on how South Africa has progressed since democracy, was attained in 1994 and it stated that now over 60% of South Africa's population lives in urban areas (The Presidency, 2014).

Rural-urban migration leads to rural depopulation. The main problem with depopulation is that of the population declining below a critical level, resulting in a situation whereby any socio-economic activity is hindered by the lack of the required population to maintain infrastructure and basic services as described (FAO, 2006a). It is therefore notable that natural and human resources are particularly key to socio-economic development. To this end, rural development is necessary to reverse the process of depopulation (Spatial Planning and Information (2009) and a sufficient population is required for sustainable development (Alpine Convention, 2011).

3.4.4.1.6 *The triple challenge: inequality, poverty and unemployment*

Agriculture is not only a key livelihood in rural areas, but also the key to poverty alleviation (Cervantes-Godoy & Dewbre, 2010). Meanwhile, the World Bank (2018) maintains that poverty, high inequality and high unemployment in South Africa, persists. Data from the Statistics South Africa (Stats SA) report, revealed that more than half (55% or 30.4 million) of South Africa's population were poor at the upper bound poverty line of R992 monthly per person in the 2015 prices, for an upper middle-

income country, poverty remains (World Bank, 2018). In 2009, 16.7 million people were reported to be living in extreme poverty (Omarjee, 2017). Moreover, according to Triegaardt (2006), poverty is obvious to the human eye and through homelessness, shacks, casualised labour, unemployment, poor infrastructure and a lack of access to basic services – it is profiled. The reality is that South Africa’s socio-economic challenges are deep, structural and long-term (World Bank 2018).

According to Triegaardt (2006), poverty and inequality in South Africa have racial, age, gender and spatial dimensions. Therefore, the concentration of poverty lies predominantly with Africans, women, rural areas and black youth. Children are the most vulnerable and poorest, which is a threat to the future of South Africa (Omarjee, 2017). The majority of them reported to be poor because they live in poor households. The youth, additionally, bear the unemployment brunt (Omarjee, 2017) at the rate of 38.6% (World Bank, 2018). Children grow in poverty and at youth become unemployed. Females alike are more vulnerable to poverty than males (Omarjee, 2017).

3.4.4.1.6.1 The geography of poverty: rural poverty and urban pressure

The World Bank (2018) concurs with Triegaardt (2006) and states that “geography is still a maker of poverty” in South Africa as poverty demonstrates an enduring legacy of apartheid in South Africa with a strong spatial dimension in South Africa. In 2015, 59.7% of the country’s poor were living in rural areas. There is indeed an observable exodus of a large number of the rural population from rural areas (or former homelands) to urban areas, fleeing poverty and hopeful of opportunities for employment and a better quality of life (Kamer, 2006). Consistently, between 2006 and 2015, Eastern Cape, KwaZulu-Natal and Limpopo were the three poorest provinces. Eastern Cape had the highest rate of poverty in 2015 at 59.1% and recorded the lowest reduction in levels of poverty, while in the same year, the largest share of the poor in South Africa were in KwaZulu-Natal – which is partly due to the relatively high share of the population in KwaZulu-Natal (World Bank, 2018). On the same note, the former Statistician, General Lehohla, shared a view that migration to the Western Cape and Gauteng cannot be stopped and will cause poverty in urban areas (Omarjee, 2017).

On the other hand, the results tend to have an overwhelming pressure on urban resources and services such as land, water and housing, as well as an increase in urban poverty and thus, poverty migration. As observed by Yap (1995), unfortunately, the newer urban dwellers often lack the capacity to succeed in the cities due to the lack of skills, training, education, access to land and formal housing. More often, they become unemployed (Chiweshe, 2014; Stats SA (Census 2011), 2012), extremely poor, marginalised and a persistent burden to the government and policymakers (Atuahene, 2004).

3.4.4.2 Environmental

3.4.4.2.1 Region and capability: land suitability and fertility, and climate conditions

Not all regions in South Africa are suitable for agriculture and all its types. The country is a rich and diverse country with a spectacular range of biodiversity and climates as well as vegetation and soil types. South Africa can be divided into distinct farming regions and farming activities range from intensive crop production in winter rainfall and high summer rainfall areas, to cattle farming in the bushfields and sheep farming in the regions that are more arid (Goldblatt, 2010).

A third of the country receives sufficient rain for crop production, but only a third of this area (about 12% of the country) has fertile soil. Most of this area is marginal for crop production, while less than 3% of South Africa is considered as high-potential land. With only 3% of the land considered to have truly fertile soil, South Africa falls short of other countries, such as India where 53% of the country's land is arable. Climate-soil combinations leave only 12% of the country suitable for rain-fed crop production. Sixty nine per cent of South Africa's land surface is suitable for grazing and thus, it is not surprising that livestock farming is by far the largest agricultural sector in the country (Goldblatt, 2010).

For various reasons, the circumstances are more difficult for rural communities, such as in the Eastern Cape, especially when considering their historical dispossession and settlement into poor environments. South Africa inherited land patterns that were racially-skewed, since whites owned 87% of the agricultural land and blacks owned 13% while the greater part of the country's agriculture takes the form of animal production, as 80% (11% more than the World Wide Fund for Nature percentage) of

the country's agricultural land is suitable for this purpose (National Treasury, 2014). Bank and Meyer (2006) also add that the climatic conditions in the Eastern Cape Province are not conducive for crop production, while grain is obtained from large commercial farmers and group projects under irrigation. Such rural communities have to adapt to the environmental and climate conditions or fall victim to it.

Moreover, Goldblatt (2010) claims that the amount of land that is fertile in South Africa is limited; so many crop producers need to increase the fertility of their soils to achieve good crop yields. Frequent cropping depletes the nutrients of the soil, so farmers in the fertile areas also have to maintain the fertility of their soils. To this end, central to the sustainability of the farmers operations, is the manner in which they improve or maintain their soil fertility. Thus, sustainable agriculture or farming (which is about meeting the needs of people today and in the future) is very important (Goldblatt, 2010).

3.4.5 Policies and instruments for Agriculture Land Abandonment

Agriculture Land Abandonment is prevalent in marginal areas, such as mountainous areas. Experiences in Europe and Japan have modelled that agricultural subsidies in constrained and/or marginal areas can lessen the marginalisation of land and slow land abandonment (Eurostat, 2013). Agriculture Land Abandonment first occurred early in Europe and it has developed quickly, thereby attracting the attention of national governments and the European Union (EU). To decrease land abandonment, several European countries have introduced pointed policies (Eurostat, 2013; European Commission (EC), 2015). The Less Favoured Areas (LFAs) Scheme was wide in scope, but it was updated as the Areas of Natural Constraint (ANCs) Scheme in 2015. First launched in France in 1970, the LFAs Scheme aimed to improve agricultural viability in constrained areas (initially marginal mountainous areas) by issuing direct payments and ensuring that agricultural land use continue so as to maintain and promote sustainable systems of agriculture and viable rural communities in these areas (EC, 2015). The implementation of the LFAs contributed to the prevention of the abandonment of previously managed lands. Yet the impacts varied among member states due to their unequal support for farmers in LFAs (Perrier-Cornet, 2010).

In Japan, ALA abandonment coupled with rural depopulation, reductions to the agricultural labour force and an aging population became an obvious and major problem in the country's agriculture, especially in mountainous and semi-mountainous areas. In 2000, the Japanese government introduced a direct subsidy policy for these areas in order to promote agricultural development and to prevent the abandonment of agriculture (Hu, 2007). Under that policy, a subsidy per hectare (twice the EU average area subsidy) can be issued to each mountain farmer and the government developed a policy to subsidise the production (of rice) so as to stabilise the incomes of rice farmers (Gao, Cui & Hao, 2005). Results began to show as the rate of land abandonment began to slow with the implementation of these policies, and from 2000 to 2005, the rate at which land abandonment in mountainous areas of Japan was similar to that in plain areas (Ministry of Agriculture Forestry and Fisheries (MAFF), 2011).

South Africa, on the other hand, introduced the Preservation and Development of Agricultural Land Framework Bill (RSA, 2014). To address ALA, the act aims to preserve and develop agriculture land by (i) encouraging:

- Farming on agricultural land in collaboration with other role players; and
- Provincial and local government to enable and promote the use of agricultural land for farming purposes and compatible uses in their policies, legislation, Integrated Development Plans, Spatial Development Frameworks and other relevant administrative frameworks and procedures.

As well as (ii) discouraging or prohibiting:

- Land uses unrelated to agriculture from taking place on agricultural land, including urban and other non-agricultural developments that are likely to create conflict with established or proposed Protected Agricultural Areas;
- Subdivision and rezoning of agriculture land that results in the fragmentation of farming systems, reduced agricultural productivity and land degradation;
- Encouraging the mitigation of lost productive capacity of agriculture land if permanent impacts cannot be avoided and arise from development; and
- Promoting and encouraging long-term, viable farming units from an economic, environmental and social perspective.

Through the Bill, South Africa intends (iii) to establish an incentive-based regulatory regime that is linked to the enforcement to actively promote the preservation and optimal agricultural use of agriculture land for agricultural production.

Moreover, policies that are designed to address land abandonment should focus on both maintaining production on marginal land and addressing its perceived negative effects (van Berkel & Verburg, 2011; Renwick, Jansson, Verburg & Het, 2013; Shao, Zhang & Li, 2015). The FAO has proposed tackling ALA by classifying various situations of abandonment (FAO, 2006b). To this end, Renwick et al. (2013) concluded that policy designs for land abandonment should consider both the capability of the land and the population density: areas with a low land capability, but high population density should undertake multifunctional development (e.g., rural tourism); areas with a high land capability, but low population density should promote agricultural development; and areas with a low land capability, but low population density should focus on nature conservation.

3.5 CHAPTER SUMMARY

Chapter Three highlights that whereas agriculture remains the key to rural development, vast agricultural lands have been abandoned worldwide, over the last decades – testament that Agriculture Land Abandonment (ALA) is a global phenomenon. Largely, ALA is driven by rural–urban migration in areas where new economic opportunities are presented to rural residents, while ecological and mismanagement drivers are of secondary significance. Causes of agricultural/crop production decline and ALA in rural South Africa, include, amongst others, migrant labour and rural-urban labour, lack of oxen, schooling, livestock and lack of a fencing, land fertility and drought.

Moreover, ALA is a major hindrance to the efforts towards achieving sustainable development in rural areas for three primary reasons: (i) uncultivated land gives way to the uncontrolled shrubs growth and many unwanted plants; (ii) land becomes more susceptible to soil erosion; and (iii) income losses to people living in rural areas. In addition to potential income losses to people living in rural areas, socio-economic consequences of ALA include agricultural decline, the loss of livelihood, poverty and especially food insecurity to an extent that rural dwellers spend most of their money –

mainly social grant – on purchasing food. Thus, agriculture ceases to be the major rural household's supporter as there is an increased dependence on employment, social grants and supermarkets for food supply.

With a regard to policy, experiences in Europe and Japan have indicated that agricultural subsidies in constrained and/or marginal areas can alleviate the marginalisation of land and slow land abandonment. Yet South Africa is opting for an incentive-based regulatory regime that is linked to the enforcement to actively promote the preservation and optimal agricultural use of agriculture land for agricultural production. Moreover, it is suggested that policies that are designed to address land abandonment, should focus on both maintaining production on marginal land and addressing the perceived negative effects of land abandonment.

In the following chapter (Chapter Four), attention is given to the research process, an appropriate methodology to the study chosen and a detailed and practical explanation of the research plan and execution (of what was actually intended and how it was achieved), will be provided.

CHAPTER FOUR

METHODOLOGY, RESEARCH DESIGN AND METHODS

4.1 INTRODUCTION

Chapter Three presented the review of literature on and/or related to the topic of Agriculture Land Abandonment and rural development. This was a review of what the literature says about these concepts and the arguments that were constructed using some references. Chapter Four, in essence, explains the research design and methodology, including all of the processes that were undertaken to generate and present study findings and to interpret the data. This includes the methodological approach, strategy/design and study methods (e.g. sampling methods and size, and recruitment activities; data collection tools - showing how these helped to answer the research questions), describing how data was analysed.

4.2 METHODOLOGY

The study utilised a qualitative methodological approach in assessing ALA and rural development in South Africa. Qualitative research is an inductive process of categorising data and observing relationships between categories (McMillan & Schumacher, 1993). This implies that data and meaning, transpires purely from the study context and that data requires further interpretation (McMillan & Schumacher, 1993; Bamberger, 2000). This approach allows the respondents to give a contextual response to the research objective and the problem that is being investigated (McMillan & Schumacher, 1993; Krueger & Casey, 2009). In this case, it is to determine the extent, causes and consequences of ALA in the rural areas of South Africa.

The justification of adopting a qualitative methodology, further lies in its ability to allow for a flexible approach and for the researcher to research, in context, in the process of conducting the research (Wiersma, 1995). In addition to this, the researchers did not impose their experiences, beliefs, limitations and research strategies upon emerging data, thus the researcher's responsibility was to document the data that observed and

collected from the respondents, in their context. Thus, this methodology allows respondents to give a background as well as their experiences and perceptions of the research problem.

4.3 RESEARCH DESIGN

The study was conducted using a case study-based research strategy, which is a qualitative research typology. A village in the Eastern Cape has been chosen as a case study area (see 4.4.1 hereinafter). Research within the social sciences, often poses 'how or why' questions, where the researcher has little or no control over the events and has the desire to understand a contemporary or social phenomenon, in this case, ALA in a real-life situation instead of general knowledge - a case study is the most preferred strategy for this kind of a research (Yin, 2009). A case study is an intensive, holistic description and analysis of a bounded phenomenon (Merriam, 1998). The ability to provide a holistic description and analysis of the research focus or topic, serves as a justification of a case study strategy being employed.

Additionally, a case study makes an in-depth investigation, making use of multiple sources of data that are found in a setting or situation (McMillan & Schumacher, 2010). This is further advanced by Yin (2003), who argues that the use of multiple data sources, a strategy which also enhances data credibility, is the hallmark of a case study research. Baxter and Jack (2008) add that possible data sources may include, but are not limited to, interviews, documentation, observations and physical artefacts. Yet for such a narrative form of data to effectively respond to the research problem and objective(s), it relies upon a flexible, well-organised and thoughtful data collection process.

4.3.1 Research paradigm

A distinction between two research paradigms, namely, positivistic and phenomenological, is necessary in order to conduct primary research (Antoni, 2014). This study adopted a phenomenological paradigm that seeks to understand reality from the respondents' experiences and therefore it adopted applicable qualitative methods to collect and explain the experienced reality of the respondents. Gray (2009) makes it clear that the respondents' experiences of reality are the ground upon which

any investigation of phenomena must be based. According to Cohen, Manion and Morrison (2007), the focus of the phenomenological paradigm is on understanding the respondents' interpretations of the world around them and hence the data that has been gathered should give meaning and aim or intent of the people who are data sources. The phenomenological paradigm seeks to give a description of the respondents' experiences that are gained from interacting with the phenomenon and the meaning that is derived from such interactions (Springer 2010). Moreover, the phenomenological paradigm was adopted because it is grounded on the assumption that reality is not discrete from the observer, but rather formed by the observer's perspectives or perceptions.

4.4 SCOPE AND SCALE OF THE STUDY

This study provides recent data on the extent, causes and socio-economic consequences of ALA in the rural areas of South Africa. Ultimately, the study also seeks to provide relevant recommendations towards addressing ALA and achieving rural development. As McNabb (2004) puts it, the underlying aim of this study – as a social research – is to unearth information that is required to expand and improve the levels of awareness and understanding of one or more related phenomena and in this case, land abandonment and rural development.

Providing a South African socio-economic and fresh perspective of ALA and rural development, is the ultimate scientific contribution of this study, to the body of existing knowledge and it is meant to inform policy. Existing studies on land abandonment in South Africa (Kakembo, 2001; Kakembo & Rowntree, 2003; Andrew & Fox, 2004; Davis et al., 2008; Kakembo, 2009), are largely old and provide a predominantly environmental/ecological perspective, while others are not necessarily about land abandonment but agricultural production decline instead (Mlomzale, 2014). In providing a fresh socio-economic perspective, the study will expand on these studies.

The study did not cover the entire country, but instead it focussed on the Eastern Cape Province, given the historic prominence of the abandonment of land in the province in South Africa. The primary data will be particularly collected in and about Julukuqu, a village in the former "Transkei homeland" in the Eastern Cape. The basic motivation for using such a village, is the land that has been evidently lying fallow while people

are poor and increasingly urbanising due to a poor or lack of socio-economic infrastructure. Existing research (i.e. Kakembo & Rowntree, 2003; Andrew & Fox, 2004; Davis et al., 2008; Kakembo, 2009) also reveals that ALA exist in the Eastern Cape and in particular, the former homelands.

This study therefore is mainly delimited by the research subject and geographic area and to some extent, time. The study area is presented below.

4.4.1 Study area

Julukuqu (in Figure 4, used as a case study area) is just one example of the many rural villages, particularly in the Eastern Cape, that is experiencing the abandonment of croplands. There are visible signs of eroding soil, drying rivers supplying the village, such as Mtentu, and Guduse flowing from the mountain. Julukuqu is the researcher's village and the family has a cropland (*intsimi* in isiXhosa) that has been left untilled and lying fallow for years now. On one hand, Figure 4 also show cultivated and planted household gardens – indicating that it may be the ploughing season - and on the other hand, fallow (some clearly eroded) croplands, which is an indication of land abandonment.

Little to nothing is known, written or published about Julukuqu, the study area. Julukuqu is known well by its own people and through Sanuse Nqolobe, the late famous radio presenter of Unitra Community Radio (situated in the former University of Transkei now Walter Sisulu University), for famously saying that he is from *ezantsi kwesikolo saseJulukuqu* (isiXhosa for below Julukuqu Senior Secondary School). Geographically, Julukuqu is located in the Eastern Cape Province or former Transkei homeland in Mthatha under the King Sabata Dalindyebe Local Municipality (KSD LM). As shown in Figure 1, it is adjacent to the Great Place Mqekhezweni where the former and late President Nelson Rholihlahla Mandela grew up and became a man under the tutelage of the Regent of the abathembu people, King Jongintaba Dalinyebo. It is also a few kilometres by gravel road from Bityi where the police station is situated and where the young Nelson and Justice, the son of the king, ran to while trying to get away from marrying the young women that the king had chosen for them. They stole and sold two of the king's cattle to raise funds and secretly took a train in Bityi and left

for Johannesburg where Nelson began his long political walk to freedom (South African Heritage Resource Agency, n.d).

Figure 4: Aerial view of Julukuqu with some of its croplands



Source: Google Earth, 7 May 2018

Like in Cata community, in the former Ciskei area, people used to rely largely on agriculture for their livelihood and food security while growing up – croplands used to be tilled by cows or hired tractors and ploughed in season. Crops, including maize, beans and vegetables such as butternut and cabbage, were key enterprises that used to seemingly perform well and it proved to be a good harvest in the village. What is left now as a living reminder, at most, are the contour lines. Many people leave for the city to work and they come back during June and largely in December for Christmas and cultural traditions and/or rituals and celebrations – but not to till the land. It has become a trend and custom for even young men to drop out of school and to go to work in the cities, mostly in the Western Cape – Cape Town and the Gauteng province. This signals a great shift from agricultural dependency to a lack of reliance on agriculture for meeting socio-economic needs of this rural population.

4.5 STUDY POPULATION AND SAMPLING

4.5.1 Study population and sample

The study population were comprised of residents of Julukuqu, the study area and its authorities. Marshall, Cardon, Poddar and Fontenot (2013) provide that, ideally, one case study should be about 15 to 30 interviews. Yet Boyce and Neale (2006) maintain that the general rule on the sample size for interviews, is that when the same narratives, themes, problems and subjects are emerging from interviews, then a sufficient sample size has been achieved. In accordance with Cardon et al. (2013), and Boyce and Neale (2006), 17 respondents (including the residents, headmen (*sibonda*), and the ward councillor) were interviewed.

4.5.2 Sampling technique

The purposive sampling technique was used for this study to help choose the respondents from the study population. Maxwell (1997) and, Tashakori and Teddlie (2003), further defines purposive sampling as a method of sampling in which particular settings, persons or events are deliberately chosen for the important information that they can provide, which cannot be obtained from other choices. Purposive sampling is associated with small and in-depth studies, including case studies (Matthews & Ross, 2010). As provided by Maxwell (1997) and Tongco (2007), purposive sampling allowed the researcher to deliberately choose a particular group of respondents (e.g. residents of Julukuqu with croplands) and the study area (Julukuqu which is a microcosm of rural communities who have abandoned their croplands in the Eastern Cape, South Africa) to provide insightful/expert information on the phenomenon of ALA to feed into the study objectives and to address the research question. This makes the respondents key informants to the study.

The hallmark and strength of purposive sampling, essentially lies in its deliberate bias. Notwithstanding its intentional bias, purposive sampling has the ability to provide dependable and strong data (Bernard, 2002; Lewis & Sheppard, 2006; Tongco, 2007). Purposive sampling is efficient in that easily accessible respondents are chosen, including those who are keen to participate in the study (Teddlie & Yu, 2007). Similarly, Tongco (2007) provides that informants may be chosen out of convenience or from

recommendations of knowledgeable people. To this end, the first respondent was the headmen (in Figure 5) as the head of the village, who also recommended a number of (five) other people (who became the respondents), including the ward councillor, ward committee member and the experienced and elderly Respondent A, as key informants worth interviewing. Moreover, the headmen also raised the need for *Imbizo* (focus group discussion) to be held to provide a consolidated community response to the research questions.

Do not worry about the issue of cultivation. The people of Julukuqu want to cultivate the croplands. Since you have a car, let me give a day for a meeting. Be there also and we will inform you. I am sure you will leave with a book full. – Official 1

Figure 5: With Official 1 (on the left), the headmen of Julukuqu, after an interview – a day before Imbizo



Source: All fieldwork pictures have been taken by the researcher

4.6 DATA COLLECTION METHODS

According Casley and Kumar (1992), there are two types of data collection methods: qualitative and quantitative. The most obvious distinction between the two is that quantitative methods produce numerical data and qualitative methods result in

information which can be best described in words. This study employed qualitative methods of data collection and it used a case study strategy to collect data. Data was collected using a semi-structured interview guide with questions that were designed to illicit qualitative data (see Annexure C). Primary and secondary data collection is detailed briefly in the next sub-section

4.6.1 Primary data

Primary data refers to raw data or data gathered by the researcher first-hand – from respondents of the present study – rather than data that has previously been collected for other purposes or studies (Wiid & Diggins, 2013). For the purpose of this study, primary data was collected from 17 respondents using semi-structured interviews:

4.6.1.1 Individual interviews

Such interviews were conducted to allow the respondents to elaborate and express themselves in their own words. They are further used to provide information which can be best described in and to provide meaning. This can result in the collection of observational data (Bjornholt & Farstad, 2012). For the purpose of this study, the interview questions were determined in the same sequence in advance, as advised by Creswell (2013), using a standardised interview guide with questions that needed to be covered (Gall, Gall & Borg, 2003). Accordingly, an interview guide consisting of semi-structured questions was developed and used to allow the respondents to give meaning and to express themselves in words that may not be possible with attitude scaling.

The individual interviews were held with four respondents who had first-hand and official information regarding the phenomenon of ALA and its effects to the their households and community, as well as the context, nature of problem and possible solutions. This made them key informants.

Peek and Fothergill (2009) states that interviews can also be conducted where the potential key informants may not be included or comfortable talking openly in a group or particularly to individualise (as opposed to group) their experiences, perceptions and behaviours. To this end, individual interviews were conducted in two ways: face-

to-face with three respondents and through the cellphone with one respondent. These respondents, as community leaders, public representatives (officials) and elders, tend to know the area and its issues better as official and indigenous experts. It was important – for the richness of the data and to provide a different voice – to also interview a woman.

4.6.1.2 Focus group discussion (*Imbizo*)

The initial plan was to individually interview all of the respondents. Yet in addition to the four individual interviews, villagers (Julukuqu community dwellers) were gathered for *Imbizo* at the headmen's place on the agenda of crop production/cultivation (*umba wezolimo*). *Imbizo* is a standard operating procedure or tradition for raising and providing solutions/way forward to important issues in the village. *Imbizo* [noun; nguni], is basically a high-level focus group discussion that is usually called and chaired by a king or traditional leader (for example, a headmen), whose proceedings are captured by a delegated scribe. *Embizweni* is simply used to refer to *Imbizo* as an institution.

Focus groups are group interviews involving respondents who share the same characteristics relating to the research topic. They are used to encourage respondents to share their opinions, experiences and perceptions. Moreover, they are used to collect data that cannot be collected through the means of individual interviews, such as opinions and how members of a focus group relate to one another's opinions and arguments (De Vos, Strydom, Fouche & Delpont, 2005).

The focus group was held and conducted at the headmen's place, next to the kraal (in Figure 6).

Figure 6: The headmen's place



Thirteen respondents were available for and made up the focus group. This is because of the timing of *Imbizo*. There was an urgency caused by the longing of the villagers to cultivate their croplands and the fact that the coming days of the month (from the 1st to the 3rd) were social grant payment dates. Therefore, a number of potential respondents would be in town to withdraw their grants and they would not be available for the individual interviews and *Imbizo*.

After the official introduction and welcoming by the headmen, the researcher facilitated the focus group discussion to the end. The same interview guide (in Annexure C, with semi-structured questions) was used to facilitate and guide the focus group discussion and to ensure that the discussion remains focused, relevant and responsive to the study objectives and questions. Whilst the questions were written in English, the individual interviews and discussion were conducted in isiXhosa, the local language of the village. Conducting the focus group in the language of the respondents, increased the ability of the respondents to articulate their views (Stewart & Shamdasani, 1992). As with the individual interviews, open-ended questions were particularly used to acquire a perfect understanding of the respondent's views and experiences. The interviews and discussion were recorded (with the respondent consent) and transcribed, and key notes were taken as advised by Krueger (1994).

4.6.3 Secondary data

Secondary data refers to information that has been gathered before the current study (Collis & Hussey, 2009; Zikmund, Babin, Carr & Griffin, 2010). The secondary data was obtained from an internet source, Google Earth:

4.6.3.1 Satellite imagery

Satellite imagery was also used/analysed to map and establish the extent of land abandonment or abandoned agriculture land, by analysing and detecting changes in land use and land cover overtime (Khanal & Watanabe, 2006). It is important to note that the croplands' cultivation season (spring/summer) was considered in choosing, using and analysing the satellite imagery. Change is happening everywhere. This can clearly be seen when comparing things, like before and after images. Land use and cover are changing unprecedentedly faster the world over (or like never before) and its consequences are sweeping. Having been imaging the planet for over four decades, Landsat helps to make comparisons by allowing people to see how the earth has changed. Landsat collects imagery data at the scale of human relations with the land and with the necessary frequency to monitor, detect and gain an understanding of the changes in land cover and land use. This data has benefits to society. For instance, a number of historical images of a single area can now be obtained and analysed to detect change (or for 'Change detection') over time (National Aeronautics and Space Administration (NASA), 2016).

Overall, because of its consistency, Landsat data, obtained through the years, allows for the direct comparison of current specific area images that were acquired in earlier months, years or decades. This process of comparison can show changes in land-cover (and use) that take place gradually and subtly or rapidly and devastatingly. The archive's richness, together with a policy of no cost data, allows users to take advantage of the time series of data over geographic areas to find long-term trends and to monitor the rates and characteristics of the change on the surface of the land (Miller, Richardson, Koontz, John & Koontz, et al., 2013).

4.7 DATA ANALYSIS

A thematic analysis was used to generate and present the study findings from the collected data. This involves categorising and relinking aspects of data from the respondents and other utilised data sources so that data can be analysed, finding underlying meaning and discussing the meaning of the data (Matthews & Ross, 2010; Maree, 2012). The analysis will start with data coding (Boyatzis, 1998; Creswell, 2003). According to Creswell (2003), this involves the comprehensive process of grouping together evidence or collected data and labelling ideas that are similar, so that they ultimately provide the researcher with wider perspectives. The findings of the interviews (interviews and focus group discussion) and satellite imagery, made up the research data in this study. After data collection, the interview transcripts and other data sources underwent a comprehensive process of data coding and the identification of themes.

Themes capture significant data in relation to the research objective and questions and it provides patterned responses within the data (Braun & Clarke, 2006). In this study, the research objectives and questions made up the main themes of the research data. The researcher then made a list of the sub-themes by summarising the respondent's response to the interviews that relate to each main theme. The researcher then catalogued – categorised and put together – all the data that fit under each sub-theme. Finally, sub-themes were put together under each theme to summarise the respondent's comprehensive responses (Creswell, 2013). (See Table 4).

Following a comprehensive analysis, the study findings were presented (i.e. tabulated as indicated above) and discussed under each theme. Some of the responses that were given by the respondents (including Officials) are boxed and written in italics (and/or supported with some figures) to give reference and to support the discussion points. Moreover, the findings were considered and discussed against the literature review (which provides what can be considered as land abandonment, the process of abandonment and presents the causes and consequences of ALA and their relation to rural development). The similarities and differences between the study findings and literature review were also noted.

4.8 DATA VALIDATION

The validity of qualitative research is always questionable. So to ensure validity, triangulation was used. Validity indicates the level of accuracy and effectiveness as well as the consistency and dependability overtime at which an instrument measures what it was meant to measure (Du Plooy, 2001). Validity involves accounting on the truthfulness of the results/findings and whether the research truly measures that which it was intended to measure. The intention of this study is to answer the research question. To this end, in wrapping up the study in Chapter Five (the final chapter), the research objectives and questions are listed and it is provided on how each research question was answered. Moreover, triangulation is essential in providing data validity and reliability as it considers more than one source of data for the same data (Patton, 1990; Yin, 2003; Runeson & Host, 2009). Accordingly, the study findings that were linked with the current literature, similarities and differences were considered and diplomatically explained.

4.9 ETHICAL CONSIDERATIONS

As the study will involve people, it is essential to understand the ethical duties of conducting a research (McMillan & Schumacher, 2010). Firstly, ethical clearance was obtained from the Nelson Mandela University. Secondly, before conducting the study, permission to conduct academic research in Julukuqu was requested in person and obtained from the headmen (the contents of the request are attached as Annexure A). Moreover, consent was obtained from each respondent by the signing of the provided consent forms. (See Annexure B)

Prior to signing the consent forms, the purpose of the study (and the intended use of the data that was obtained as well as the findings of the study) and content of the consent forms, was communicated to the respondents in isiXhosa, their home and local language for understanding. Three respondents (i.e. officials/community leaders) consented to the use of their name with referenced quotes and the rest of the respondents were assured of confidentiality and anonymity. To this end, written responses of the focus group respondents are referenced as FGDR (focus group discussion respondent), and Respondent A and Respondent B, as well as Official 1 and Official 2 from the four individually interviewed respondents.

4.10 CHAPTER SUMMARY

Chapter Four highlights that a qualitative approach was chosen wherein a case study strategy was used to undertake the study. The primary data was collected from 16 respondents through individual interviews as well as a focus group discussion by using a semi-structured interview guide. Thematic analysis was used to analyse the data that was collected and to present the study findings. In the next chapter (Five), the study findings are presented and the data that was collected, is interpreted accordingly.

CHAPTER FIVE

FINDINGS AND INTERPRETATION OF DATA

5.1 OVERVIEW

Chapter Four specified the methodology that was chosen as well as the research design that was followed to collect the data and to obtain the study findings. This chapter offers a thematic analysis of the data that was collected as well as a presentation and discussion of the study findings – beginning with the important and relevant demographic data of the respondents.

5.2 DEMOGRAPHIC INFORMATION OF THE RESPONDENTS

All the respondents of the study were Africans, of which only one was a female (a widow with children and a ward committee member). The lack of the representation of women within the focus group discussion (*embizweni*) was due to the urgency and short notice of the focus group (*Imbizo*). It happened that only men came to *embizweni*. To this effect, Tongco (2007) provides that informants may be chosen out of convenience or from the recommendations of knowledgeable people. Notwithstanding this, it was evident also that it has not been a norm or culture to exclude women from attending and participating *embizweni*, particularly on the topic and agenda of agriculture, which affects everyone in the community. Nonetheless, it appeared as though, patriarchy concerning cropland is not in use, but in ownership and poverty has no gender

That is why we say the problem is the loss of capacity to work the croplands, because, with regards to their work in the croplands, woman are not different from man. Likewise, poverty is gripping all of us, including woman. – FGDR

The interest of those who did not make it to *embizweni*, was acknowledged from the onset. Moreover, the community has held meetings on the agenda of the agriculture/cultivation of croplands, in which community members, including women, raised their challenges, needs and proposals towards the cultivation of the their

croplands. This provided a basis to believe that the views of the absent community members on the agenda could not be any different or, at least, far from those present. Moreover, the responses that were provided by the Respondent B, the only female respondent, did not contradict the responses of rest of the respondents, but rather provided more detail and a feminine point of view. Given the dominance of males, demographically, interviewing a female respondent was very important and deliberate. This is stated as in accordance to Peek and Fothergill's (2009) research, which advances that individual interviews can also be conducted where the potential key informants may not be included or comfortable talking openly in a group or particularly to individualise (as opposed to group) their experiences, perceptions and behaviours.

With respect to age, the focus group had a mix of adult and youth respondents – a generational representation. The focus group respondents were between the ages of 18 and over 60 years, with a concentrated number of respondents between the ages 40 and 60 years. The lack of education is one of the prevailing challenges confronting Julukuqu and it is highlighted by the fact that none of the respondents completed their schooling. Even worse, some never even went to school. This seems as though it is because the older generations, in their childhood and especially when male, herded livestock.

I did not complete any standard, because my household had livestock. Therefore, I was not able to go to school because I had to herd the livestock. – Official 1

Only the respondents (three of four) that were individually were employed (as indicated in Table 3), which indicates a high unemployment rate in the village.

Table 3: Individually interviewed respondents

Name and Surname	Gender	Age	Level of education	Occupation	Source of income
Official 1 / Community leader	Male	53	Never went to school	Julukuqu headmen	Disability grant
Respondent A	Male	80	No schooling completed	Pensioner	Old-age pension
Official 2	Male	43	No schooling completed	Ward 18 councillor (KSD)	Public service
Respondent B	Female	40	No schooling completed	Resident and ward committee member	Child support grant; Public service; deceased pension annuity

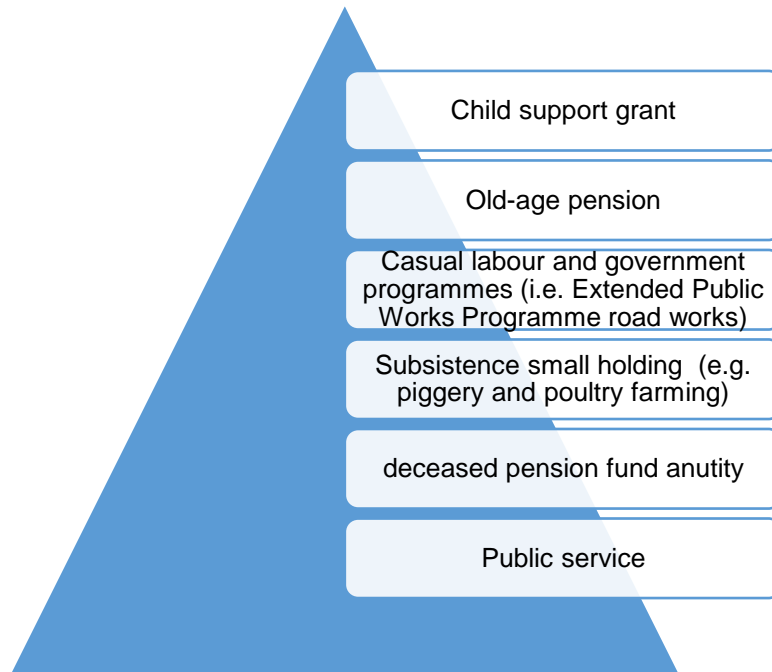
Source: Individual interviews

With the exception of the ward councillor (who was from Mqhekezweni, a neighbouring village), all of the respondents were from and resided in Julukuqu. Key to the study is that all of the respondents had a cropland in the area. This is in accordance with purposive sampling, which is defined as a method of sampling in which particular settings, areas, persons or events are deliberately chosen for the important information that they can provide, which cannot be obtained from other choices (Maxwell, 1997; Tashakori & Teddlie, 2003). It suffices to argue that only the people of Julukuqu and especially cropland owners, know for a fact why they have abandoned their croplands.

Croplands have been abandoned to the extent that none of focus group respondents indicated agriculture (both crop and animal production) as their source of income.

From *Imbizo* and individual interviews, the main sources of income in the community were identified and are listed in ascending order in Figure 7, below:

Figure 7: Main source of income of respondents, and in Julukuqu in general



Respondent B and Official 2 explained the system of the social grant as the primary and transgenerational source of income in Julukuqu:

Few people are farming livestock. The source of income is social grant: child support grant for people below 60, which stops when the children are 18 years old; and pension fund for people over the age 60 years. – Respondent B

In our days, everyone, regardless of how youth they are, at the age of 40 is seeking for a loophole of how I can get a social grant. If the person is married, [that person] is dependent on child support grant ... and feed on it until the time he/she might be getting pension. From there, he/she supports himself/herself by stealing people's belongings. – Official 2

Secondary to social grants:

There are people who work there on the road, who earn R700 a month. On that money, you find those people relying on it to buy grocery. Contribution to societies is also from this money. By the time you are paid, you have debts and realise that the money is finished. – FGDR ... even children's education depends on this money. – FGDR

The respondents provided that they spent their money mostly on food and towards burial, debts and health care among other basic expenses further discussed below under 5.6.2. Societies (rotating savings and credit associations (ROSCAs)) are very important and they play a critical role in funding the households in Julukuqu and include burial societies and stokvels for grocery. As de Aghion and Morduch (2010) explain, ROSCAs provide an alternative microfinance solution, based on pooling financial resources with a broad group of friends and neighbours, usually in one community. They are simply structured and their basic element is a group of individuals who agree to contribute money on a regular basis to a single pot that is allocated to one member of the group for each period or when their turn comes (de Aghion & Morduch, 2010).

5.3 THEMES AND SUB THEMES

As noted above, the research questions made up the main themes of the research data. The researcher then made a list of the sub-themes by summarising the respondent's response to the interviews (individual and focus group), which relate to each main theme, thereby responding directly to each research question and achieving the research objective.

Therefore, the discussion of the findings are presented according to the following format:

- Table format on theme 1, 2, 3 and 4, and sub-themes (see Table 4)
- A discussion of theme 1, 2, 3 and 4, and the sub-themes

Some of the themes, sub-themes and discussions overlap, as will be notable in the discussions of the themes.

Table 4: Overview table of themes and sub themes

Themes	Sub-themes
1. Extent of Agriculture Land Abandonment	<ol style="list-style-type: none"> 1. History of crop production in Julukuqu 2. Extent agriculture land abandoned in Julukuqu
2. Causes of Agriculture Land Abandonment	<ol style="list-style-type: none"> 1. Socio- economic 2. Environmental 3. Political
3. Socio-economic consequences of Agriculture Land Abandonment	<ol style="list-style-type: none"> 1. Decline in cultivated agriculture land area, crop production; loss of livelihood, heritage and income 2. Consumption without production 3. De-agrarianisation, dependence on employment and rural population decline 4. Poverty, unemployment, crime 5. Lack of livelihood/business succession 6. Dependency on government projects and support
4. Reviving agriculture: towards agriculture land use/cultivation and rural socio-economic development	<ol style="list-style-type: none"> 1. Desire and will to cultivate croplands again 2. Agri-infrastructure and implements 3. Leadership and agri-training 4. Community pro-activism and co-operation 5. Intensification of production for commercial purposes 6. Reversing rural population decline

Source: Data from 17 respondents

5.4 THEME 1: EXTENT OF AGRICULTURE LAND ABANDONED

5.4.1 Subtheme 1: history of crop production in Julukuqu

Despite the present abandonment of the croplands, history reveals that crop production has always been consistent and a source of livelihood in Julukuqu. Crop production once thrived in Julukuqu as a key socio-economic activity, to the extent that Julukuqu fed its inhabitants and the surrounding villages by selling surplus produce. The cultivation of the croplands was, therefore, a source of household food security, income and pride. The indigenous practice of *ilima* was Ubuntu in practice, wherein those with oxen gave their oxen and those with men or children provided themselves and their children to cultivate each other's land – free of charge. Essentially, the goal was to lift each other up and to leave no one behind. Thus, it appears as though co-operation and Ubuntu was deeply embedded in the people and in a common way of life.

(exclaims) Cultivation was practised a lot, with oxen; because we grew up without projects. This is primarily what caused us to have pride about cultivation during that time, because there were no projects – where people were cultivated for. Such as it was important during that time, each man took it upon himself to cultivate his cropland. You would not use your household's oxen only. You would come together, as two or three households. There would be one man with cattle, who would work alone, but most man would come together, and combine their household's oxen and cultivate each other's household's croplands. During that time, all things were right, nothing lacked... The main cultivating village in this area was Julukuqu. That helped us a lot, because people came here for maize. Maize filled the house and tanks. We would take a car and load bags of maize, 10 to 15, and offload them to our relatives in town to sell for us. – Respondent A

As indicated by the respondents, it is apparent that oxen were very useful in cultivating the land, while school going-aged children played an instrumental role in the performance of crop production and livestock farming.

I was born here and the croplands were cultivated. At home there were three croplands. Cows were used to cultivate, but they finished. Maize was planted and, we took turns to go to school and are herded livestock. Even white people used to come with vans and buy our maize. Cultivation of the croplands stopped, because children are now are going to school. – Respondent B

In the croplands, people grew maize, soya beans and pumpkin, but maize was the main crop. Moreover, croplands were a lot more valued than gardens since a garden was just limited to household sustenance.

We sow three things: maize, beans and pumpkin. – Official 1

In the croplands, we mainly sow maize... a garden was just for household consumption and sustenance. – Respondent A

5.4.2 Subtheme 2: extent of Agriculture Land Abandonment in Julukuqu

Figure 8 shows that the croplands of Julukuqu were once totally cultivated and that they are now almost (all) totally abandoned with only one person who are still cultivating their reduced cropland. The headmen is the only one now cultivating the cropland, because it was reduced to about one hectare (garden size) and is fenced. It is also evident that the headmen's cropland, itself, is semi-abandoned (DLG, 2005) given that the cultivation land area has been (greatly) reduced.

We have been trying, but there it is a bit difficult (exclaims); because here we have croplands, we had a fence and it ceased. People then got discouraged... Now I think it is the third year since I have stop cultivating... others had stopped long before me. Only the headmen and I remained, and our croplands are next to each other... The headmen is still endeavouring. So, now one man only is cultivating the cropland here... The headmen is still cultivating, because he obtained a fence and fenced about hectare of his household's cropland. – Respondent A

The headmen obtained an old fence from some household after a casual job of replacing the old fence with a new one and this is how he managed to fence off a portion his household's cropland as shown in Figure 9, below. Fencing is very

important in the area, especially because of the livestock that is not being herded. The livestock enters and grazes the crops in unfenced croplands, to such an extent that the lack of fencing has become the chief cause of ALA. Moreover, Figure 8 illustrates the change in the use of croplands as well as the cover – abandonment overtime (2002-2017). The situation of Agriculture Land Abandonment in Julukuqu, is in line with Filho et al. (2016), who reports that vast amounts of agriculture land have been abandoned worldwide over the last decades. Moreover, Mlomzale (2014) further provides that, in rural areas, family owned croplands are underutilised to such an extent that the Eastern Cape is also characterised by a minimum usage of the fertile- arable land since many households have abandoned crop production.

It is observable in Figure 4 above that the croplands were totally cultivated in 2002 and that the utilised agriculture land declined, especially from about 2010, in such a way that only approximately a hectare of the cropland – belonging to the headmen – is currently being cultivated. There size of the croplands and gardens differ since the gardens are relatively smaller.

... Those croplands are the old ones and could be 4 hectares; on the new ones could be 2 hectares... [Gardens] could be one or half a hectare. – FGDR

The effect of government intervention and projects, is worth considering for its role in the cultivation of croplands from 2002 – 2010. The intervention and project came at a time when people had stopped cultivating the croplands due to the increased (importance) child schooling and reduced cattle-stock. The first land tiller (*umlimi*), called by clan name Dosini, was allocated by the municipality with a tractor between 2002/2003 and tilled the land for the people for six years. The Ntinga O.R. Tambo Development Agency (Ntinga), which was established in 2003, began its work after the six years of Dosini. Ntinga came and implemented a project for the purpose of cultivation, which lasted for 2/3 years. For a period of three years after Dosini, another land tiller was allocated and tilled the land for a hectare-based price. Modern fertilizers and pesticides were provided and used in place of indigenous kraal manure (*umgquba*) as Ntinga was promoting the Green Revolution in the agricultural sector. Thus, for a period of 9 years, from 2002/03, the croplands were fundamentally optimally cultivated. These were good times, because there was plenty. Yet the Ntinga

project ended in 2010 and the people began to stop cultivating the croplands and they then abandoned them.

The croplands then were lying a bit fallow; especially those of the people who not afford to hire a tractor to till them. Then Ntinga projects came and all people cultivated, because it was cheap... depending on the number of hectares and the financial muscle of a person. There was cultivation for about two years. A person had a lot maize, such that it would even rot... because all people were cultivating. Nonetheless, it was a good time; people would even sell maize... the project ended in 2010. After that, cultivation ceased, because livestock were grazing our crops in the croplands. – Respondent B

Figure 8: Agriculture Land Abandonment in Julukuqu, 2002-2017



Source: Google Earth; from DigitalGlobe, Image Landsat / Copernicus

The white path line on the bottom left (in Figure 8) marks the border of the Mokolweni cropland. Residential developments have not occurred, particularly on the agricultural land that was used for or under cultivation, because of the rural population increase since some of the households relocated to where their forefathers dwelt and were buried (*Zwelidala* is a Nguni word, loosely translated as old country). This is different to the observation of Hemson et al. (2004). According to Hemson et al. (2004), agricultural production has virtually collapsed in the rural areas of South Africa to such

an extent that a number of arable agriculture lands are being turned into residential lands and grazing lands. Figure 8 also shows that minor gully erosion is also appearing with land abandonment. This is the kind of soil erosion that follows ALA (Harden, 1996; Khanal & Watanabe, 2006). Yet, notwithstanding this, grass covering seem to be holding and keeping much of the land from eroding. The dried rivers signal a lack of rainfall, water and irrigation in the area.

Below shows the headmen's cultivated cropland

Figure 9: Headmen's fenced and cultivated cropland



Globally – including in Europe and Asia – ALA has been prevalent in marginal areas, such as mountainous areas, that are sloping (Hu, 2007; Eurostat, 2013; EC, 2015; Shengfa & Xiubin, 2017). Yet Julukuqu, In terms of its location and surface, is relatively plane, but its location in the former homeland, Transkei, makes rural areas such as Julukuqu, marginal areas.

5.5 THEME 2: CAUSES OF AGRICULTURE LAND ABANDONMENT

The causes of Agriculture Land Abandonment (ALA) in Julukuqu are particularly socio-economic, environmental and political in nature. According to Benayas et al. (2007), socio-economic, ecological and mismanagement drivers have a bearing on the

abandonment of agriculture land. Yet land mismanagement – practices that can lead to severe soil erosion or land degradation (Benayas et al., 2007) – was not identified nor indicated, by the respondents, as a cause of ALA in Julukuqu.

5.5.1 Subtheme 1: socio-economic

5.5.1.1 Infrastructure: Livestock, schooling and fencing

Livestock presents a major challenge of the grazing of cultivated croplands, which have caused the respondents and the community of Julukuqu at large, to abandon the cultivation of the croplands. According to the respondents, this is due to the lack of fencing and children going to school, thereby leaving the livestock to graze cultivated croplands, virtually with nothing and no one stop them. Moreover, single women or widows seem to be more vulnerable and they suffer the most from free-ranging livestock, because they dominate crop production (land cultivation) as indicated by the headmen.

... the livestock, including horses, began to graze the croplands by night, livestock. The people of Julukuqu got discouraged, because they used money and weeded only for the maize to be grazed by horses, which stayed in the croplands, when it is ripe... then croplands started lying fallow. This is because, most of the time croplands do not belong to man, and they belong to woman, because man are no more. [Therefore] it is woman who are cultivating. So, woman are not able to wake up at night to go and see what is happening, and by the time they go in the morning the already grazed and messed-up. This is also deliberate, as people graze their livestock at night in the croplands. – Official 1

We were the last people to cultivate the croplands and we stopped, because livestock grazed our maize. – FGDR

We also, do not want our children to study in the rural area... There was a fence in the past, called trust... such that there was a brother who was a ranger, surnamed Nkohla... who had bicycle and guarded on governments payroll. We called him Ranger... Cultivation stopped because there was no fence. The fence ceased because that man died and no ranger was employed afterwards. – Respondent B

Similarly, in the former Transkei sub-district of Shixini, part of the Eastern Cape, Andrew and Fox (2004) observed an increase in abandoned agriculture land between 1962 and 1982, and the causes were attributed to cultivation intensification in gardens, the diminishing fertility of croplands and damage from livestock as well as compulsory schooling that removed child herders from the rangeland. The lack of fencing and oxen to cultivate the land were also found to be the cause of the decline in agricultural production in the Cata rural community in the former Ciskei, in the Eastern Cape (Mlomzale, 2014). Yet the cultivation intensification in gardens do not seem to be a cause of ALA in Julukuqu, but rather its consequence. Moreover, there was no indication of a diminishing fertility in the croplands of Julukuqu.

5.5.1.2 Old-age and health

One of the reasons for the abandonment of the cultivation of croplands and the croplands themselves, appears to be old age and poor health, which comes with aging. Respondent A, aged 80, stopped cultivating his cropland and abandoned it because of arthritis.

Loss of strength caused me to stop cultivating in the croplands, because you have to be always in the croplands when you are the only one who has cultivated. I started suffering from arthritis. Arthritis sometimes does not allow me to go to the croplands. Therefore, I saw that would be a problem because, there has to be always someone in the croplands and I will cause trouble when arthritis is not allowing me to go to the croplands. I was not troubling anyone before, because people looked after their livestock when they saw that I was in the croplands they would look after their livestock.

In fact, in Cata, linked to the reluctance of the youth, the majority of the people also complained of poor health and old age as some of the reasons why they were not practising crop production anymore (Mlomzale, 2014).

5.5.1.3 Abandonment of indigenous practice called *ilima* and the rise of individualism

There appears to be an abandonment of good indigenous practice and the underutilisation of indigenous knowledge – a societal culture/value system. It seems

as though, with the government intervention and project, such as Ntinga, co-operation deteriorated while giving birth to individualism. Co-operation ended and individualism rose (*'kwaphel'ilima kwavuk'ubayinkom'edlayodwa'*) to the extent that people no longer combined their resources and efforts, such as oxen and manpower, to cultivate the land so as to meet their socio-economic needs.

Extreme poverty came with the projects. Now a person works alone in his household's cropland, because the culture of collaboration broke when the projects came. People looked to and relied on the tractors of the project to cultivate their croplands and there began division, because this discouraged us a lot from working together. When the projects came, we gradually stopped using the cows, until we stoooped entirely. Then difficult started to attend, because when we used cows; households brought and span their oxen together and had success in what they did.

We had great pride and joy when it came. I think we took five years having received it. (deep sigh) no one was troubled; (deep sigh) we boasted to each other about cultivation and our produce. – Respondent A

5.5.1.4 Rural-urban migration and employment

Besides schooling, some of the family members have gone to work in the urban areas, for example, working as security guards , and do not life in the village during the year. The main migrators are the youth who are looking for employment and income from non-agricultural activities.

My sons do not cultivate the croplands, but if they can be here, there is no way he would not cultivate when he is eating here. What would happen instead is that I would be the one to rest, and he will go to the croplands. – Official 1

They say they are going to look for work. Even those who are not working, they are looking for work hence they are not here. – FGDR

Benayas et al. (2007), also conclude that the abandonment of agriculture land is a global phenomenon that is largely driven by rural–urban migration in areas where new economic opportunities are presented to rural residents. Notwithstanding the reality of

emigration-out-migration and the decline of the population of Julukuqu to urban areas looking for jobs, the respondents did not clearly indicate rural-urban migration as a cause of ALA in the area, yet the lack of fencing was clearly and more pronounced as a cause of ALA.

5.5.1.5 Youth reluctance

Youth, especially, is reluctant to get involved in agricultural activities, particularly the cultivation of croplands. Thus, the future of agriculture seems to be bleak because the youth is increasingly reluctant to engage, at all, in intensive crop production and they usually opt for short cuts.

One of the things that is also discouraging is that our people are impatient... A number of things are on the rise in the society, such as stealing. If you happen to listen to news, especially in ward 18, people are after quick cash. You see then young people who want to cultivate reluctant to go and do so, because people want short cuts. – Official 2

I have sons. When they have come, they say I should stop killing and troubling myself and only plough cabbage and potatoes in the garden, but I tell them that I was not fed-up with that. That says we are not in agreement with the youth on working the land and the vision thereof. The youth want cabbage and spinach, which do not cater for the livestock... yet they want maize to be sent maize when they are in the urban area. – FGDR

The problem of laziness in the community, especially from the youth, was also raised as one of the cause's of agricultural production decline in Cata, where the youth demonstrated a lack of interest in agricultural activities (Mlomzale, 2014).

5.5.2 Subtheme 2: environmental

5.5.2.1 Climate change: drought

Concerning fertility, the croplands in Julukuqu has no problem. Environmentally, the challenge is climate change and variability, particularly drought.

The land has no problem... here we are troubled by drought and livestock. Drought aggravated against us and few people continued to cultivate the croplands. You see that now they are no longer cultivating. – Official 1

It is possible that you will get a proper harvest when there is frequent rainfall, but when there is no rain, and then you will not get what is appropriate. Therefore, rain and drought contributes to the abandonment of the croplands. – Official 2

According to Fraser et al. (2003), the Eastern Cape province is characterised with fertile soils that have a high potential for agricultural production to mitigate the high levels of poverty. Moreover, in terms of the DGDS, because of the available natural resources, the potential and prospects for the development of agriculture in the region lies, among other things, on the crop production. Additionally, the following advantages are due to crop production in the region (O.R. Tambo DM, 2007):

- Good fertile soils
- Favourable climatic conditions
- Some land availability to every household
- Suitable terrain on river valleys providing irrigable land
- Abundant water resource along rivers for irrigation
- Huge local market and local consumption

The soil might be having no problem and there might be some land available to every household, but the climate is seemingly no longer favourable, as drought has left the river streams and the land hard and dry, in Julukuqu. Effectively, there is no reliable source of irrigation in Julukuqu. Other reasons for not practicing crop production in Cata, besides the lack of labour and the high production cost, also included global warming (i.e. climate change) and agricultural infrastructure, such a water problems, especially because the crops were rain-fed or reliant crops (Mlomzale, 2014).

5.5.3 Subtheme 3: political

5.5.3.1 *Withdrawal and lack of government support*

This includes the withdrawal and lack of government support (e.g. project, funding and inputs) as well as the resulting, but unintended, dependency on the government. Government programmes, intervention and projects seem as though to they yield unintended results, where the community is not able to sustain their livelihood on their own without the government's involvement. Ntinga functioned as a special purpose vehicle (SPV) for the implementation of the DGDS of the Region, focusing on agriculture as one of its four-focus areas (Ntinga news, 2010). According to the ward councillor, this programme that saw the establishment of community projects, yielded unintended consequences. The people of these rural communities, including Julukuqu, began to become too dependent on the government to cultivate their croplands.

This problem started with the arrival of Ntinga... I think about 8 or less than 10 years ago; government launched a programme of cultivating for the people. People would pay a small amount of money according to the number of hectares they are cultivating. It was a beautiful and promising, because everyone even the one who was not longer cultivating, cultivated, but in the long-run, due to lack of funds government stopped and our people also stopped cultivating the croplands... This is the first thing that discouraged them, because they had everything done for them before, paying small amount of money. – Official 2

The above assertion seem justified considering that the people stopped cultivating the croplands and abandoned them when the projects stopped for some reason in 2010. Moreover, the people are now also looking to the government to provide and fence their croplands for them. Meanwhile, the government now seem as though it is not responding to their need, because of budgetary constraints and the processes that need to be followed. Instead, the government is now expecting the people of Julukuqu to be proactive, to form a co-operative and to cultivate their cropland before the government can intervene and give them a fence. Thus, they should be proactive and

they should not wait for the government. This seems to be a difficult challenge for the community, notwithstanding the fear that livestock will graze their crops.

5.6 THEME 3: SOCIO-ECONOMIC CONSEQUENCES OF AGRICULTURE LAND ABANDONMENT

It appears as though the effect of Agriculture Land Abandonment have only been negative on the community of Julukuqu. The consequences of this phenomenon on the households and community of Julukuqu, as indicated by the respondents, are discussed under the respective sub-themes below.

5.6.1 Subtheme 1: decline in cultivated agriculture land area, crop production; loss of livelihood, heritage and income

Gone are the days and good times where the people of Julukuqu produced, consumed and sold surplus produce for income. In those days, households used to have enough to eat, feed their livestock and they sent their children to school with the income that was generated from selling surplus produce.

No, I am not cultivating to sell. I have reduced that cropland... to a size that I will be able to manage. The area should be enough for me. – Official 1

Davis et al. (2008), also observed that the abandoned lands in the Eastern Cape attract public attention due to the loss in agricultural production. As it is the case in Julukuqu, López (1996) noted that, in practice, most of the totally abandoned agriculture land does not support any kind of activity and thus it generates no livelihood or income for its owners. In the case of Official 1, the headmen, the management of the cropland has changed and there has been shift towards less intensive production (Baldock et al., 1996).

Moreover, the respondents seem to have lost not only food security and income, but also their pride, joy and heritage of agriculture that had been their livelihood for ages.

It is painful to me that we are not cultivating, because the matter of cultivation is important to us – it's important to me. – Respondent A

5.6.2 Subtheme 2: consumption without production

5.6.2.1 Food insecurity and dependency on social grants and supermarkets for food

Now, since the people are no longer cultivating their croplands, a phenomenon of consumption without production have emerged. This is a state of food insecurity, dependency on employment, unemployment, social grants and supermarkets/wholesales for food. The respondents further indicated that they now spend most of their money on food and the money is used up immediately after they receive it. (See Figure 10). Therefore, this seems as though they are living 'from hand to mouth'.

We get money from the social grant. The old-aged get R1500, the disabled I think it is the same. For example, tomorrow we are supposed to go and take the amount we are given at the end of the month. The money is used for many things: burial society, food etc. We buy food because we do not cultivate. You come back from town with the money finished, yet carrying (only small) plastics of goods; it finishes on plastics, because prices (of food) go up all the time. – FGDR

... even the price of maize is increasing. Some of us have chickens and pigs that we are farming, which do not eat rice. They want maize. This is where we are hit. – FGDR

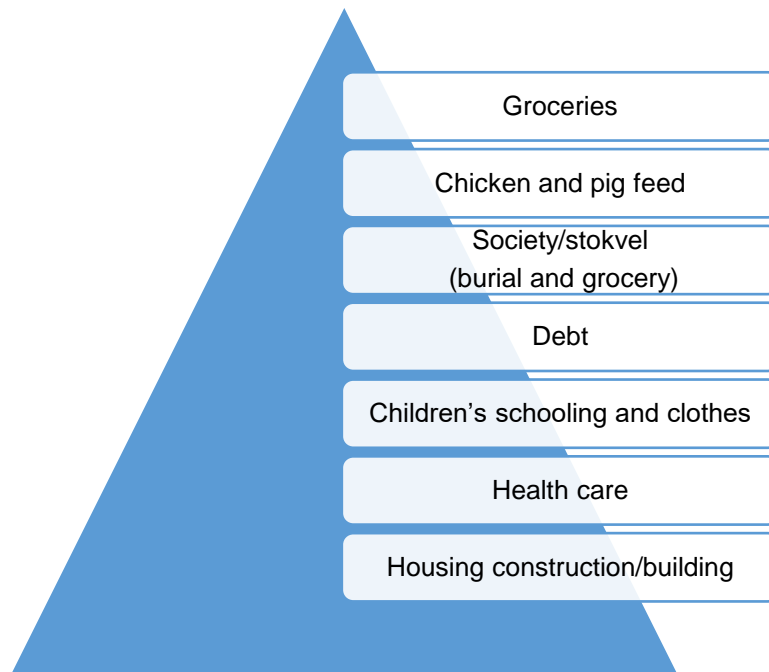
To eat we go and buy with this grant. (deep sigh) There is hunger now... Education, food, building and clothes are dependent on this grant money. It finishes in the hands... the stokvel contribution is also towards children's needs, so you are left hungry. – Respondent B

Here we are living on that old-age grant, only, because jobs are scarce for the young men. Now, this old-age grant is little. You first look into the needs of the house: food, sickness of children, your sickness as well, and the livestock we have now is also being treated on this old-age grant. It does not do anything for us beyond this. Nonetheless, this money sustains most of us. – Respondent A

Likewise, ECSECC (2012) reports that households in the Eastern Cape who used to rely on agricultural activities for sustenance, seem to be reliant on other sources of

income rather than that of agricultural production, such as government grants, wages and remittances. Therefore, agriculture has ceased to be the major rural household's supporter. To this end, the decline in agricultural production and the dependence on supermarkets for food supply, drove 68% of the population in Eastern Cape into poverty (ECSECC, 2012).

Figure 10: Money spending



Whilst the croplands have been abandoned, gardens are still productive, but they are not adequate enough to provide for the household's food security. Therefore, it seems also as though, year after year, gardens are still cultivated because they are fenced. To this end, people are now relying on social grant and gardens, yet overtime, they still go and buy food from the wholesale, because the produce is not enough.

It is known everywhere in Julukuqu, that you will hardly find a garden that is lying fallow. People cultivate gardens and eat maize. They are depending on those gardens; there is nothing else... That small harvest assists even to feed the chicken. However, when it comes to the grocery, food that is cooked, people here eat rice, maize meal and buy samp when they want samp and beans... When the maize from the gardens finishes, people go to the wholesale to buy maize, all the time. – Official 1

It has been acknowledged that the Eastern Cape province is facing a problem of food shortage (PGEC, 2004) to the extent that the province have been reported to be spending the largest amount of money on food, despite having the largest population in the lowest income category (Baipheti & Jacobs, 2009).

Essentially, the people have lost the benefits of cultivation.

It was good when we were cultivating the croplands... we did not lack maize... even our livestock was well fed, because when it is cultivated there would be grass for the it... We were well off. We are impoverished now, because the grass and stalk is finishing... When we look at it, this is caused by not cultivating the croplands. As soon as you stop cultivating, food becomes scarce. Food is scarce also to our livestock. This means cultivation is important, because it provides food for people and the livestock. Now we struggle to go and buy maize.

We did not consider ourselves as having cultivated when we cultivated the garden. By our standard, a garden was just for household consumption and sustenance. That means we are in trouble now, because we are cultivating the gardens only... we are poor, because we have to go and buy, and this is painful to us.

– Respondent A

5.6.3 Subtheme 3: de-agrarianisation, dependence on employment and rural population decline

According to the respondent's responses, it appears that the community no longer rely on agriculture as both a source of food and income. Besides the dependence on social grants, there appears to have been a shift in the livelihood as a number of people look to non-agricultural employment in rural areas.

I have other children who are not at home; who are at work, but they are not working for me now... My younger brother called Nomagaga lives in Cape Town. My son is in Bhayi... I do not know what is happening, he is not working. There other one gave up school and ran to Cape Town. He is telling me that he is paid little where he working temporary. There are also those who are here besides these ones I am counting... they are three. – Official 1

A great number of people no longer reside in the village. The village population has declined as a number of people, including children, migrate to the urban areas, cities, and towns, to study, look for work or to work. Essentially, those of Julukuqu who leave, migrate to urban areas because of money. Ultimately, such migration and population decline (depopulation) also means that a reduction to the agricultural labour force in rural areas to urban employment, takes place. Contrary, the lack of labour was identified as the cause of the crop production decline in Cata village (Mlomzale, 2014).

What is driving people to urban area is money and unemployment. – FGDR

Even for money to be available, you use your strength. So, you have to go, work, and get money. – Official 1

According to reviewed literature, poverty increases as agricultural production decreases in rural areas. This trend of agricultural production decrease is described as a phenomenon of de-agrarianisation. Bryceson (1993:33) describes de-agrarianisation as a “process of economic activity reorientation, occupational adjustment and spatial realignment of human settlement away from agrarian patterns”. The process of de-agrarianisation manifests itself in various ways, particularly in shortages of food in households, declining agricultural output in the national economy and in a reduced rural population (Bryceson, 1993). Effectively, Hemson et al. (2004) state that agricultural production has now virtually collapsed and rural people now consequently depend on non-agricultural incomes, which include wages and social pensions. Instead of subsistence agricultural production, this situation places an increasing dependency on employment (Hemson et al., 2004).

According to the Provide Project (2005), the agricultural households, which are mainly found in the rural areas, are financially worse-off in comparison to the non-agricultural households, which occupy the urban areas. People who are living in rural areas take a chance in migrating to urban areas in order to seek employment opportunities and a better life. Yet some leave and then come back because they are unable to secure a better life in the urban areas. To this end, the rural depopulation does not seem to have reached the level where no economic activity can take place because the respondents perceive that there is still a significant number of people on the ground to maintain infrastructure and basic services.

When I look at it, majority of the youth is hear in the village. We can say it is 50/50. If we are hundred in this village, 50 is in Gauteng and 50 is here. – FDGR

Moreover, some people seem as though they come back from the urban areas when they realise that they are dying from hunger and it is better to go back to their home in the rural areas.

... people are looking for jobs in the urban areas... but you find that when they are there, they are sitting down and not working. Some give up, seeing that hunger is killing them, because there is no longer staying is hostels where food was served for everyone. Some are staying in a Township and have to pay rental... Others comeback, seeing that they are not safe there. Some are sleeping outside in the street. – FGDR

The results of rural-urban migration tends to have an overwhelming pressure on urban resources and services such as land, water and housing as well as an increase in urban poverty and thus, poverty migration. As observed by Yap (1995), unfortunately, the newer urban dwellers often lack the capacity to succeed in the cities due to the lack of skills, training, education, access to land and formal housing. More often, they become unemployed (StatsSA, 2012; Chiweshe, 2014), extremely poor, marginalised and a persistent burden to the government and policymakers (Atuahene, 2004). Notwithstanding this, the former Statistician, General Lehohla, argued that migration to the Western Cape and Gauteng cannot be stopped and will cause poverty in urban areas (Omarjee, 2017).

5.6.4 Subtheme 4: Poverty, Unemployment and Crime

The various respondents' responses, link poverty, unemployment and crime in the village to the abandonment of crop production and land. To this end, hunger, livestock theft, conflicts and robbery, even of grant recipients, appears to be the major challenges that are facing the community of Julukuqu. Young people seem to be affected the most by unemployment and because of this reason, they become known perpetrators of crime in Julukuqu.

The consequences of not going to the croplands, one, is poverty that I have already highlighted. In the olden days, you would find there are two households that are poor, because of the disease of hunger, but now you would find that the entire location is poor; poverty is drastically increasing. This means that when poverty increases, people lack something to do. What is prevailing is that people idle away the hours. The married make more children... From there, the rate of crime has increased. Children go to school, because there is feeding scheme. They do not go because they want to be at school, but they are driven by hunger. However, when that food finishes they leave school and go to steal people's things. They leave school, because they want to get rid of hunger; and arrive in areas such as Joburg and Cape Town and not get Jobs. They end up coming back to steal peoples things here. – Official 2

The rate of unemployment seem to have increased... the rate of protests in the community has been growing... You find that hundreds of young people are fighting to get a job in a particular project, but very few will be taken, maybe less than 10. Then there will be fighting in the community, because people are raging at each other. – Official 2

The main livelihood we have, actually, is this livestock, only, which is now being seized by children, because they are not working. They come at night and take all of it; and when you wake up in the morning, the kraals are opened and the livestock is not there... See here these are bullet cartridges; they came here yesterday night to take my livestock... This is painful. – Respondent A

The people who receive pension are being harmed. In fact, some were injured the other month. They are hurt and robbed their money. – Official 1

Moreover, because the Eastern Cape province is facing a problem of food shortage (PGECC, 2004), livestock is sometimes sold for money in order to be able to purchase food since there are few crop production practices that are taking place (Bank and Meyer, 2006). Unfortunately, the livestock is now prone to become targets for theft.

Ormajee (2017) also reports that the concentration of poverty, lies predominantly with Africans, women, rural areas and black youth. Children are the most vulnerable and

poorest, which is a threat to the future of South Africa. They grow in poverty and become unemployed at a young age. The majority of them reported that they were poor because they live in poor households. To this end, the youth, additionally, bear the unemployment brunt (Omarjee, 2017) at the rate of 38.6% (World Bank, 2018).

The community of Julukuqu intends to patrol by night because of the increased crime rate, especially regarding the livestock theft that is prevalent in the community. Yet this is not easy to go about. It required authority, first from the king and then from the police. To this end, the people are yet to secure authorisation from both the king and police.

When we met, and advised each other, (deep sigh) we saw that it is better we patrol and not sleep. We wrote a letter to the king; for the king to put a stamp and for us to take the letter to the police in Bityi to put a stamp. We are assisting the king and the police. We do not want to kill the people, but to patrol. We cannot kill a person because we have informed the king and the police... sometimes a person will come to harm, we will frighten him. It must be known that it is being patrolled in Julukuqu. However, the letter is stuck with Zanomthetho (the king) and we cannot go to Bityi police station, because the police will turn us back to the king... Even the police that are patrolling livestock... say that we should patrol and call them even at night when we are patrolling, because they are also fighting against livestock thieves.

– Official 1

5.6.5 Subtheme 5: Lack of Livelihood/Business Succession

Related to youth reluctance, children's rights appear as though they are promoting the abandonment of agriculture by the children in rural areas and this compromises the succession and sustainability of agriculture as a rural livelihood and source of income. This is because parents can no longer force their children to go and work in the croplands. Thus, it seems as though without an alternative way to encourage children practice agriculture, the future of agriculture as a family business and rural livelihood is being compromised and that its future looks bleak.

Moreover, in our schools government ended to corporal punishment. Even as a parent, you cannot discipline your child. Our parents are afraid of forcing us to go to the croplands, because if I say I do not want to... and I beat him/her, as a parent, he/she will go and lay a charge against me. In our time, I woken up at 02:00 in the morning and go to the croplands, but today you can't wake me up at 02:00. I can't wake up my child at 02:00, because he/she will lay a charge against me. My child has rights. – Official 2

5.6.6 Subtheme 6: Dependency on Government Projects and Support

The people are no longer proactive and self-sufficient while working as a single community through co-operation in order to meet their common socio-economic needs, such as practicing crop production and eradicating poverty. There is now an over reliance on government, for almost everything. The people are degraded and poor. They have lost their power and also their (social and financial) capital. Largely it seems as though a dependency on the government (as opposed to 'vukuzenzele' meaning wake-up and do it yourself) has been produced, perhaps unintentionally, as indicated by Official 2, the ward councillor.

When there is talk about a manifesto. Let me talk about especially of the ANC. Our government has corrupted the people's minds and now they think that everything would come down from heaven without a person working. So, the people expect that government will do everything for them. But it does not work like that. You play your role and the government play its role. That made people not to wake up and do things for themselves and to depend on government. We ask government to assist us and it does, but that programme is extremely slow. And one of the things that make it to be slow, you will find that there is a group of ten people who say they are cultivating, then government fences, but they never cultivate. That is one of the things that discourages. You see then our government not trusting any person.

– Official 2

5.7 THEME 4: TOWARD REVIVING AGRICULTURE AND RURAL SOCIO-ECONOMIC DEVELOPMENT

Notwithstanding the abandonment of agriculture land, in Julukuqu, the respondents still consider agriculture as a key to rural socio-economic development and poverty alleviation, as argued also by Anríquez and Stimoulis (2007). In response to the question on whether the people wanted to cultivate the croplands again and of what should be done to assist them in this regard, the following findings were made.

5.7.1 Subtheme 1: Desire and will to cultivate the abandoned croplands again

The respondents appear to be in agreement and they are very keen on cultivating their croplands again.

The sentiment is mutual; we want to cultivate the croplands land. – FGDR

Yet it is apparent that their desire and willingness to cultivate their abandoned croplands, needs to be complemented with agri-infrastructure (i.e. a fence and irrigation system), activism and co-operation on their part, as well as leadership and training.

5.7.2 Subtheme 2: agri-infrastructure and implements

5.7.2.1 Fencing and irrigation system

Due to the rising importance of education, children (who would ordinarily be herding the livestock) are going to school and therefore they are not available. Given that livestock is also an important livelihood in the rural area, the respondents are noting that the most reasonable, logical and immediate thing to do, is to fence their croplands in order to protect them from being grazed on or encroached untimely during crop production season by free-range or deliberately led livestock. Given the evidence of surrounding villages, whose croplands are fenced (as shown in Figure 11) and cultivated, there seems to be a reason to believe that if the croplands of the people of Julukuqu could be fenced off, then crop production could thrive again in this rural village.

We want to cultivate the croplands, but we do not have the power to do so. We do not herd our livestock well, because children go to school. Livestock grazes on our croplands, because they are not fenced. If government could help us and fence for us the area that we want to cultivate. – FGDR

If government could put a fence. The children are not here to herd. They are in schools... the Department of Agriculture says we must first cultivate. We see it does not trust anyone and it has forgotten who we are. We stopped cultivating the croplands because they were not fenced... Therefore, people want to cultivate.

– Respondent B

Given that agriculture is their thing, the respondents have concluded that the only thing they need, basically, is a fence and for the croplands to be fenced off – to the point that they appear to be frustrated, because of the king's inaction or lack of support. To this end, there is hope for socio-economic development in Julukuqu.

... we concluded that what we needed was fencing, because ca, cultivation is our enterprise... By and largely, our challenge is fencing, because most of the croplands in other communities are fenced. Now we are the only ones that have not fenced their croplands – only under our king. Beyond the park (forest), it is fenced; there in Msana and Ndibela it is fenced. You see those croplands are the ones surrounding us. Now, closer, here in Mokolweni it is fenced.

... We are actually part of Mqhekezweni and it is only the king of Mqhekezweni that is yet to fence the croplands. The fence that was requested first by us is now going to people who came late, because they have kings who support them when they want something... I mean we want to cultivate and we only need a fence. The main thing is the fence. The people of Mokolweni started when we were stopping to cultivate our croplands. Now we drive and feed our cattle there, because there they have had a fortune, that when they went to the land tillers, they followed-up on them until they gave them a fence... That means they are cultivating those croplands of theirs and their livestock is well-off. – Respondent A

The cultivation of gardens serves as an argument and evidence, perhaps, that the people of Julukuqu have not abandoned crop production, but that they were driven instead to abandon the (cultivation of) croplands due to the lack of fencing.

... We are firm on our request for assistance to cultivate the croplands. If you could come in December, you would see how the gardens are cultivated. You would see that the gardens are cultivated... People want to cultivate, but livestock trouble them, because it is just roaming, as the croplands are not fenced. If they could be fenced, you would see. – FGDR

Figure 11: Livestock and the fence protecting Mokolweni croplands on the right



Moreover, drought is a challenge in the area with the scarcity of rainfall and the respondents submit that the community needs an irrigation system for the purpose of crop production on the croplands.

What we are cultivating here in the garden is a small plot... We do not have strategies of cultivating the garden even in winter and irrigating it. If we had water we would cultivate the garden throughout the year... Now we are cultivating during the rainfall season, because we do not have irrigation. – FGDR

To this effect, Baldock et al. (1996) provides that among effects of total land abandonment, are the growth of natural vegetation and the deterioration of the structures such as fences, rights of way, irrigation systems and the very own

parameters of the land parcels. One of the problems with these effects, is the fact that, after some years have passed, it becomes almost impossible to return the land to cultivation, because of economic reasons (Baldock et al., 1996; FAO, 2006a).

To the issue of irrigation, Bank and Meyer (2006) stated that the climatic conditions in the Eastern Cape province are not conducive for crop production, while grain is obtained from large commercial farmers and group projects under irrigation. Therefore, it appears as though rural communities such as Julukuqu, have to adapt to the environmental and climate condition or fall victim to them. Perhaps, group projects are the solution to the lack of irrigation.

5.7.2.2 Land tillers and tractors

Moreover, it is believed that the assignment of 'land tillers' (*abalimi*) could assist the community to cultivate their croplands again.

It would assist us if government could give us land tillers. We would be happy.

– Respondent A

Similarly, due to lack of oxen to cultivate the land, high production costs (i.e. tractors) were also highlighted as one of the causes of agricultural decline in Cata village, in the Eastern Cape (Mlomzale, 2014). Tractors are critical, because the stock of cows have reduced in the village, whilst they have completely vanished in some of the households.

5.7.3 Subtheme 3: Leadership and Agri-Training

The respondents provided that they needed a leader in agriculture to lead them to success and training to adapt to modern challenges, such as climate change, fertilizers and effective, efficient and sustainable ways of practising agriculture.

When something has no leader, it dies on the way. We were here at the headmen's place and made a list. Now I doubt there is a person who can come with a vision for the croplands to be cultivated and not be followed. However, the truth is, when something does not have a head you see it dying down. We really want to cultivate... perhaps if we could get some kind of training and work together as a village. – FGDR

The issue of drought and not having knowledge of what fertilizer our land wants has also hit us. – FGDR

5.7.4 Subtheme 4: community pro-activism and co-operation

The ward councillor, Official 2, highlighted that the government wants active people, to form a co-operative group before funding can take place. Essentially, this means the prospects of agricultural revival and development in Julukuqu, in particular, hinge on the community being proactive and co-operative - .

Also, as a member of the ward committee, people come and request and we inform the ward councillors... agricultural authorities say that we must come together, combine the croplands and cultivate them. They are all lying fallow and not cultivated. You would see if there would be a fence, people would cultivate the croplands. – Respondent B

These croplands are not cultivated. I tried my best that we should be financed and fence them, but government through one of its policy statements says that, at least, a group of people who are in one place should be cultivating the croplands before it can providing. This also what disables us, because the people cannot go and cultivate the croplands when they are not fenced off and get their crops grazed by livestock. And government says children must be at school. – Official 2

There is a prospect and a potential for the formation of a co-operative, given that the respondents provided that the people want to consolidate a portion of their croplands and combine their efforts to cultivate according to their capacity or to the extent that they can manage. The word co-operative comes from co-operate, which means

working together to reach a common goal (RSA, 2005). The people want the revival of agriculture or agricultural revival.

When I said we had met. We met to make a way for the revival of cultivation and agreed to combine and work together to cultivate our croplands. We agreed that we will take some of the croplands to belong to all of us and to do everything them and divide the harvest among ourselves. With time, we will add the other croplands. We had those agreements, because we want to revive cultivation... We agreed then about that, but it is difficult to act, mainly because of the lack of fencing of the croplands. – Respondent A

We said we would take from these croplands, because it does not help anything to be guarding land that you will not be able to use; that you will not work. – FGDR

Yet, to this end, it seems as though even with the people coming together and cultivating the land, a fence will still be required because of the livestock that are not being herded. The ward councillor indicated that the people could cultivate their croplands by December (2018) provided that they will not wait on government forever (*bangalindi ukuza kukaNxele*), but rather proactively cultivate their croplands first and request help from the the municipality.

Yes, the people can cultivate their croplands provided that they would not wait forever; but cultivate them and then request the government to assist. – Official 2

In the final analysis, this gives an impression that the people of Julukuqu will not cultivate their croplands in 2018, because of lack of fencing and thus, will reap nothing come 2019.

5.7.5 Subtheme 5: intensification of production for commercial purpose

The respondents were also keen to venture into subsistence production with a conscious intensified production for commercial purposes. Commercialisation does not seem to be new to the village, as many of the homes were built with maize money.

We want to produce maize for food and a surplus to feed our pigs and to sell.

– FGDR

Cultivation provides for everything: food to eat and money to buy what you want...

there are people who use to cultivate and sell this maize. – FGDR

Many homes here were built by cultivating the land and selling maize. Even this one (the headmen's household) was built with money made from selling maize.

– Official 1

5.7.6 Subtheme 6: reversing rural population decline

Agricultural development, as a form and means of rural development, has a potential to reverse the rural population decline. The respondents believe that the revival of agriculture will cause those who have migrated to urban areas, to come back and cultivate the land. This is good for agriculture and rural development because people are required to work the land and maintain the socio-economic infrastructure and basic services (FAO, 2006a).

They will follow and cultivate the croplands, because they belong here and did not grow up there in the urban area. – FGDR

This assertion is true given that the quest for money – jobs and better life – is behind rural-urban migration. Essentially, people move to urban areas – towns and cities – because there is lack of development in rural areas. Therefore, there is reason to believe that agricultural development is likely to retain and drawback the migrated population with its prospects and presenting opportunities .

5.8 CHAPTER SUMMARY

Chapter Five presents and discusses the findings from the data that have been collected through individual interviews and a focus group discussion. The essence of the study findings, is that the people of Julukuqu need a fence. The fence serves as a cause of ALA in the community as well as a key to the revival of agriculture land use (cultivation) and agriculture. The people of Julukuqu want and intend to cultivate their croplands again. In addition to requiring a fence, the people of Julukuqu have initiated

a process of consolidating some of their croplands and combining their efforts to cultivate a portion of the croplands that they can manage. There appears to be a realisation that the abandonment of indigenous practices such as *ilima* (co-operation) and that the rise of individualism has played a huge role in the abandonment of the croplands. Ultimately, ALA has led to, among other things: poverty, food insecurity, a loss of livelihood and income, an increase in crime and dependence on government social welfare and security for income and supermarkets/wholesales for food.

In Chapter Six, the findings that were highlighted from the empirical research that was conducted, as well as the recommendations of the study and concluding remarks, are presented.

CHAPTER SIX

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

6.1 OVERVIEW

Chapter Five provided the analysis of the data collected and the findings of the study. As a last chapter, Chapter Six presents the summary, conclusions and recommendations of the study. Overall, attention is given to the achievement of the research objectives, the findings and the relevant recommendations that are due.

6.2 SUMMARY OF THE RESEARCH CHAPTERS AND CONCLUSIONS

In South Africa, ALA is apparent even to the human eye, but little or nothing is known about it, especially regarding its causes and the implications for rural socio-economic development. Chapter Two highlighted that whereas agriculture remains the key to rural development, vast agriculture lands have indeed been abandoned worldwide, over the last decades and this is a testament that Agriculture Land Abandonment (ALA) is a global phenomenon. Largely, ALA is driven by rural–urban migration in areas where new economic opportunities are presented to rural residents, while ecological and mismanagement drivers are of secondary significance. Causes of agricultural/crop production decline and ALA in rural South Africa include, amongst other things, migrant labour and rural-urban labour, lack of oxen, schooling, livestock and lack of fencing, land fertility and drought. To this end, socio-economic consequences of ALA include agricultural decline, loss of livelihood and potential income and poverty, especially food insecurity to an extent that rural dwellers spend most of their money – mainly social grant – on purchasing food. Thus, agriculture ceases to be the major rural household’s supporter as there is an increased dependence on employment, social grants and supermarkets for food supply. In addressing ALA, experiences in Europe and Japan have indicated that agricultural subsidies in constrained and/or marginal areas can alleviate the marginalisation of land and slow land abandonment.

According to Chapter Three, the findings of the interviews (interviews and focus group discussion) and satellite imagery made up the research data in this study. A thematic analysis was used to generate and present study findings from the collected data. Thus, after data collection, the data underwent a comprehensive process of data coding and the identification of themes. The themes captured significant data in relation to the research objectives and provided patterned responses within the data. The research objectives made up the main themes of the research data, which means that the themes were predetermined with the exception of the sub-themes. The researcher then made a list of the sub-themes (with headings) by summarising the respondent's responses to the interviews that relate to each main theme.

Following a comprehensive analysis, the study findings were presented (i.e. tabulated) and discussed under each theme. Some of the responses that were given by the respondents were boxed and written in italics (and/or supported with figures) to give reference and to support the discussion points. Moreover, the findings were considered and discussed against the literature review, where similarities and differences were considered and diplomatically explained.

A summary of the research findings (Chapter Five), conclusions and recommendations is provided in the following section (6.3).

6.3 RESEARCH FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.3.1 Summary of research findings

Vast amounts of agriculture land have been abandoned worldwide over the last decades and this includes Julukuqu village in the Eastern Cape province of South Africa. The croplands of Julukuqu were once completely cultivated, but they are now almost (all) totally abandoned with only one person still cultivating their reduced cropland. The causes of ALA in Julukuqu are socio-economic, environmental and political in nature. They include livestock, schooling and a lack of fencing, old-age and ill health, the abandonment of indigenous practice called *ilima* and the rise of individualism, rural-urban migration and employment, youth reluctance, drought and the withdrawal and lack of government support. Meanwhile, the socio-economic consequences of ALA include a decline in cultivated agriculture land area and crop

production, loss of livelihood, heritage and income, consumption without production, de-agrarianisation, dependence on employment and rural population decline, poverty, unemployment and crime, problem of family business/crop production succession, and dependency on government projects and support.

Agriculture is still considered as a main key to poverty alleviation and broad socio-economic development in Julukuqu, hence the people's desire to cultivate the abandoned croplands again. The people of Julukuqu have the desire and will to cultivate their abandoned croplands again, but to actually revive agriculture, their desire and will needs to be complemented by agri-infrastructure (i.e. croplands fencing and irrigation system), activism and co-operation on their part, as well as a leader to lead the revival and development/growth of agriculture.

6.3.2 Conclusions

In spite of everything, there is no compelling reason that is given to explain why the agriculture land or croplands in Julukuqu are abandoned and not being cultivated, other than their lack of fencing. Fencing is required to keep the livestock away from the crops. Despite lack of collaboration and/or reduced dependency on agriculture as the main household supporter (i.e. de-agrarianisation), the rural situation is such that the people (rural households) are so poor that they cannot afford fencing of their croplands. They need financial support for agricultural infrastructure (fencing, irrigation system etc.).

Tied to lack of fencing, drought and individualism, ALA land abandonment has become a major opposition to agriculture and rural socio-economic development in Julukuqu to the extent that now only one hectare of the entire cropland is cultivated. Consequently, agriculture has ceased to be the prime rural household's source of food and income. Moreover, it is apparent that ALA is the abandonment of agriculture itself and when agriculture is abandoned, there is poverty and increased dependency on government support – especially social grants/security and on supermarkets/wholesales for food that the people used to plough and produce surplus. To this end, in order to revive agriculture and address ALA, at least 10 specific factors (detailed below under 6.3.3) should be considered – chief among them is co-operative development.

6.3.3 Recommendations

To address ALA and to achieve agricultural and rural socio-economic development, it is critical to consider certain factors. These factors are co-operative development, the intensification of agriculture, agri-infrastructure, leadership, returning abandoned croplands to cultivation, agri-training, policy measures, youth participation in agriculture, family livelihood/business succession plans and education. The recommendations relate to these aforementioned factors, which are discussed in the following sub-sections.

6.3.3.1 Co-operative development and support

It is reasonable for the people of Julukuqu to form and register a primary co-operative as an extensive catalyst for socio-economic development, economic growth and innovation. They have a history of pooling their various resources and working together – ensuring that every household's land is cultivated using the indigenous practice of *ilima* – a socio-cultural approach to development. This includes the use of ROSCAS such stokvels and burial societies – where individuals also use social grants to contribute towards. Thus, co-operation (fundamental nature/character of a co-operative) is indigenous to the people as an equaliser and a co-operative appears to be a modern-day *ilima*. A co-operative is a by-product of a common human socio-economic need, arising from their hardship or suffering. Under a co-operative, people with a common need and goal voluntarily work together to achieve their common needs and goal (other than the need to make money).

Moreover, the case of Julukuqu also goes along with the five pre-requisite characteristics of a co-operative (that set it apart from any other types of business). The people of Julukuqu have realised that they have the common struggle or hardship of food security and to make a living, thus they are willing to work together to achieve their mutual desire of eradicating food insecurity and generating an income through a constant and reliable source of livelihood, namely, agriculture. The findings of the study also reveal that the people want to consolidate their skills and common and strategic resource, namely, agriculture land, now lying desolate and fallow. Given this, the community can use a co-operative as a vehicle to achieve socio-economic development and social cohesion in the community (ECSCC, 2009).

Given the communities assets, socio-economic situation and challenges, at least three co-operatives can be formed or incorporated under one umbrella co-operative:

- Agricultural (crop and animal production) co-operative, including agro/food-processing – for food security and profit;
- Security co-operative – against crime related croplands (e.g. fence) and livestock theft; and
- Financial or savings co-operative – comprising of their stokvels, burial societies and savings clubs.

The government should assist the people financially and otherwise so as to capacitate them to start-up and succeed. Particularly, the government should:

- Mobilise finance for the development of co-operatives, for example, by guaranteeing access to finance through state-owned or development banks such as the Land and Agricultural Bank of South Africa (Land Bank);
- Provide extension through, for example, state enterprises to provide access to machinery (including tractors) and to maintenance services as well as training, management and other institutional support;
- Provide access to market for their produce (which could include the use of statutory instruments and advisory services in the marketing of agricultural products provided by the National Agricultural Marketing Council (NAMC)); and
- Provide research and development through R&D institutes, such as the Agricultural Research Council (ARC).

Yet this extreme role by the state should not be synonymous to direct intervention, instead it should be viewed as the provision of capacity and an enabling environment for co-operatives to develop themselves and succeed (ECSECC, 2009). Thus, ownership, rather than a 'government project' or intervention, is an antidote to individualism and dependency on government support and initiatives – such as Ntinga.

Moreover, co-operatives, by law, are designed to promote the participation of previously disadvantaged and vulnerable members of society – black people, women, youth, people living in rural areas and people with disabilities – in both the activities and the management of co-operatives (RSA, 2005)

Nonetheless, the following elements – beginning with agri-infrastructure – are particularly critical for the revival of agriculture, since the village and its economy requires the croplands to be cultivated.

6.3.3.2 *Agri-infrastructure*

With the desire and will to cultivate the croplands that are in existence, the fencing of the croplands is basically the most critical aspect and it is the first thing that is required for/by the people to cultivate their croplands. Children are going to school, so the livestock are not being not herded. In this regard, the findings of the study demonstrated that the people were discouraged from cultivating their croplands by the lack of fencing and due to the livestock grazing in their fields – in season and out of season. There is also evidence that the villages, whose croplands are fenced, cultivated their croplands. Moreover, the development of an irrigation system (e.g. even a borehole) is necessary because of drought and because the provision of and access to water is an important determinant of crop productivity or yield. Drought is one of the major causes of the abandonment of agriculture and agriculture land. To this end agri-finance and relief is required.

6.3.3.3 *Leadership*

The cause of agriculture – to cultivate the land – lacks a particular leader to drive it. Without a leader, there is a struggle, first of all, for agriculture to take-off. Moreover, a vision for agriculture in the community is imperative as it is a strategy or a path to success.

6.3.3.4 *Bring back abandoned cropland into cultivation*

Given the study findings, the priority should be to bring back the abandoned agriculture land as there is also little or no negative environmental impact on the land as a result of its abandonment. Against, such there is no hope for real socio-economic development in Julukuqu. Moreover, it does not seem as though the use of the croplands for agricultural restoration would either be impossible or too costly, as the needs of the people of Julukuqu are basic and yet critical, such as the fencing of the croplands.

6.3.3.5 *Agri-training*

Climate change and modern agricultural practices (including technology) require that indigenous farmers must adapt or fall victim to such environmental, economic and agricultural changes. The study proved that rural people need training on how to adapt to drought, the role, formation and operation of co-operatives, as well as which fertilizers are good for their soil and/or whether to stick to the indigenous manure. Moreover, training is necessary regarding administration, leadership, organisation/ business and financial management fundamentals.

6.3.3.6 *Policy measures against Agriculture Land Abandonment: direct agricultural subsidies*

To this end, the phenomenon of ALA should attract huge attention from policymakers at all levels of government, particularly provincial and local. This is very important for South Africa if agriculture is to remain the key to rural development and poverty reduction in the country. Moreover, located in the former homeland, Transkei makes rural areas such as Julukuqu, marginal areas. Therefore, the government should consider the use of direct agricultural subsidies to directly subsidise rural farmers to maintain production and ultimately to transform from subsistence to commercial agriculture.

6.3.3.7 *Intensification of agriculture for commercial purposes*

The people of Julukuqu desire not only to produce for household consumption, but also for commercial purpose – to deliberately produce a surplus for sale. The intensification of agriculture is possible through a co-operative. It was also through subsidies that the apartheid state mechanised and commercialised South Africa's commercial (large-scale) agricultural sub-sector, which is now responsible for the country's thriving agricultural sector and which alone produces about 95% of the country's farm output.

Co-operatives and the intensification of agriculture are also in line with the Comprehensive Rural Development Programme (CRDP) of South Africa and the country's National Development Plan (national outcome 7: building vibrant, equitable, sustainable rural communities with sufficient food for all). The CRDP is the strategy of

'agrarian transformation', intended for "a rapid and fundamental change, in the use and control (patterns of ownership across race, gender, and class) of land, livestock and cropping" (Gwanya, 2010; DRDLR, 2013). Ultimately, the aim of the land and agrarian reform is to have more black entrepreneurs in agribusiness, to provide access to agricultural support services for emerging black farmers and increase their agricultural production and to increase trade by previously disadvantaged people (including blacks, and predominantly Africans). The Agricultural Research Council (ARC) can go a long way in advancing research and innovation.

6.3.3.8 Youth participation in agriculture

Old people dominate the agriculture section. The practice of agriculture does not seem to be attractive to the young people (35 years of age and below in South Africa). Young people, especially, seemingly do not want to get dirty. Moreover, like many people, they are generally impatient and want "quick cash". Agriculture needs a lot of patience. Their impatience and need for quick cash is demonstrated by high rates of youth unemployment – which demonstrates an over dependency on employment or existing businesses for employment – and increasing crime. There should be a drive to mobilise and empower young people to embrace and participate in agriculture. It is high time that the youth should consider making a business from and of agriculture. It is also important to take consistent food security and livelihood/business succession seriously. To this end, institutions such as the National Youth Development Agency (NYDA) can do well to promote and advance the promotion of agriculture, for example, by creating incentives for young people to participate in agriculture. No development can be sustained without young people.

6.3.3.9 Family livelihood/business succession plans

Crop production in rural areas is family based. Young people are the future and they should, especially in rural areas such as Julukuqu, see and take agriculture as a family business and their heritage. There is clearly a need to instill this. Failing in this regard would mean that the succession and sustainability of agriculture in rural areas would be greatly compromised. In the same vein, poverty will pass on to another generation. The rights (enshrined in the Bill of Rights) that are due to children, such as the right to education and basically to say no, coupled with the youths' reluctance to engage in

agriculture, could mean that the practice of agriculture will retire or die with the older generations. There is a need to devise ways and means to sensitise rural farmers on issues that are related to succession plans. The Family Business Unit of Nelson Mandela University might assist the community in this regard.

6.3.3.10 Education and community service

Since “formal” education has become so important, even for the rural people, it should be used to deliberately promote agriculture as a career of choice and trade, and for development. Government should collaborate with higher institutions of learning so that, by law, when students finish their course work/theory (Part 1) for accreditation/full certification as well as recognition as a professional farmer and they should be required to go and plough back by working in poor communities, such as rural areas (community service: Part 3), before permanent employment. This is over and above the internship/in-service training that is currently required for students of agriculture to undertake in their final year for practical experience (Part 2). The object of Community Service should be to develop and/or revive agriculture in communities where the students are assigned. Medicine and teaching (through Funza Lushaka) in South Africa provide a model and lessons to learn. Therefore, the government, in collaboration with higher institutions, should incentivise the students with study bursaries/scholarships to complete their studies, as well as with stipends and support/capacity to fulfil Community Service. At school level, more schools should introduce and promote agriculture as subject.

6.3.3.11 Gender

Issues of gender should be considered when it comes to reviving agriculture, because women (including single parents and/or widows) dominate crop production/cultivation. The Ministry of Women and Children in the Presidency should also look into how women may be empowered to become successful farmers, to not only feed their households and revive the rural economy, but also to participate in the mainstream economy of the country.

6.4 RECOMMENDATIONS FOR FUTURE RESEARCH

It is further recommended for future research to investigate:

- The establishment of community service for agricultural and rural development.

An investigation into the prospects of establishing Community Service as a requirement for the accreditation/full certification of agriculture graduates and for recognition as a professional farmer as mentioned above in 6.3.3.10 (particularly to develop and/or revive agriculture in poor communities, such as rural, where the students are assigned).

- The agricultural intentions of agricultural science/management graduates.

It is not clear whether the Bachelor of Sciences in agricultural management or science (BSc Agriculture) students study to become farmers or “desktop farmers” (analyst, for example, at Land Bank) as a last resort/ out of desperation to have a qualification. It is necessary to know this in order to establish whether South Africa is producing the human capacity (skill and expertise) that is required to work the land.

- The establishment youth agricultural co-operatives for optimal agricultural land use, sustained food security, agrarian reform and inclusive economic growth.

Such youth co-operatives could be an answer to the high (youth) unemployment rate in South Africa and ultimately realising the potential of creating close to 1 million new jobs by 2030. Such an investigation could also shed light on how to promote agriculture as an attractive and viable business enterprise or entrepreneurial venture, especially for young people (including BSc agriculture students/graduates).

6.5 SUMMARY

Notwithstanding the abandonment of agriculture land, in Julukuqu, agriculture remains the key to rural socio-economic development and poverty alleviation in the village for two major reasons: (i) the land as a prerequisite for crop production is available and not damaged; (ii) the people have the desire and will to cultivate their abandoned agriculture land again. In spite of its abandoned status, agriculture land in Julukuqu is

neither infertile nor degraded. The findings have demonstrated that the essential requirement for addressing ALA and the revival of the cultivation of the croplands, is as basic as fencing (because of free-range livestock), an irrigation system (because of drought) and community co-operation (against dependency on government and individualism; as governments policy, to source funding (from both public and private sources), to increase productivity and for commercialisation).

To this end, rural development as a national imperative in South Africa – declared in the National Development Plan (NDP) as the country's blueprint for poverty and inequality reduction and economic growth – can be achieved. This is simple because the NDP has identified agriculture as the main economic activity in rural areas, with the potential to create nearly 1 million new jobs by 2030, thus making it a key to rural socio-economic development. Therefore, as a major hindrance to sustainable development in rural areas, ALA should be addressed as recommended above in 6.3.3. Agriculture Land Abandonment should attract the attention of policymakers and implementers in South Africa at all levels, because the land must be worked (cultivated) to provide work and to banish poverty.

REFERENCE LIST

- African National Congress (ANC). 1955. *The Freedom Charter. Adopted at the Congress of the People at Kliptown, Johannesburg, on June 25 and 26, 1955.* Issued by the Congress of the People. Johannesburg: Historical Papers Research Archive. [Online] Available: http://www.historicalpapers.wits.ac.za/inventories/inv_pdfo/AD1137/AD1137-Ea6-1-001-jpeg.pdf [Accessed on 31 July 2016].
- Alpine Convention. 2011. *Report on the State of Alps. Alpine Signals, special ed. 3. Sustainable rural development and innovation.* Innsbruck: Permanent Secretariat of the Alpine Convention.
- Ameen, A., & Raza, S. 2017. Green Revolution: A Review. *International Journal of Advanced Scientific Research*, 3(12):129-137. DOI: 10.7439/ijasr.v3i12.4410.
- Andrew, M., & Fox, R. C. 2004. 'Undercultivation' and intensification in the Transkei: A case study of Historical change in the use of arable land in Nompá, Shixini. *Development Southern Africa*, 21(4):687-706. [Online]. Available: <http://www.tandfonline.com/doi/pdf/10.1080/0376835042000288851>. [Accessed on 20 March 2018].
- Anríquez, G., & Stimoulis, K. 2007. *Rural Development and Poverty Reduction: Is agriculture still the key?* ESA working paper, no. 07-02.
- Antoni, X. L. 2014. 'Financial Literacy and Behaviour among the Black Community in Nelson Mandela Bay'. Master of Commerce thesis, Nelson Mandela Metropolitan University, Port Elizabeth, South Africa.
- Arun, S., Heeks, R., & Morgan, S. 2004. *Researching ICT-based enterprise for women in developing countries: A livelihoods perspective.* University of Manchester, UK.
- Atuahene, B. 2004. Legal Title to Land as an Intervention against Urban Poverty in Developing Nations. *The George Washington International Law Review*, 36(5):1109-1179.

- Baiphethi, M. N., & Jacobs, P. T. 2009. The Contribution of subsistence farming to food security in South Africa. *Agrekon*, 48(4):459.
- Bakker, J. D., Parsons, C., & Rauch, F. 2016. *Urbanisation in Post-Apartheid South Africa*. Preliminary and incomplete. Global Research Program on Spatial Development of Cities. [Online]. Available: <https://urbanisation.econ.ox.ac.uk/materials/papers/52/southafrica.pdf> [Accessed on 20 August 2016].
- Baldock, D.; Beaufoy, G.; Brouwer, F., & Godeschalk, F. 1996: *Farming at the Margins: Abandonment or Redeployment of Agricultural Land in Europe*. London: Institute for European Environmental Policy / The Hague: Agricultural economics research institute.
- Bamberger, M. 2000. *Integrating Quantitative and Qualitative Research in Development Projects*. Washington DC: World Bank.
- Bank, L., & Meyer, L. 2006. *Rapid Eastern Cape Provincial Assessment and Socioeconomic survey, Summary Report*, The Fort Hare Institute of Social and Economic Research (FHISER) and Development Research Africa (DRA), Report supported through IPSP, DFID funded.
- Baudry, J. 1991. "Ecological Consequences of Grazing Extensification and Land Abandonment: Role of Interactions between Environment, Society and Techniques", en J. Baudry and R.G.H. Bunce [ed.]: *Land Abandonment and its Role in Conservation*, cap. 1. (Séminaires Méditerranéens, Série A, n. 15). Centre International de Hautes Études Agronomiques.
- Baxter, P. & Jack, S. 2008. Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, 13(4):544-559.
- Beinart, W. & Dubow, S (eds). 1995. *Segregation and Apartheid in Twentieth-Century South Africa*. New York: Routledge.
- Benayas, J. M., Martins, A., Nicolau, J. M., & Schulz, J. J. 2007. Abandonment of Agriculture land: an overview of drivers and consequences. *CAB Rev Perspect Agric Vet Sci Nutr Nat Resour*. 2:36.

- Bernard, H. R. 2002. *Research Methods in Anthropology: Qualitative and quantitative methods*. 3rd edition. Walnut Creek, California: AltaMira Press.
- Bjornholt, M., & Farstad, G. R. 2012. "'Am I rambling?' On the advantages of interviewing couples together". *Qualitative Research*, 14(1):3-19. doi:10.1177/1468794112459671.
- Bosman, B. N. 2014. *The Department of Human Settlement's Policy on Eradicating Informal Settlements in South Africa: A De-colonial Feasibility Analysis*. Master of Arts in Development studies. University of South Africa, South Africa [Online]. Available: http://uir.unisa.ac.za/bitstream/handle/10500/18642/dissertation_bosman_bn.pdf?sequence=1&isAllowed=y [Accessed on 26 June 2016].
- Boyatzis, R. E. 1998. *Transforming qualitative information: Thematic analysis and code development*. London: Thousand Oaks, and New Delhi: Sage Publications.
- Boyce, C., & Neale, P. 2006. *Conducting In-Depth Interview: A Guide for Designing and Conducting In-Depth Interviews for Evaluation Input*. Pathfinder International Tool Series, Monitoring and Evaluation-2. http://www.pathfind.org/site/DocServer/m_e_tool_series_indepth_interviews.pdf?docID=6301.
- Braun, V., & Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3: 77-106.
- Bryceson, D. 1993. De-agrarianization and Rural Employment in Sub-Saharan Africa: A Sectoral Perspective. The Netherlands: African Studies Centre.
- Bureau of Market Research (BMR). 2005. Total cashe expenditures in South Africa by living standards measure (LSM) group and products, *Research Paper 347*.
- Carter, K.A., & Beaulieu, L.J. 1992. *Conducting A Community Needs Assessment: Primary Data Collection Techniques*. Gainesville, FL: University of Florida—Institute of Food and Agricultural Sciences. [Online]. Available: <http://edis.ifas.ufl.edu/pdffiles/HE/HE06000.pdf>. [Accessed on 29 February 2016].

- Cervantes-Godoy, D., & Dewbre, J. 2010. *Economic importance of agriculture for poverty reduction*. OECD Food, Agriculture and Fisheries working papers, no. 23, OECD Publishing.
- Chambers, R., & Conway, G., 1992, '*Sustainable rural livelihoods: practical concepts for the 21st century*', IDS Discussion Paper 296, Brighton: IDS.
- Chidi, C. L. 2015. Depopulation and rural land abandonment in the hills of Nepal. *SSARSC Int J Geo Science Geo Info*, 3(1):1-7.
- Chiweshe, Y. M. 2014. *Eradicating informal settlements by 2014: A goal deferred*. Public Service Accounting Monitor.
- Cohen, L., Manion, L., & Morrison, K. 2007. *Research methods in education*. 6th edition. USA: Routledge.
- Collis, J., & Hussey, R. 2009. *Business research: a practical guide for undergraduate & postgraduate students*. China: Palgrave MacMillan.
- Corbelle-Rico, E. & Crecente-Maseda, R. C. 2008. Land Abandonment: Concept and Consequences. *Revista Galega de Economía*, 17(2). ISSN 1132-2799.
- Cramer, V. A., Hobbs, R. J., & Standish, R. J. 2008. What's new about old fields? Land abandonment and ecosystem assembly. *Trends in Ecology and Evolution*, 23(2): 104-112.
- Creswell, J. 2003. *Research Design. Qualitative, Quantitative and Mixed Methods Approaches*. 2nd edition. Thousand Oaks, CA: Sage.
- Creswell, J W. 2013. "*Steps in Conducting a Scholarly Mixed Methods Study*". DBER Speaker Series. Paper 48. [Online]. Available: <http://digitalcommons.unl.edu/dberspeakers/48>. [Accessed March 2018].
- Dáil, P. vW. 2015. *Hard Living in America's Heartland: Rural Poverty in the 21st Century Midwest*. Jafferson, North Carolina: McFarland & Company, Inc.
- Davis, J., K., Ainslie, A., & Finca, A. 2008. Coming to grips with 'abandoned arable' land in efforts to enhance communal grazing systems in the Eastern Cape

- province, South Africa. *African Journal of Range and Forage Science*, 25(2): 55-61. DOI: 10.2989/AJRFS.2008.25.2.3.482.
- De Klerk, M., Fraser, F., & Fullerton K. (2013) The status of agricultural and rural finance in South Africa. FinMark Trust. Turok. 2012.
- De Vos A. S., Strydom H., Fouche C. B., & Delport, C. S. L. 2005. *Research at Grass Roots: For the Social Sciences and Human Service Professions*. 3rd edition. Hatfield: Van Schaik.
- Demarcation Board in KSD LM. 2016. King Sabata Dalindyebo Local Municipality: Final Draft IDP Review 2016/17. Mthatha: KSD LM.
- DFID (Department for International Development). 1999. *Sustainable livelihoods guidance sheets*. London. [Online]. Available: <http://www.enonline.net/pool/files/ife/dfid-sustainable-livelihoods-guidance-sheet.pdf> [accessed 17 April 2013]
- Díaz, G. I., Nahuelhual, L., Echeverria, C., & Marin, S. L. 2011. Drivers of land abandonment in Southern Chile and implications for landscape planning. *Landscape and Urban Planning*, 99(3/4):207-217.
- Dixon, C. 1990. *Rural Development in the Third World*. 1st edition. London: Routledge.
- DLG (Dienst Landelijk Gebied). 2005. Land abandonment, biodiversity and the CAP. Utrecht: Government Services for Land and Water Management of the Netherlands.
- DRDLR (Department of Rural Development and Land Reform). 2013. Land Audit Report. Presentation to the Portfolio Committee on Rural Development and Land Reform, 23 October 2013. DRDLR.
- Du Plooy, G. M. 2001. *Communication Research: Techniques, methods and applications*. 1st edition. Cape Town: Juta & Co.
- Dyanti, M. 2015. *Urban Land Ownership*. Briefing Paper 397. Southern African Catholic Bishop's Conference. Parliamentary Liaison Office. November 2015.

Eastern Cape Socio Economic Consultative Council (ECSECC). 2009. International Cooperatives Experiences and Lessons for the Eastern Cape Cooperative Development Strategy: a Literature Review. Working paper series No. 5. East London: ECSECC.

Eastern Cape Socio Economic Consultative Council (ECSECC). 2012. Eastern Cape Development Indicators. Working paper Series no. 11. [Online]. Available: <http://www.ecsecc.org>.

Eastern Cape Socio Economic Consultative Council (ECSECC). 2017. King Sabata Dalindyebo Local Municipality Socio-Economic Review and Outlook 2017. East London: ECSECC.

Ellis, F. 2000. *Rural livelihoods and Diversity in Developing Countries*. Oxford: Oxford University Press.

European Commission (EC). 2015. Rural development 2014-2020.1).

Eurostat. 2013. Agri-environmental indicator - risk of land abandonment. Luxembourg: Eurostat.

Even-Zahav, E. 2016. *Food security and the urban informal economy in South Africa: The state of Knowledge and perspectives from street-food traders in Khayelitsha*. Master of Philosophy in Sustainable Development. Stellenbosch University, Stellenbosch, South Africa.

Fallon in Goldblatt, A. 2010. AGRICULTURE: FACTS & TRENDS: South Africa. [Online]. Available: http://awsassets.wwf.org.za/downloads/facts_brochure_mockup_04_b.pdf

FAO. 2006a. *The role of agriculture and rural development in revitalizing abandoned/depopulated areas*. Food and Agriculture Organization of the United Nations, Riga.

FAO. 2006b. *Agriculture and the Environment: Changing Pressures, Solutions and Trade-offs*. Rome.

- Filho, W.L., Mandel, M., Al-Amin, A. Q., Feher, A., & Jabbour, C.J. C. 2016. An assessment of the causes and consequences of Agriculture Land Abandonment in Europe. *International Journal of Sustainable Development & World Ecology*, DOI: 10.1080/13504509.2016.1240113.
- Fitzgerald-Moore, P. & Parai, B. J, 1996. The Green Revolution. Research paper in progress. [Online]. Available: <http://www.ucalgary.ca/~pfitzger/green.pdf>.
- Fraser, G. C. G., Monde, N., & Van Averbeke, W. 2003. *Food security in South Africa: A case study of rural livelihoods in the Eastern Cape province*. Agricultural Economy of South Africa, Durban: IAAE Conference. August.
- Friedman, S. 2018. Land debate in South Africa is about dignity and equality - not the constitution. *The Conversation*, 5 March. [Online] Available: <http://www.theconversation.com/land-debate-in-south-africa-is-about-dignity-and-equality - not-the-constitution-92862> [Accessed on 06 December 2018].
- Gall, M. D., Gall, J. P., & Borg, W. R. 2003. *Educational research: An introduction*. 7th edition. Boston, MA: Allyn and Bacon.
- Gao, Z., Cui, J., & Hao, J. 2005. Agricultural subsidy policy of developed country and its implication. *Forward Position*, (1):92-94.
- Goldblatt, A. 2010. *Agriculture: Facts & Trends: South Africa*. [Online]. Available: http://awsassets.wwf.org.za/downloads/facts_brochure_mockup_04_b.pdf.
- Good News Translation. *American Bible Society*. [Online]. Available: <https://www.biblegateway.com/versions/Good-News-Translation-GNT-Bible/#copy> [Accessed on 31 July 2016].
- Gray, D.E. 2009. *Doing research in the real world*. 2nd edition. Los Angeles: Sage.
- Greenberg, S. 2010. 'Status report on land and agricultural policy in South Africa 2010'. Institute for Poverty Land and Agrarian Studies, Research Report 40, University of Western Cape, Cape Town.
- Gwanya, T. 2010. *South Africa position paper on rural development: a model for the comprehensive rural development programme*. Paper presented at the

International Conference on Dynamics of Rural Transformation in Emerging Economies, 14-16 April 2010, New Delhi, India.

Halfacree, K. 1993. Locality and Social Representation: Space, Discourse and Alternative Definition of the Rural. *Journal of Rural Studies*, 9:23-37.

Harden, C. P. 1996. Interrelationships between land abandonment and land degradation: A case from the Ecuadorian Andes. *Mountain Research and Development*, 16(3):274-280. DOI:10.2307/3673950.

Harrison, P., Todes, A. & Watson, V. 2007. *Planning and transformation: Learning from the post-apartheid experience*. London: Routledge.

Hemson, D., Meyer, M., & Maphunye, K. 2004. Integrated Rural and Regional Development, Position Paper. Human Sciences Research Council.

Howieson, J. 2006. *Pasture development for community livestock production in the Eastern Cape province of South Africa*. Unpublished project description and budget 2006–2010. Murdoch University, Perth, Australia.

Hu, X. 2007. Investigation and analysis of Japan's agricultural direct subsidy policy for mountainous and semi-mountainous regions. *China Rural Economics*, (6):71-80.

Kakembo, V. 2001. Trends in vegetation degradation in relation to land tenure, rainfall and population changes in Peddie District, Eastern Cape, South Africa. *Environmental Management*, 28:39–46.

Kakembo, V., & Rowntree, K. M. 2003. The relationship between land use and soil erosion in the communal lands near Peddie town, Eastern Cape, South Africa. *Land Degradation and Development*, 14:39–49.

Kakembo, V. 2009. *Land Abandonment in the Eastern Cape, South Africa: Implications for vegetation invasions, soil surface conditions and gully erosion*. [Online]. Available: https://www.researchgate.net/publication/258356985_Land_Abandonment_in_the_Eastern_Cape_South_Africa_Implications_for_vegetation_invasions_soil_surface_conditions_and_gully_erosion. [Accessed on 14 March 2018].

- Kamer, M. 2006. *Dispossessed: Life in Our World's Urban Slums*. New York: Orbis Books.
- Khanal, N. R., & Watanabe, T. 2006. Abandonment of Agriculture land and Its Consequences: A Case Study in the Sikles Area, Gandaki Basin, Nepal Himalaya. *Mountain Research and Development*, 26(1):32–40.
- King James Version. 2012. *Holy Bible*. Vereeniging Christian Art Publishers.
- Krueger, R. A. 1994. *Focus groups: A practical guide for applied research*. 2nd edition. Thousand Oaks, CA: Sage.
- Krueger, R. A., & Casey, M.A. 2009. *Focus groups: A practical guide for applied research*. 4th edition. Thousand Oaks, CA: Sage.
- KSD LM. 2016. King Sabata Dalindyebo Local Municipality: Final Draft IDP Review 2016/17. Mthatha: KSD LM.
- Lewis, J. L., & Sheppard, S. R. J. 2006. Culture and communication: can landscape visualization improve forest management consultation with indigenous communities? *Landscape and Urban Planning*, 77:291–313.
- López, I. E. 1996 Movilidad de la tierra y dinámica de las estructuras agrarias en Galicia. Madrid: Ministerio de Agricultura, Pesca y Alimentación, Secretaría General Técnica.
- MacNabb, D. E. 2004. *Research Methods for Political Science: Quantitative and Qualitative Methods*. M.E. Sharpe: New York.
- Madzwamuse, M. 2010. *Climate change vulnerability and adaptation preparedness in South Africa*. Heinrich Boell Stiftung, Cape Town.
- MAFF. 2011. *The current state of abandoned farmland in Japan*. Ministry of Agriculture, Forestry and Fisheries, Japan (MAFF).
- Maree, J. G. (ed). 2012. *Complete your thesis or dissertation successfully: Practical guidelines*. Cape Town: Juta.

- Maritz, M. J. 2003. *Towards establishing national standards for the classification of construction information in the republic of South Africa*. Philosophiae Doctor (Quantity Surveying). University of Pretoria, Tshwane, SouthAfrica.
- Maromo, J. 2018. #LandExpropriation: Many demanding land have no plan to utilise it, says Agri SA. *IOL*, 5 December. [Online]. Available: <https://www.iol.co.za/news/politics/landexpropriation-many-demanding-land-have-no-plan-to-utilise-it-says-agri-sa-1839176> [Accessed on 06 December 2018].
- Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research? A review of qualitative interviews in is research. *Journal of Computes Information Systems*, 54(1):11-22. [Online]. Available: <http://search.proquest.com.ezp.waldenulibrary.org/docview/1471047612?accountid=14872>. [Accessed 31 August 2017].
- Matthews, B. & Ross, L. 2010. *Research Methods: A practical guide for the social sciences*. 1st edition. Don Mills, Ontario: Pearson.
- Maxwell, J. 1997. *Designing a qualitative study*. Thousand Oaks, CA: Sage.
- McMillan, J., & Schumacher, S. 1993. *A conceptual introduction*. 3rd edition. New York: Harper College.
- McMillan, J. H., & Schumacher, S. 2010. *Research in education: Evidence-based inquiry*. 7th edition. New York, NY: Pearson
- Merriam, S. B. 1998. *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Miller, H. M., Richardson, L., Koontz, S. R., John, L. & Koontz, L. 2013. Users, uses, and value of Landsat satellite imagery—Results from the 2012 survey of users: U.S. Geological Survey Open-File Report 2013–1269. [Online]. Available: <https://pubs.usgs.gov/of/2013/1269/pdf/of2013-1269.pdf> [Accessed on 11 August 2017].

- Mlomzale, M. 2014. *The decline of agricultural production in rural areas of the Eastern Cape*. Master in Development Studies, Nelson Mandela Metropolitan University. Port Elizabeth, South Africa
- Munroe, D. K., van Berkel, D. B., Verburg, P. H., & Olson, J. L. 2013. Alternative trajectories of land abandonment: causes, consequences and research challenges. *Curr Opin Environ Sustain*. 5:471–476.
- National Aeronautics and Space Administration (NASA). 2016. Observing Earth with Landsat Satellites. [Online]. Available: https://landsat.gsfc.nasa.gov/wp-content/uploads/2012/12/ESW2016_poster_back.pdf [Accessed on 1 August 2017].
- National Planning Commission (NPC). 2011. National Development Plan. Vision for 2030. The Presidency, Republic of South Africa. [Online] Available: www.info.gov.za/issues/national-development-plan/ [Accessed: March 2018].
- National Treasury of the Republic of South Africa. 2014. Provincial Budgets and Expenditure Review: 2010/11 – 2016/17. Pretoria: National Treasury. [Online]. Available: <http://www.treasury.gov.za/publications/igfr/2015/prov/09.%20Chapter%209%20-%20Agriculture%20and%20Land.pdf> [Accessed on 25 May 2018].
- Ngomane. T. 2012. *Rural Development in South Africa: The role of Agriculture*. The Presidency, Department of Performance Monitoring and Evaluation. AGRISETA ANNUAL SEMINAR Kempton Park, South Africa 21 September, 2012.
- NISS in Ngomane. T. 2012. Rural Development in South Africa: The role of Agriculture. The Presidency, Department of Performance Monitoring and Evaluation. AgriSETA Annual Seminar Kempton Park, South Africa 21 September, 2012.
- Nowers, C. 2008. Stock Farming: What Is Holding Back Communal Sheep and Cattle Production. *Farming SA*, September 2008: 26-27.
- Ntinga news. 2010. “We promote Green Revolution in Agricultural sector...” says CEO. *Ntinga O.R. Tambo Development Agency Quarterly Newsletter*, vol. 2, January 2010.

- Ntinga. 2017. Strategic Business Plan 2017/18 – 2019/20.
- O.R.Tambo DM. 2007. District Growth and Development Strategy: Position Paper on Agricultural Sector. District Growth and Development Summit.
- O.R. Tambo DM. 2016. Public Notice. O.R. Mthatha: Tambo District Municipality.
- Oberholster, J. H. 2014. *The Development of a Financing Model for Agricultural Production in South Africa*, Doctor of Business Administration thesis, Nelson Mandela Metropolitan University.
- Omarjee, L. 2017. More than 50% of SA's population is living in poverty. *Fin24*, 22 2017.
- Patton, M. Q. 1990. *Qualitative evaluation and research methods*. 2nd edition. Newbury Park, CA: Sage.
- Peek, L., & Fothergill, A. 2009. Using focus groups: lessons from studying daycare centers, 9/11, and Hurricane Katrina. *Qualitative Research*, 9(1):31-59.
- Peires, J., & Dooling, W. 2004. *Turning Points in History: Impact and Limitations of Colonialism Bk. 2*. STE Publishers.
- Pepeteka, T. 2013. Reversing the Legacy of the 1913 Natives Land Act: Progress of Land Reform. Research Unit, Parliament of the Republic of South Africa.
- Pepper, M. 2018. How do I enter the job market after graduation? Dept. Immunology. Faculty of Health Sciences. [Online]. Available: <https://www.up.ac.za/media/shared/.../ris-presentation-15-february-2018.zp143202.pd>.
- Percival, V. & Homer-Dixon, T. 1995. Environmental scarcity and violent conflict: the case of South Africa. American Association for the Advancement of Science, Washington, DC, USA; and University of Toronto, Toronto, Canada.
- Perret, S. 2002. *Livelihood strategies in rural Transkei (Eastern Cape Province): how does wool production fit in?* Working paper: 2002-20. University of Pretoria: Pretoria.

- Perrier-Cornet, P. 2010. The LFAs policies in France and the European Union. PRIMAFF Symposium, Japan.
- Pinto, C. T. 1993. "Land Abandonment: Changes in the Land Use Patterns around the Mediterranean Basin", en CIHEAM: The Situation of Agriculture in Mediterranean Countries. Soils in the Mediterranean Region: Use, Management and Future Trends, cap. 7. *Cahiers Options Méditerranéennes*, 1(2).
- Pointereau, P., Coulon, F., Girard, P., Lambotte, M., Stuczynski, T., Ortega, V. S., & Del Rio, A. 2008. Analysis of the driving forces behind farmland abandonment and the extent and location of agricultural areas that are actually abandoned or are in risk to be abandoned. Ispra: Joint Research Centre. Development Projects. Washington DC: World Bank.
- Provide Project. 2005. A profile of the Eastern Cape Province: Demographics, poverty, inequality and unemployment, Background Paper 1(2).
- Provincial Government of the Eastern Cape (PGEC). 2004. Eastern Cape Provincial Growth and Development Plan 2004-2014. Section 1: Introduction. Bisho.
- Rakodi, C. 2002. *Urban Livelihoods: A People Centred Approach to Reducing Poverty*. London: EarthScan.
- Reddy, E. S (ed). 1985. Apartheid, South Africa and International Law Selected Documents and Papers. [Online]. Available: <https://www.sahistory.org.za/sites/default/files/Apartheid%2C%20South%20Africa%20and%20International%20Law.pdf> [Accessed on 25 March 2016].
- Renwick, A., Jansson, T., Verburg, P., Revoredo-Giha, C., Britz, W., Gocht, A., & McCracken, D. 2013. Policy reform and agricultural land abandonment in the EU. *Land Use Policy*, 30(1):446-457. DOI:10.1016/j.landusepol.2012.04.005.
- Republic of South Africa (RSA). 2014. Draft Preservation and Development of Agricultural Land Framework Bill. Minister of Agriculture, Forestry and Fisheries. [B XX—2014].

- Revised Standard Version. 1975. *The Bible: Revised Standard Version*. Collins Clear-Type.
- RSA. 2005. Guide to the South African Co-operatives Act 2005. Department of Trade and Industry. Pretoria: Republic of the Republic of South Africa.
- Runeson, P., & Host, M. 2009. Guidelines for conducting and reporting case study research in software engineering. *Empirical Software Engineering*, 14(2):196.
- Rural Development Framework. 1997. Compiled by the Rural Development task Team (RDP) and the Department of Land Affairs, Pretoria.
- SAHO. 2014. *The Creation of Native Reserves and Migratory Labour System to South African mines*. [Online]. Available: <https://www.sahistory.org.za/article/creation-native-reserves-and-migratory-labour-system-south-african-mines> [Accessed on 31 July 2016].
- SAIRR (South African Institute of Race Relations). 2013. *South Africa goes with the urbanisation flow. Press release for immediate release, 22 January 2013*. [Online]. Available: https://irr.org.za/media/media-releases/Urbanisation%20-%2022_Jan_2013.pdf [Accessed on 25 March 2016].
- Scoones, I. 1998. *'Sustainable Rural Livelihoods: a framework for analysis'*, IDS Working Paper No 72, Brighton: IDS
- Setswe, 2010. Township communities and urbanisation in South Africa. Discussion guide for the 4th AMREP World Health Day workshop session on “*Current Challenges in Urbanisation & Health*” Burnet Institute, Monash University and Compass 8 April 2010. Human Sciences Research Council.
- Shao, J., Zhang, S., & Li, X. 2015. Farmland marginalization in the mountainous areas: Characteristics, influencing factors and policy implications. *Journal of Geographical Sciences*, 25(6):701-722.
- Shengfa, L. I., & Xiubin, L. I. 2017. Global understanding of farmland abandonment: A review and prospects. *Journal of Geographical Sciences*, 27 (9):1123- 1150

- Sineiro, G. F.; López, I. E., Lorenzana, F. R., & Valdés, P. B. 2004: “La tipología de las explotaciones en función de su viabilidad económica y demográfica; aplicación a las explotaciones de bovino de Galicia”. *Economía Agraria y Recursos Naturales*, 4(8):63-85.
- Skoufias, E., Rabassa, M., Olivieri, S. & Brahmhatt, M. 2011. *The poverty impacts of climate change*. PREM Policy Brief No. 51. Washington, DC, World Bank.
- South African Heritage Resource Agency(SAHRA). n.d. *Site Visit Report for Mqhekezweni Nelson Mandela Childhood Site*. [Online]. Available: [https://www.sahra.org.za/sahris/.../Mqhekezweni% 20site%20visit%20%281% 29.docx](https://www.sahra.org.za/sahris/.../Mqhekezweni%20site%20visit%20%281%29.docx).
- Spatial Planning and Information. 2009. Comprehensive Rural Development Programme: National Progress Report. [Online]. www.ruraldevelopment.gov.za/.../progress_report_july_09_crdp_v.1_1.pdf.
- Springer, K. 2010. *Educational Research: Contextual approach*. USA: Wiley.
- Stats SA. 2009. General Household Survey. Pretoria: Government Gazette.
- Stats SA. 2011. 2011 Census products, available [Online]. Available. [http://beta2.Stats SA.gov.za/?page_id=3955](http://beta2.StatsSA.gov.za/?page_id=3955).
- Stats SA. 2012. Census 2011 Statistical release – P0301.4 / Statistics South Africa. Pretoria: Statistics South Africa.
- Stats SA. 2014. Statistical release P0302: Mid-year population estimates. Pretoria: Stats SA.
- Stats SA. 2018. Media Release: Quarterly Labour Force Survey – QLFS Q1:2018. [Online]. Available: <http://www.statssa.gov.za/?p=11139>.
- Stewart, D. W. & Shamdasani, P. N. 1992. *Focus groups: theory and practice*. London: Sage.

- Tagg, J. H. 2012. *Providing adequate housing in South Africa in the twentieth and twenty first century*. BSc (Hons) Quantity Surveying. University of Pretoria, Tshwane, South Africa. [Online]. Available: https://repository.up.ac.za/bitstream/handle/2263/40984/Tagg_Providing%282012%29.pdf?sequence=1 [Accessed on 1 March 2016].
- Tashakkori, A., & Teddlie, C. 2003. *Handbook of Mixed Methods in Social & Behavioral Research*. Thousand Oaks: Sage.
- Teddlie, C., & Yu, F. 2007. Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research*, volume 1, pp. 77-100.
- Terres, J. M., Scacchiafichi, L. N., Wania, A., Ambar, M., Anguiano, E., Buckwell, A., Coppola, A., Gocht, A., Källström, H. N., Pointereau, P., Strijker, D., Visek, L., Vranken, L. & Zobena, A. 2015. Farmland abandonment in Europe: identification of drivers and indicators, and development of a composite indicator of risk. *Land Use Policy*. 49:20–34.
- Tesfaye, W., & Seifu, L. 2016. Climate change perception and choice of adaptation strategies: empirical evidence from smallholder farmers in east Ethiopia. *International Journal of Climate Change Strategies and Management*, 8(2):253-270.
- The Presidency of the Republic Of South Africa. 2014. Twenty Year Review, South Africa 1994 – 2014. [Online] Available: <http://www.thepresidency-dpme.gov.za/news/.../20%20Year%20Review.pdf>. [29 February 2016].
- Todorova, L., & Sârbu, O. 2014. Innovation policy in agriculture and rural development of the European Union: Prospects for the Republic of Moldova, Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, 14(2):311-316. [Online]. Available: http://managementjournal.usamv.ro/pdf/vol4_2/art53.pdf [Accessed 31 August 2017].
- Tongco, D. 2007. Purposive Sampling as a Tool for Informant Selection. *Ethnobotany Research and Applications*, 5: 147-158.

- Trading Economics. 2018. South Africa Youth Unemployment Rate. [Online]. Available: <https://tradingeconomics.com/south-africa/youth-unemployment-rate>
- Triegaardt, J. D. 2006. *Reflections on poverty and inequality in South Africa: Policy considerations in an emerging democracy*. Paper presented at the annual Association of South African Social Work Education Institutions (ASASWEI) conference, University of Venda, Department of Social Work, 18–20 September 2006.
- Tshikotshi, V. 2009. *The challenges of eradicating informal settlements in South Africa by 2014. The case of Seraleng sustainable human settlement, Rustenburg local municipality, North West Province*. Master of Science in Housing. University of the Witwatersrand, Johannesburg, South Africa. [Online]. Available: <http://wiredspace.wits.ac.za/bitstream/handle/10539/8319/The%20Challengers%20of%20Eradicating%20Informal%20Settlements%20In%20SA%20by%202014.pdf> [Accessed on 28 November 2015].
- Turok, I. 2012. *Urbanisation and Development in South Africa: Economic Imperatives, Spatial Distortions and Strategic Responses*, IIED Urbanisation and Emerging Population Issues Working Paper 8, London: IIED.
- UN. 2015. *Transforming our world: the 2030 Agenda for Sustainable Development*. [Online]. Available: <https://sustainabledevelopment.un.org/post2015/transformingourworld> [Accessed on 22 September 2018].
- UN. n.d. *Sustainable Development Goals: 17 Goals To Transform Our World*. [Online]. Available: <http://www.un.org/sustainabledevelopment/biodiversity/>. [Accessed on 31 August 2017].
- van Berkel, D. B., & Verburg, P. H. 2011. Sensitising rural policy: Assessing spatial variation in rural development options for Europe. *Land Use Policy*, 28(3):447-459. DOI:10.1016/j.landusepol.2010.09.002.
- Weissteiner, C. J., Boschetti, M., Böttcher, K., Carrara, P., Bordogna, G., & Brivio, P. A. 2011. Spatial Explicit Assessment of Rural Land Abandonment in the Mediterranean Area. *Global and Planetary Change*, 79(1-2):20-36.

- Western, J. 1981. *Outcast Cape Town*. Landon: George Allen and Unwin.
- Wiersma, W. 1995. *Research methods in education: An introduction*. 6th edition. Boston, MA: Allyn and Bacon.
- Wiid, J., & Diggines, C. 2013. *Marketing research*. 2nd edition. Cape Town: Juta.
- World Bank. 1975. Rural development (English). Sector policy paper. Washington, DC: The World Bank.
- World Bank. 2018. Overcoming Poverty and Inequality in South Africa: An Assessment of Drivers, Constraints and Opportunities. Washington, DC: World Bank.
- Yap, K. S. 1995. The Global Context of Housing Poverty. In Aldrich, B.C. & Sandhu R.S (eds). *Housing the Urban Poor: Policy and Practice in Developing Countries*. London: Zed Books.
- Yin, R. 2003. *Case study research: Design and methods*. 3rd edition. Thousand Oaks, CA: Sage.
- Yin, R. K. 2009. *Case study research: Design and Methods*. 4th edition. Thousand Oaks, CA: Sage.
- Zakkak, S., Radovic, A., Nikolov, S. C., Shumka, S., Kakalis, L., & Kati, V. 2015. Assessing the effect of agricultural abandonment on bird communities in southern-eastern Europe. *J Environ Manage*. 164:171–179.
- ZeroEightyFour. 2017. South Africa - *The White Laager* (Suid-Afrika: Die Wit Laer). [Online]. Available: <https://www.youtube.com/watch?v=HZhSXAVnNqY&t=24s> [Accessed on 11 April 2017].

ANNEXURES

Annexure A: Permission to conduct academic research

English



Unit for Applied Business Management
Summerstrand South Campus
DEPARTMENT OF DEVELOPMENT STUDIES
Tel: +27 (0)41 504 4275

To: the Headmen of Julukuqu

RE: REQUEST FOR PERMISSION TO CONDUCT ACADEMIC RESEARCH

Dear Mr Ndabayithethwa Groto

I am Aphiwe Mgushelo, a student at the Nelson Mandela University, **Student number 211167673**, studying for a Master of Philosophy in Development Finance. I hereby request your permission to conduct an academic research in your area, Julukuqu location. This research project investigates **Agriculture land abandonment and rural development in South Africa**. This research has been granted ethics clearance by the above-mentioned university. You are welcome to contact Dr Amanda van den Berg on 041 504 4275 should you have any ethical concerns (such as the way you have been treated or your rights as the respondent).

This research aims to establish the extent and, causes and socio-economic consequences of agriculture land abandonment in rural areas in South Africa. The ultimate is to provide relevant recommendations towards achieving rural development, particularly of Julukuqu. This will be done through interviews with various households. Feedback will be given to you and your community on the findings and recommendations of the completed research. It is our (myself and my supervisor) that the results of this study will benefit your community and possibly other communities in the future.

Thank you in advance for considering my request. We will greatly appreciate your granting of permission to conduct this academic research.

Yours in development,

Mgushelo, Aphiwe (Mr)

Email: s211167673@nmmu.ac.za | Cell: 083 392 2676

Xhosa

NELSON MANDELA

UNIVERSITY

Unit for Applied Business Management
Summerstrand South Campus
DEPARTMENT OF DEVELOPMENT STUDIES
Tel: +27 (0)41 504 4275

KwiBhodi yaseJulukuqu

ISICELO SOKWENZA UPHANDO

Mnu. Ndabayithethwa Groto

NdinguAphiwe Mgushelo, umfundi eNelson Mandela University (iDyunivesithi), ofundela i-Master yePhilosophy kwi-Development Finance. Ndicel'invume yokwenz'uphando kwilali yakho, iJulukuqu. Oluphando lumalunga nokushiywa kwamasimi nophuhliso lweelali eMzantsi Afrika. Oluphando luyinikiw'invume ngokwemimiselo yonqubo-phando, yiDyunivesithi. Wamkeleli ukubethel'umnxeba uGq. Amanda van den Berg ku-041 504 4275 xa uthel'ingqongile loluphando, indlel'oluqingqwe okanye olugqutywa ngayo (njengendlel'ophethwe ngayo okanye abahlali, okanye amalungelwenu njengabaphenduli).

Eyona njongo yoluphando kukwazi, ubukhulu-becala, unobangela kunye nemiphumela yokushiywa kwamasimi – ngokwentlalo-ntle nangokoqoqosho – kwilali zoMzantsi Afrika. Inkunzi kukunikeza iingcebiso zokubhangisa lengxuba-kaxaka, ethand'ukuxhaphaka kwilali zoMzantsi Afrika, ngokukhethekileyo eJulukuqu. Ukwenza oku, sicebe ukungena kwimizi-ngemizi, sibuzela nganye-nganye, ukufumana iimpemulo zayo malunga nalomba.

Izokuzisw'ingxelo malunga neziphumo neengcebiso zophando.

Ngumnqweno wethu ukub'iziphumo zoluphando ziyokubayinzuzo kwilali yakho, nakwezinye zoMzantsi Afrika uphela..

Enkosi ngokuv'isicelo sethu.

Owenu kuphuhliso,

Mgushelo, A (Mnu.)

I-email: s211167673@nmmu.ac.za | Inombolo yomnxeba: 083 392 2676

Annexure B: Consent form

CONSENT FORM

This research project investigates **Agriculture land abandonment and rural development in South Africa**. This research has been granted ethics clearance by the Nelson Mandela University. You are welcome to contact Dr Amanda van den Berg on 041 504 4275 should you have any ethical concerns (such as the way you have been treated or your rights as the respondent).

You are kindly requested to participate in this interview and respond to the following questions to assist in the completion of this research. Your participation and contribution is very valuable. This questionnaire seeks to achieve the aim of the research, which is to establish the extent and, causes and socio-economic consequences of Agriculture land abandonment on rural areas in South Africa. The ultimate is to provide relevant recommendations towards achieving rural development, particularly of Julukuqu. This should take 30 to 45 minutes of your time. Feedback will be given to your community on the findings and recommendations of the completed research.

This interview is entirely anonymous and all information will be treated in the strictest confidence - no one will know your name as research instruments and data, as well as quotes used in the research will be anonymous, so you may speak quite freely to the interviewer. Keep in mind that we are just as interested in negative comments as positive comments, and at times, the negative comments are the most helpful. We are interested in the. Please answer the questions as accurately as possible as it relates to your experiences and perceptions. With your permission, the interview will be audio recorded and transcribed so that we do not miss any of your comments. We cannot write fast enough to note them all.

I hereby voluntary agree to participate in this this interview	Yes	No
I hereby agree to tape recording of my participation and contributions in the study	Yes	No
I hereby agree to the use of my name referenced quotes (only if person in authority)	Yes	No

Signature of respondent: _____ Date: _____

Signature of witness: _____ Date: _____

Annexure C: Interview guide



Interview/focus group guide

Master in Development Finance: Research Project 2018

Department of Development Studies

Thank you for volunteering to participate in this research project, which investigates **Agriculture Land Abandonment and rural development in South Africa.**

Accept my gratitude for your participation.

Date of interview (dd/mm/yyyy)	
Interview/questionnaire no.	
Authority/Household	
Name and Surname, if authority	
Language interview conducted in:	
Contact number (in case of follow-up interview)	

Your participation is very valuable so please feel free to make your contributions. First, let us find out about you.

PART A: GENERAL DEMOGRAPHIC & SOCIO-ECONOMIC DATA

1. Population

1.1. Gender

Gender	mark with X
Male	
Female	

1.2. Age

Age category	Actual age
18 – 21 years	
22 – 25 years	
26 – 35 years	
36 – 45 years	
46 – 55 years	
56 – 65 years	
Over 65	

2. Level of education

Education	mark with X
Never went to school	
Below Matric (Grade 12)	
Matric (Grade 12)	
Under-graduate diploma/certificate	
Undergraduate degree	
Post-graduate degree	

3. Main source of income

Crop/plant production		Off-farm employment	
Animal production		Casual labour	
Remittances		Vending/hawking	
Old-age pension		Spaza	
Disability		Sheeben/Tavern	
Retirement pension		None	
Child grant		Other (specify)	

4. How long have you (/your household) lived in this community, in years?

.....

PART B: EXISTENCE AND EXTENT OF AGRICULTURE LAND ABANDONMENT

5. Please give us a brief history of crop field's cultivation and crop production in the community.

.....
.....

6. Do you have a crop field?

Yes	
No	

6.1. If yes, do you longer use the crop field? Please state what you use/it is used for/by, if any.

No		
Yes	Partly	
	Wholly	

.....
.....

6.1.1. When (*in years*) did you last use it for growing crops?

.....
.....

6.1.2. If no longer cultivating the field for crop production, what do you use it for?

.....

PART C: CAUSES AND CONSEQUENCES OF AGRICULTURE LAND ABANDONMENT *(positive and negative)*

7. State the reasons why your household is no longer cultivating the crop fields?

.....

.....

.....

.....

8. In your opinion, why other people/households are no longer cultivating their crop fields?

.....

.....

Benefits of land use

9. When you cultivated your crop fields, what did you grow in them?

Maize	
Beans	
Cabbage	
Spinach	
Potatoes	
Other (specify)	

.....

.....

9.1. What were the benefits (of land use)?

.....

.....

.....

.....

Consequences of land abandonment (i.e. unused of land)

10. How do you get access to vegetables and other crops for consumption?

From garden	
From garden and field	
Purchase	
Exchange	
Other (specify)	

10.1. What is the impact of this on your household?

.....

.....

11. Further state/list the impacts of not cultivating the fields to your household?

.....

.....

12. State/list the impacts of not cultivating the fields to the community (or how has the community been without ploughing the fields).

.....

.....

13. On what do you spend most of your income/money?

Food	
Starting and growing a business	
Transport fare	

Other (specify)	
-----------------	--

Other means of survival/livelihood

13. Do you have any other means of survival/livelihood?

Yes	
No	

13.1. If yes, what are they (choose one)?

Livestock farming	
Employment (formal) in rural area/village	
Employment (informal) – e.g Spaza shop, street vending etc.) in rural area/village	
Employment (formal) in the urban area/city	
Employment (informal) – e.g Spaza shop, street vending etc.) in the urban area/city	
Other (specify)	

.....

Migration: household and rural population decline

14. Do all of your household's members live here during the year?

Yes	
No	

Briefly elaborate.

.....

PART D: REVIVING OF AGRICULTURE IN THE RURAL AREA

15. Would you like to cultivate your fields again?

Yes	
No	

Briefly elaborate.

.....

16. What should be done to help you (the community) cultivate your crop fields?

.....

.....

.....

Thank you for your valuable time and participation in this re

Annexure D: Intention to submit

NELSON MANDELA
UNIVERSITY

INTENTION TO SUBMIT TREATISE/DISSERTATION/THESIS FOR EXAMINATION

TO: FACULTY ADMINISTRATION OFFICE

PLEASE FAX OR EMAIL THE COMPLETED FORM TO THE RELEVANT FACULTY MANAGER:

FACULTY	MANAGER	FACSIMILE	EMAIL
ARTS	Ms D Nzoki	041 504 1057	Druella.Nzoki@mandela.ac.za
BUSINESS AND ECONOMIC SCIENCES	Mr A Smith	041 504 9004	Adnaan.Smith@mandela.ac.za
EDUCATION	Mr R Sefo	041 504 8383	Ridaa.Sefo@mandela.ac.za
ENGINEERING, THE BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY	Mr J Dorothy	041 504 9751	Jonathan.Dorothy@mandela.ac.za
HEALTH SCIENCES	Ms N Isaacs	041 504 9463	Nouweal.Isaacs@mandela.ac.za
LAW	Ms N Terblanche	041 504 9660	Nikki.Terblanche@mandela.ac.za
SCIENCE	Mrs L Roodt	041 504 2369	Lynette.Roodt@mandela.ac.za

DEADLINE FOR THIS FORM FOR POSSIBLE GRADUATION IN APRIL: 31 AUGUST 2018

When the treatise/dissertation/thesis nears completion, the student must inform the relevant Faculty Administration Office in writing of his/her intention to submit it for examination. Such notice must be given at least 3 months before the prospective date of submission.

General Prospectus: <http://www.nmmu.ac.za/Apply/Admission/Quick-documentation>

STUDENT DETAILS

FACULTY	Business and Economic Sciences
NAME OF QUALIFICATION	Master of Philosophy in Development Finance
STUDENT NUMBER	211167673
FULL NAMES	Aphiwe
SURNAME	Mgushelo
STUDY ADDRESS	04 Kock Street Summerstrand, Port Elizabeth Code: 6001
TELEPHONE NUMBERS	Home: 083 392 2676 Work: 083 392 2676 Fax: E-mail: s211167673@mandela.ac.za
TITLE OF RESEARCH PROJECT	Agriculture Land Abandonment and Rural Development in South Africa
SUPERVISOR FULL NAMES AND SURNAME	Alex Bara (Dr)
EMAIL	alexabara15@gmail.com
TELEPHONE	+263772962491
CO-SUPERVISOR/S FULL NAMES AND SURNAME	-

PLEASE INDICATE WITH AN (X) IN THE RELEVANT BOX

<input checked="" type="checkbox"/>	This is to inform you of my intention to submit my Research Project for examination purposes for possible graduation in April
<input type="checkbox"/>	Non-submission for this cycle

NB for Doctoral candidates: Kindly be reminded of the requirement for a publishable manuscript/article to be submitted in accordance with rule G5.6.7 in the General Prospectus

STUDENT'S signature  Date 16/07/2018

SUPERVISOR'S signature  Date 30 August 2018

Annexure E: Letter for proof of treatise edit

S. Ferreira	
Westmead Drive Theescombe Port Elizabeth 6001	PO Box 15439 Emerald Hill Port Elizabeth 6011
Cell: 074 457 5336	

To whom it may concern

This document serves to confirm that the following thesis paper has been checked:

NAME: Aphiwe Mgushelo

Student Number: 211167673

This paper has been checked for:

1. Grammar
2. Spelling
3. Punctuation
4. Other formatting errors

I have left my comments in the review section of the document.

Should you have any further enquiries, please do not hesitate to contact me.

(Cell: 0744575336)

Kind regards

Simoné Ferreira



Annexure F: Turnitin Report

Mgushelo_MPhil treatise final			
ORIGINALITY REPORT			
14%	8%	3%	8%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS
PRIMARY SOURCES			
1	Submitted to Nelson Mandela Metropolitan University Student Paper		2%
2	Shengfa Li, Xiubin Li. "Global understanding of farmland abandonment: A review and prospects", Journal of Geographical Sciences, 2017 Publication		1%
3	JK Davis, A Ainslie, A Finca. "Coming to grips with 'abandoned arable' land in efforts to enhance communal grazing systems in the Eastern Cape province, South Africa", African Journal of Range & Forage Science, 2009 Publication		1%
4	www.ntinga.org.za Internet Source		1%