Tides of change: Exploring the knowledge system of a rural community's transition from subsistence farming, to landlessness, and to communal farm ownership

By

Moses M. Thabethe

Submitted in partial fulfilment of the requirements for the degree of Master of Education, Adult Education in the School of Adult and Higher Education, Faculty of Education, University of KwaZulu-Natal, Durban

Supervisor: Dr Sylvia Kaye

January 2006

TABLE OF CONTENTS

LIST C	F FIGURESF TABLES	v vi
DECLA	ARATION	vii
	DWLDGEMENTS	
LIST O	F ABBREVIATIONS USED IN THIS STUDY	X
CHAPT INTRO	TER ONE DUCTION AND BACKGROUND TO THE STUDY	1
1.1	Introduction	1
1.2	Background to the study Demographics Locality of the study area Forced removals The socio-economic situation Legal framework	2 3 4 6
1.3	Statement of the problem	10
1.4	Motivation of the study	11
1.5	Goal of the study Research objectives Research questions	13
1.6	Organisation of the report	14
1.7	Summary	15
	TER TWO ATURE REVIEW AND THEORETICAL FRAMEWORK	
2.1	Introduction	17
2.2	Key concepts and definitions Subsistence farming Livelihoods Community Communal land ownership	18
2.3	The learning theories employed in the study. How adults learn. Transformational learning. Indigenous knowledge as knowledge for living.	24 25 27 31
2.4	Traditional Decision-Making Processes	32
2.5	Learning Through Coping and Adaptive Strategies	34
2.6	Theoretical Framework	35
2.7	Summary	37

3.1	Introduction	38
3.2	Research design	38
3.3	Methodological paradigm	. 40
3.4	Methodological techniques. Sampling. Data Collection. Interviews. Observation. Focus group interviews. Data analysis. Familiarisation. Identification of themes. Charting. Mapping and interpretation.	43 44 45 46 47 47 48
3.5	Verification and standards of quality	50
3.6	Ethical consideration. Voluntary participation. Informed consent and dialogue. No harm to participants, caring and fairness. Confidentiality and anonymity. Summary of ethical consideration.	52 53 53 54 55
3.7	Challenges encountered	55
	TER FOURARCH FINDINGS	57 57
4.1	Introduction	57
4.2	A profile of the research participants	57
4.3	The knowledge base of the community	62 62 66
4.4	Major events which changed the community' way of life	69 69 70
4.5	Emerging themes from the major events. Poverty. Loss of means of livelihoods. Shortage of labour. Homelessness. Loss of economic power and decline in subsistence farming. Traditional belief system challenged by new situation. Social disarticulation.	76
4.6	Coping and adaptive strategies. Establishment of a governing structure. Innovation and industriousness. Community of practice. Migrant labour and reliance on wage labour. A shift in gender roles. Diversification of activities and household inputs.	81 83 84 85 86

	Pushing the boundaries set by governing authorities	87
4.7	Summary	88
	TER FIVEANALYSIS AND DISCUSSIONS	89 89
5.1	Introduction	89
5.2	Discussion of the knowledge base of the community Indigenous farming knowledge Traditional farming knowledge	90 90 93
5.3	Major events which changed the community's way of life	96 96 97
5.4	Emerging themes from the major events. Poverty Loss of means of livelihood Landloss, Homeloss and Homelessness Loss of economic power Traditional belief system challenged by new situation Innovation and industriousness amidst social disarticulation	100 100 102 103 104 106 107
5.5	Coping and adaptive strategies. Establishment of a traditional governing structure. Community of practice. Migrant labour and reliance on wag labour. Gender. Diversification of activities. Learning from coping and adaptive strategies.	108 109 110 111 112 114 115
5.6	What transformational learning has occurred in the community?	116
5.7	Summary	118
	ER SIX	120 120
6.1	Introduction.	120
6.2	Conclusion	120
6.3	Suggestions Creation of partnerships among farm owners Strengthening community leadership structure The need for an adult education programme	122 122 123 124
7.1	References	127
8.1	Appendices	137 137 138

LIST OF FIGURES

Figure 1,1:	Map showing the location of Calais Village
	Summary of research design and methodological paradigm 4
Figure 5.1:	A matrix of risks resulting from forced removals100

LIST OF TABLES

 58
(

DECLARATION OF ORIGINALITY

I, Moses Mposho Thabethe, hereby confirm that this dissertation, which was conducted under the supervision of Dr. Sylvia Kaye, is my original work that is in partial fulfilment of the requirement for the degree of Masters in Education, Adult Education, in the School of Adult and Higher Education, University of Kwazulu-Natal. The work of different authors used in this study is acknowledged accordingly.

Signature of student	
Signed on this date 21 th of April 200	96
Signature of supervisor	
Signed Sylvity on this date 24th of April	7007

ACKNOWLEDGEMENTS

My gratitude goes to my supervisor, Dr Sylvia Kaye, for her dedication and enthusiastic support throughout the process of writing this dissertation. The many hours spent in your office proved to be fruitful.

Many thanks to the staff members at the department: Prof Astrid von Kotze, for her encouragement and interest in my work, Dr Elda Lyster, for her thoroughness and attention to detail which helped me during the process of this study, and Mrs Kogi Doorasamy, for her dedicated and friendly service.

My appreciation and thanks to the Church of St Paul's and its leadership, for allowing me to take time off to study. Your efforts made the last part of my academic year, lighter and worthwhile.

In a special way, I would like to thank the participants of this study, for allowing me to intrude in their lives and for them to relive those painful moments that they would rather forget. I hope the process has been as cathartic for them as it has been enlightening for me.

I would also like to thank my fellow students, Kas Naidoo and Poppet Pillay for being real companions on this journey of discovery. We shared quite a lot during the process of writing this dissertation and your help is truly appreciated.

To my wife, a fellow academic, companion and a tower of strength during those difficult and tough times when the going got tough. Your companionship more than anything else, is what kept me going. So many times you have been a light in the darkness! Alongside you is our son, Lungelo, who hungered for our attention during a time when we both struggled to complete our work. It has been worth a while

ABSTRACT

This study was conducted to explore the knowledge system of a rural community in their life transitions from subsistence farming, to forced removals, and later to ownership of a communal farm. In Limpopo Province, South Africa, impoverished rural people, whose livelihoods have largely depended on subsistence agriculture constitute large sections of the population. Calais, a rural village in Limpopo was selected for the study. The village is characterized by high levels of illiteracy among the elderly people. Based on a phenomenological research design, a purposive sampling was utilised as a representative sample of the study to inquire what knowledge they possessed, how such knowledge was created, how it has been adapted, applied, and disseminated in their daily efforts of making a living.

Learning among illiterate, rural communities is mainly informal, experiential, orally transmitted and generally undocumented but forms a basis for coping, adaptation, and decision-making of communities in food security, health and management of natural resources, amongst other activities. Whereas the rural, poor people of Calais community's subsistence farming lifestyle was affected by the forced removals, the study found that they possess indigenous, 'ready-to-use' knowledge and skills, which have been adapted to assist them in their struggle for survival and in achieving control of their own lives. The study also found that decision-making in this community is characterized by social inequality based on gender and social status. It was also discovered that the traditional leadership structure lacks the necessary skills, expertise and infrastructure for effective management and ownership of a community-owned, commercial farm.

The study concluded that indigenous knowledge is a valid knowledge system that should be utilised alongside other knowledge systems. At the same time, this community's indigenous farming knowledge cannot be romanticised as a static, unchanging body of knowledge but that it should be viewed as complementary to other ways of knowing and of sustaining life in changing socio-economic settings.

LIST OF ABBREVIATIONS USED IN THIS STUDY

ADB Asian Development Bank

CPF Community Policing Forum

CRIR Commission on the Restitution of Land Rights

DFID Department for International Development

GDP Gross Domestic Product

ha hectares

ICRA International Centre for development oriented Research in

Agriculture

LRAD Land Redistribution for Agricultural Development

OFCOLACO Officers Colonial Land Company

SLF Sustainable Livelihood Framework

Soweto South Western Township

UNESCO United Nations Educational Scientific and Cultural Organisation

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

Learning involves much more than an extant body of knowledge; learning is all around us, it shapes and helps create our lives — who we are, what we do. It involves dealing with complex and intractable problems, it requires personal commitment, it utilizes interactions with others, it engages our emotions and feelings, all of which are inseparable from the influence of context and culture (Boud, Cohen & Walker, 1993:1).

In the sphere of adult education, much literature has focussed on the assumption that there is a body of knowledge to be taught and learned. This assumption has a propensity to emphasize the formal nature of education and overlook the autonomous learning that occurs throughout life and influenced by particular social settings and culture. This type of learning is rooted in taken-for-granted activities, experiences, perceptions and norms unique to a given culture, society or community. Thus, this type of learning gives rise to knowledge that is either tacit or regarded as part of people's general capabilities and inextricably linked to ways of making a living (Eraut, 2004: 249). Such knowledge is mainly informal, orally transmitted and generally undocumented but forms a basis for decision-making of communities in food security, health and management of natural resources, amongst other activities. However, this knowledge is dynamic and continually influenced by communities' internal creativity and experimentation as they explore diverse survival activities.

This study explores the knowledge system of the Calais rural community in their transition from subsistence farming, to forced removals, and later to communal farm ownership. Such knowledge system is the type that is constructed outside the formal schooling system such as informal settings, life experiences and social contexts. Through the use of the phenomenological approach, the study traces the life experiences of forcibly removed villagers to inquire what knowledge they possess, how such knowledge is created, how it

has been adapted, applied, and disseminated in their day to day efforts of making a living.

In setting the scene for understanding the study, this Chapter is divided into four parts. The first part sets the historical background of the study area. The second and third parts deal with the reasons why this particular study was undertaken as well as outlining relevant characteristics of the area of study. The fourth part would present the structure of the study.

1.2 Background to the study

Demographics

In an effort to chart a background of the study area, it is essential to provide a broad overview of the province of Limpopo (formerly known as the Northern Province) as the locus of the study. Limpopo is the northern most province bordering onto Mozambique, Zimbabwe and Botswana. The population on preliminary Census 96 figures was 4,1 million. However, this figure is subject to considerable debate particularly by service providers and spatial and demographic researchers in the field who provide a substantially high population figure. Nearly 90% of the population lives in rural areas. Of the total population, which is said to be growing at a rate of 3% per annum, 55% are female and 48% are children under the age of 15. The majority of the population, approximately 96% is black (Ramathlodi, 1999).

The largest sector in the economy in terms of production is the service sector. This produced 31,8% of the GDP with 46,7% of formal employment. This sector is followed by mining which contributes 20,6% of the GDP and 8,9% of employment, commerce 11,9% and 9,8% of employment and agriculture 8% of GDP and 19,1% of employment. The unemployment rate is 41% of the economically active population and coupled with this high figure is the increasing annual flow of school leavers into a job market in an economy that has a low capacity to grow or to absorb labour. Descriptions below outline the historical development of the specific area within which Calais village is situated.

Locality of the study area

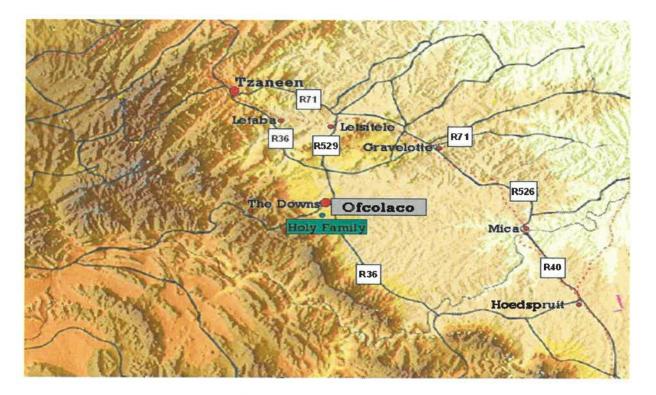
Calais village is about 50 km from Tzaneen and is located in an area called Ofcolaco – an acronym for "Officers' Colonial Land Company". Ofcolaco was formed in 1919 by a group of redundant British Regular and Indian army officers "who were axed by the War Office and the Admiralty, to join a cooperative farming venture on the banks of the Selati River" (Cartwright, 1974: 130). The war officers had acquired their farms very cheaply even though they did not receive any assistance from the government of the day. Calais village is therefore, surrounded by these farms on the southern and eastern side, and broadly situated between the then Letaba district in the former Gazankulu homeland and Naphuno district in Lebowa homeland.

Information supplied by the tribal authority of Calais is that the current population of the village is about 12 000 with 126 households. Land occupancy for black people in such farm areas was problematic. Ruth Hall elucidates this point in saying:

The permitted forms of African tenancy on white-owned farms were also restricted as successive governments introduced coercive measures to separate Africans from independent production and convert share, rent and labour tenants into wage labourers (2004: 1).

The community in this study was no exception. Once the forcibly removed community settled on Calais village, they were not given any land for farming and grazing as much of the land was reserved for housing. Today, the village falls under the Maruleng Municipality with its headquarters in Hoedspruit. Below is a topographical map showing the Ofcolaco area in which Calais village is situated.

Figure 1.1 Topographical map showing Ofcolaco, the farmland where Calais Village is situated



Forced removals

Land dispossession has characterized the history of South Africa, particularly as it served to engineer and uphold the apartheid system. Millions of black South Africans were forcibly removed from their land and homes in terms of the Groups Areas Act in urban areas and the Natives Land and Trust Acts of 1913 and 1936 in rural areas. During the 1960s, 1970s and early 1980s, the government implemented a policy of 'resettlement', to force non-whites to move to government-specified areas. It is estimated that over three and a half million people were forced, through this policy, to resettle during that period. According to Ruth Hall (2004) the victims of these forced removals included:

- I. Labour tenants on white-owned farms.
- II. The inhabitants of the so-called 'black spots', areas of Africanowned land surrounded by white farms.
- III. The families of workers living in townships close to the homelands.
- IV. 'Surplus people' from urban areas who were moved to the homelands.

The Bantu Homelands Citizen Act was passed in 1970, making every African a citizen of some homeland. The Bantu Laws Act of 1972 justified forced resettlements of African people and stated that a "Bantu tribe" community or individual could be removed from where they lived without any recourse to parliament, even if there was some objection to the removal (ICRA, 2004).

Consequently, homelands or 'reserves' were formed to accommodate black people and these accounted for just 13 % of South African land. About 16 million people or 30 percent of the country's population lives in the communal areas of the former homelands, and possibly in the region of approximately three to five million people on farms. The most well-publicised forced removals of the 1950s occurred in Johannesburg, where 60 000 people were moved to the new township of Soweto (an acronym for South Western Township). Forced removals continued up until the 1980s. During this time, only a few areas of land that remained in the so-called 'white' South Africa were owned or controlled by black people (Hall, 2004).

However, this pattern of forced removal and destruction was not limited to people of African descent. Forced removals from areas like Cato Manor (Mkhumbane) in Durban, and District Six in Cape Town, where 55 000 coloured and Indian people were forced to move to new townships on the Cape Flats, were carried out under the Group Areas Act of 1950. Ultimately, nearly 600 000 coloured, Indian and Chinese people, and a further 40 000 white people, were moved in terms of the Group Areas Act.

In Limpopo Province, black people were settled along ethnic lines under the semi-independent states or 'Bantustans' of Lebowa, Gazankulu and Venda. Because the whole Bantustan policy was an integral part of apartheid, none of the 'independent' Bantustans received international recognition. In reality, the Bantustans were rural slums, totally dependent on South Africa (Thwala, 2003). Some of the recorded forced removals in Limpopo Province include the Makuleke community, a Tsonga-speaking tribe, who were forcibly removed in 1969 to increase the size of the Kruger National Park (Langeveld, 2000). Two Venda communities, the Gumbu's and Mutele's were removed between 1930

and 1980, and the Mamatola tribe, in 1967 (Langeveld, 2000; Poonan, 2000; and Davis, 1987).

In the rural areas of Limpopo, for most communities, the suitability of land for growing crops and for cattle grazing determined where people settled. This subsistence means of living often meant that few families would settle on a sizeable piece of land in order to have ample farming and grazing land for each household. The Calais village, in which this study was conducted, consists of rural people who were forcibly removed from The Downs and the low lands areas in 1978 to be settled in a demarcated piece of land that was part of the Calais farm (Van Riet, 1984). The community forfeited 18,125 hectares of land as a result of the forced removals and this entire land was then turned into a Nature Reserve in 1984 called Lekgalameetse. As can be seen from these delineations, land dispossession of the black population in South Africa contributed to the vast neglect of human rights, dignity and acute inequalities. As a result, large populations of Africans in the former Bantustans or homelands remain poor and landless.

The socio-economic situation

The Limpopo province has Polokwane as its geographic and economic centre and provides the administrative workforce. The majority of the population in the province derives its livelihood from subsistence economy. The province is also an area of important mining activities. The world's third largest deposits of phosphates are mined in Phalaborwa. Other important minerals extracted there and elsewhere include copper, mica, vermiculite and iron. The province exports primary (agricultural and mining) products and generally imports manufactured goods and services (Ramatlhodi, 1999).

The main challenge in the Calais village including some of the neighbouring villages, is lack of employment opportunities with the majority of people working on the farms. The major economic driving force therefore, is agriculture. This means that growth and development of most rural areas are closely linked with its agriculture. Sustainable agriculture development and growth are thus important to the rural economy. A key feature of the

agricultural sector in this area is its dualism, namely commercial farming and subsistence farming.

The historical placement of the village as the only black settlement on former 'white' South Africa - located between two former homelands - made access to basic services difficult. Before 1994, there was no transport system; the roads linking the village to other villages were in a bad state and no electricity was installed until October 2005¹. There exist two schools, a higher primary and secondary, with a pre-school. Water supply was rudimentary and no primary health care facilities. The Selati River, which is perennial, used to supply water for the village but its flow was diverted to supply water for the commercial farms around Ofcolaco area.

The following is a description of the different phases or transitions that the Calais community underwent. It is from these transitions that the study explores what type of knowledge, skill, or competence the community possesses and how such knowledge is adapted and applied to cope with change.

The first phase of transition which changed the community's lifestyle occurred when the villagers were forcibly removed from their subsistence land between 1978 and 1981, to be placed in a settlement with no land to continue their livelihood activities - a move which forced them to work on the surrounding white-owned farms in order to make a living. As described in section 1.4, the Calais community consisted mainly of two groups of people who had lived a subsistence lifestyle prior to the forced removals. This was a turning point in the community's way of life as government policies then were devised to restrict their access to land and created reserves that were much too small to enable subsistence agriculture to survive. Such policies which led to the forced removals, made agriculture a minor livelihood activity, with migrant labour and farm wage remittances becoming a new and increasingly important livelihood strategy for many. However, the community members

¹ Electricity was only installed in October 2005 at Calais village – 27 years after the forced removals, and about 17 years after the last neighbouring village was electrified. The electrification of Calais village occurred during the last week of data collection for this study.

continued with small-scale farming on their undersized plots of land alongside the new challenges of migrant and farm labour.

The second phase happened around 1984 when some farming land was given to the villagers to resume their subsistence farming. For many this was a return to a traditional, yet inadequate means of making a living, as they were still not allowed to have any livestock. During this period, the commercial farms, which benefited from the villagers, witnessed a decline in the workforce as most people returned to traditional farming. As more and more people were forcibly removed, the village grew in size and more land was needed for settlement. As a result, part of the newly acquired farming land was utilized to accommodate the new arrivals to the village. A large part of the farmland that was demarcated for subsistence agriculture was turned into a cemetery as the village was confronted with new challenges.

The third phase of the village's transition occurred a few years after the 1994 democratic elections. In 1998 some of the influential leaders of the village were convinced by the local white farmer to utilize the government subsidy that had been earmarked for housing, to purchase a farm that would be collectively owned by the community for commercial farming. In an attempt to unearth the economic potential of the agricultural sector, the Limpopo provincial government had introduced a subsidy grant of R15 000 per household to access farms for rural people's own development (Ramatlhodi: 1999).

In the context of Calais village, it could not be established whether the grants were compensation for the forced removals or part of government's drive to enable rural communities to access agricultural land through the Land Redistribution for Agricultural Development (LRAD). Elsewhere in the province, communities were assisted to purchase land using land grants (Hall, 2004). According to the information received from the tribal authority, the Calais community acquired a loan of R250 000 as a start-up capital to make the farm operational. The former farm owner provided apprenticeship training to one of the community members who later assumed the managerial

oversight of the farm with the support of a committee.

The farm, totaling 450 hectares, consists of 220 hectares of fruit plantation and 180 hectares of open land. It was learnt during the data collection interviews that only 2 of the 180-hectare, open land is utilized for crop plantation. As a result, production on the communal farm has declined and since the beginning of 2005, it was learnt that the bank repossessed the farm.

These different phases or transitions in the life of the Calais community had social, cultural and economic implications from which a lot had to be learned. The decision to purchase a communal farm was a major undertaking by a rural and largely illiterate community. It is in the light of this that the study seeks to explore what knowledge was constructed and how such knowledge was utilized or adapted throughout the process of change.

Legal Framework

Over large areas of the province, the State is the legal owner of communal land. In communal areas such as the Calais village, a major issue is the relative merit of indigenous customary tenure systems and those based on western concepts involving the registration of individual ownership. For the purposes of this study land tenure would be defined as "the terms and conditions on which land is held, used and transacted" (Adams, Sibanda & Turner 1999). For those relying on local rural resources for their livelihood, it is essential for them to have a secure place to live, free from threat of eviction, with access to productive land and natural resources. The rural communities are broadly located in the customary land tenure categories, which are insecure forms of land access and ownership.

Ordinarily, the other rural areas in the now Maruleng Municipality, which includes Calais village, had tribal authorities who administered land through their traditional councils. In Calais village, the *Ntona*² is the one who confers land on individual households for residential and farming purposes through tribal, customary laws. In terms of the Traditional Leadership and Governance

² The Traditional Leader of the village, second in command to the chief.

Framework Act 41 of 2003, these tribal authorities are to be transformed and are to become known as traditional councils, including elected membership and a minimum representation of women (Hall, 2004: 49). At present, members of the Calais rural community do not have full ownership of residential land.

The current work on land reform that government has embarked on to redistribute, restitute and reform tenure is aimed at providing secure land to the poor and landless, including farm workers and labour tenants. A number of acts relating to this study have been passed including, amongst others, the following:

- Provision of Land and Assistance Act 126 of 1993, which empowers the Minister of Land Affairs to make available grants for land purchase and related purposes to individuals, households or municipalities.
- Restitution of Land Rights Act 22 of 1994, which establishes the right of people dispossessed of property after 1913 to restitution of that land or alternative redress.
- Communal Property Association Act 28 of 1996, which enables groups of people to hold and manage their land jointly through a legal entity registered with the Department of Land Affairs.
- Communal Land Rights Act 11 of 2004, which provides for the transfer in ownership of land in the former homelands to communities residing there, or alternative redress, on the instigation of the Minister (Hall, 2004: 7).

These acts and other policies are utilized to smooth the process of accessing and acquiring land. While the focal point of this study is not on land reform and tenure, it was felt however, that an overview of land tenure was necessary to provide a background to understanding the context within which this study took place.

1.3 Statement of the problem

In a changing South Africa, rural people whose livelihoods have largely depended on subsistence farming constitute large sections of the population. Limpopo province is one such example with approximately 90% of the

population living in rural areas, most of them having depended on subsistence farming. The Calais community consists largely of non-literate, elderly people who have experienced major shifts in their agricultural patterns, livelihoods and lifestyle due to forced removals. Jarvis et al (2003) maintains that education begins with the need for literacy, employment or survival skills, citizenship and the capacity for effective participation in society. Among the older generation of Calais village, there hasn't been adequate educational or literacy efforts implemented yet there appears to be evidence of integrated and holistic learning that has occurred which is not necessarily discipline-based, but perhaps experiential in nature.

The study therefore, identifies the main problem as lack of acknowledgement and use of indigenous knowledge in informal contexts of changing livelihood patterns and economy. For the purposes of this study, indigenous knowledge (IK) is defined as "a large body of traditional or local knowledge and skills that has been developed outside the formal educational system. This knowledge is embedded in culture and is unique to a given location or society. (UNESCO, Management of Social Transformation Programme: 2003). This concept shall be discussed in detail in Chapter two.

In view of the harsh experiences the Calais community members have undergone the study was conducted to explore what learning has occurred which shaped and helped to create their lives as they went through the major shifts (transitions) in their livelihood patterns.

1.4 Motivation of the study

My objective in this study was to understand, through the phenomenological methods, the experiences of people from Calais village who have undergone such life-changing events since their forced removals. Coupled with this, the study endeavoured to explore what possibilities of learning these life-changing experiences presented to them in their daily efforts of making a living. The motivation for choosing to explore this village's experiences is because it is a community that is known to me.

As somebody who lived in a rural village of the Naphuno district in the former Lebowa homeland, and in close proximity with Calais village, I grew up perplexed by the situation of the Calais community. The village was relatively small in comparison to others and it remained isolated and excluded from other villages in terms of transport, health care, education facilities, and there were no good roads leading to the village. For instance, in order to travel to town, people from this village had to walk to the nearest village, which is about 6km away (in the former Gazankulu homeland) in order to catch a bus to Tzaneen, which is about 40km away. As a community of black people settled on 'white' South African land, they were directly under the governance of a commissioner, whose office was in town. This meant that anything that was related to the village as a whole had to be conducted in the commissioner's office. Other neighbouring villages, including my own, had their local government offices.

After the democratic elections, things have not changed much at Calais village. They are still isolated and excluded. Most of the neighbouring villages were provided with basic infrastructure such as roads, clinics and electricity as early as the 1980s. Yet, despite all the issues cited above, the community seems to exhibit some resilience as they underwent all the changes in their lives.

It is in the light of this that I developed an interest in exploring the knowledge system of the community in their transition from subsistence farming, to landlessness, and to communal farm ownership. The interest was further spurred on by the apparent lack of formal education among the elderly of the village. Jarvis et al (2002: 43) argue that knowledge is contingent upon circumstances, and that learning is a process, which directly reflects these circumstances. Consequently, the phenomenological paradigm was seen as a best tool to explore the community members' perceptions, perspectives, and understandings of their particular experience of land deprivation and in their daily endeavour of sustaining their livelihoods. Thus I was prompted to explore what indigenous, experiential or transformational learning has

occurred among the community members in their informal "spaces surrounding activities and events...occurring in a much wider variety of settings than formal education or training" (Eraut, 2004: 247).

1.5 Goal of the study

The main goal of the study is to explore the indigenous knowledge system of a rural community in order to elicit what learning has taken place in their daily endeavour to sustain life, and how such knowledge has been utilised in dealing with change.

It is believed that the study would make a contribution to the growing body of research that validates indigenous knowledge (IKS) as knowledge for making a living and as knowledge that contributes to the global information content. IKS could provide problem-solving strategies for local communities, especially for the poor, yet they are at risk of becoming extinct. IKS is also relevant for the development process and yet it is an under—utilized resource in the development process.

A rural community's experience of land deprivation is used to explore what indigenous knowledge has been gained and how such knowledge has been used to cope with change.

Research objectives

Four research objectives are identified for this study and they are:

- I. To gain insight in the experiences of the Calais community in their struggle to adapt to changes brought about by forced removals from their subsistence land to collective farm ownership.
- II. To ascertain to what extent those experiences have provided opportunities for learning and how such knowledge has been utilized.
- III. To explore the community's indigenous knowledge in subsistence farming and to inquire what knowledge they possessed in commercial farming and in communal land ownership.
- IV. To explore power relationships among community members in terms of how decisions are made and whose voices count in such processes.

Research questions

The two main research questions guiding this study will be:

- I. What experiences has the community undergone in their transition from subsistence farming to communal farm ownership?
- II. To what extent has this offered them an opportunity for learning?

The following specific questions will help to provide answers for the main research question:

- I. What major events have changed the community's way of life?
- II. What coping and adaptive strategies have they developed in dealing with change?
- III. What are the perceptions of the community about forced removals and how has this affected them?
- IV. What indigenous farming skills did the community have prior to the communal farm ownership?
- V. How are major decisions taken in the community?
- VI. What have the community members learnt from the different events within the transitions?

1.6 Organization of the report

The study is presented in six Chapters, which are arranged in the following manner:

Chapter One introduces the reader to the subject matter of the study by providing a brief historical background of the study area. This Chapter therefore, traces the origins of the Calais village and the farms surrounding it, its socio-economic situation, and the type of land tenure that exists. In this Chapter the problem of the study is stated and also the justification for undertaking this study. The Chapter is then concluded with a summary of the key issues discussed.

Chapter Two comprises the literature review and the theoretical framework used in this study. The body of literature that was reviewed is discussed and

the definition of concepts further orientates the reader to the scope of the study and the subject matter.

Chapter Three gives a description of the research design and methodological paradigm (sampling procedures, methods of data collection and data analysis) utilized in this study. The Chapter also deals with reliability and validity of the research methods used and also discusses the ethical issues considered during data gathering. Lastly, the Chapter ends with the challenges encountered during the process of collecting data.

Chapter Four presents the findings of the research. In this Chapter some themes were identified which led to the categorization of data so that the participants' voices are 'heard' (by using direct quotes from participants to illustrate points).

Chapter Five analyzes and discusses the findings discussed in Chapter Four. It is in this Chapter that the researcher 'intrudes' more into the study by making interpretations and linkages, relating the findings to the research objectives and questions in Chapter one.

Chapter Six is the final Chapter, which presents issues and implications. The term 'conclusion' is deliberately avoided in the phenomenological study as it suggests a finality and surety, which is not defensible as the study is an exploratory one. However the final Chapter shall make suggestions emanating from the findings.

1.7 Summary

This Chapter presented an overview of the entire dissertation. The background locates the study in Calais, a rural village in Limpopo Province and raises issues of access to land and ownership in the backdrop of forced removals, the role of indigenous knowledge in adult learning and how non-literate adults learn. The legal framework for the acquisition of land in the village was provided, followed by the statement of the problem. The

motivation for undertaking the study was presented followed by the main goal of the study and the objectives. The next Chapter will examine the literature on subsistence farming, indigenous knowledge systems, communal farm ownership, coping and adaptive strategies and theory of transformation as the framework within which this study is undertaken.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

Having stated the research problem and the key research questions in the preceding Chapter, it is now necessary to review literature that is relevant to the research topic. It is worth noting that this Chapter entails both the theoretical framework and literature review. Some literature has already been incorporated into the discussion of background in formation in the first Chapter.

The purpose therefore, is to provide an orientation of the subject of the study. In an effort to address the question asked in this study (to explore the knowledge system of a rural community in its transition from subsistence farming, to landlessness, and to communal farm ownership), a combination of concepts, theories and models are employed. The study incorporates at least three areas of research namely; an exploration of how adults learn or construct knowledge in informal settings, the role of indigenous knowledge (IK) in rural contexts and the notion of communal land ownership, in particular, farm ownership. It was deemed necessary to link the three areas of research as the study seeks to explore (i) what is being learnt, (ii) how it is being learnt and (iii) how the knowledge is utilised in the community's day-to-day effort of making a living. A broader discussion of each concept therefore, would demonstrate a relationship with the participants' decision-making in food security, agriculture, education and natural resource management, mainly land management and other vital activities.

This study therefore, examines literature on the concepts entailed in the three areas of research mentioned above. The following is a breakdown of how the Chapter is arranged: section 2.2 defines the key concepts used in the study; section 2.3 discusses how adults learn, including some of the learning

theories applied in the study and lastly, section 2.4 presents the theoretical framework for the study ending with a conclusion.

2.2 Key Concepts and Definitions

As in any given study, the definition of concepts is often subject to various interpretations. In Chapter one section 1.4, it was mentioned that the study is an exploratory one, seeking to investigate what indigenous, experiential or transformational learning has occurred among the Calais community members. The following concepts and their usage are to be understood in the context of this study as they characterize the rural village under study and they are:

- I. Subsistence farming
- II. Livelihoods
- III. Community.
- IV. Communal land ownership

Subsistence Farming

The concept of subsistence farming or indeed, subsistence economy as used in this study denotes a traditional form of livelihood adopted by many indigenous societies. The subsistence economy has its origins in the historical hunter-gathering periods to the first history of permanent human settlement. According to Cutling and Saaiman (1996) subsistence farming is characterized by two factors: the production of food for family needs and not for the markets, and that generally the production of food occur without monetary costs and don't generate income.

In the light of this, the subsistence economy is driven by the principles of 'self-provisioning' and 'self-reliance'. Mies and Bennholdt-Thomsen accentuate this point in their definition of subsistence farming as production for life, which includes:

All work that is expended in the creation, re-creation and maintenance of immediate life and which has no other purpose. Subsistence production therefore, stands in contrast to commodity and surplus value production. For subsistence production the aim

is life, for commodity production it is money, which produces ever more money, or the accumulation of capital. (1999: 20)

Some of the inputs in subsistence livelihood are based on communal ownership and shared values such as indigenous skills, knowledge and land, hence the interest in the Calais community's collective ownership of a farm. This has direct impact on the economic perspective employed. Mies and Bennholdt-Thomsen therefore, describe this economic perspective as follows:

The subsistence perspective promotes another idea of economy – not as a system aimed at the constant expansion of industry, of production and consumption of commodities and of capital accumulation – but an economy that puts life and everything necessary to produce and maintain life on this planet at the centre of economic and social activity. (1999: 5)

While much has changed in the South African economy, many people in the former homeland areas, particularly rural villages, still depend on subsistence farming for most of their livelihoods. This point was alluded to in Chapter 1, section 1.2 in relation to Calais village. However, the case of Calais village, as in many other villages of Limpopo province, is such that the advent of industrial economy and resettlement of people has introduced into their subsistence economy elements of cost in production and income generating activities. This study focuses on the events that have impacted on the village community's subsistence lifestyle. Thus, in the case of Calais village subsistence living was closely knit with learning, if learning is also understood as imitation and identification with others in making a living (Eraut, 2004).

The subsistence life style is therefore, closely related to indigenous knowledge because rural communities have an information base of skills and knowledge (usually traditional) to make decisions about their livelihoods. This knowledge is passed on to next generations orally, aesthetically through community events, through lived experience and through collaborative efforts of the community.

Livelihoods

The Department for International Development (DIFD) defines livelihoods as "the capabilities, assets (including both material and social resources) and activities required for a means of living" (2001:1). In other words, the concept of livelihoods implies a dynamic process by which mainly rural households and communities rearrange their resources and activities to make a living. The term 'livelihoods' is therefore, not limited to one but many strategies and activities employed by individuals, households and community groups to make a living. These strategies and activities occur within the framework of poverty. Poverty consists of a number of interlinked components, including lack of material resources, physical weakness, isolation, vulnerability and powerlessness. Singh and Titi (1994) define poverty as "a condition of lack of access to options and entitlements which are social, political, economic, cultural and environmental". This definition of poverty recognizes the various processes contributing to poverty, rather than simply identifying causal links. Therefore, most of the livelihood activities of the community of Calais are characterized by insecurity and exposure to risk, shock and stress (Head and Cernea, 2000, Asian Development Bank, 1999). The loss of the means of livelihoods, brought about the loss of social capital. Social capital is defined as "the norms and networks that enable people to act collectively" (Woolcock & Narayan, 2000 cited in Kilpatrick & Falk, 2003).

Much research has focussed on the need for 'livelihoods' to be sustainable (Singh & Strickland, 1994; Palo & Mercy, 1996; Singh & Titi, 1994; de Satgé, 2002, Rantso, 2001). A livelihood is sustainable when it can cope and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resources base. (DFID, 2001: 1). This study acknowledges the amount of literature on this concept, which even led to the development of the Sustainable Livelihood Framework (de Satgé, 2002); however, it is not the primary objective of the study to expound on the concept. This study does however; explore the daily tasks performed by the community members in dealing with issues of landlessness, marginalization and food production — making a living. Such livelihood activities would include the numerous cultural

and aesthetic activities in which individuals and communities engage in order to restore, reproduce and re-invent their identities.

Therefore, "the notion of livelihood includes a sense of well-being rather than mere survival" (von Kotze, 2002: 236). In the light of this, a sense of well being in the Calais community is identified not only in terms of income, but also in terms of health care, food security, assets, education, shelter or social capital (Head, John & Cernea, 2000). Therefore, the concept of livelihoods is very central to this study in that it recognizes that the local economy can be broken up into a number of sectors or activities—livestock keeping, cultivation, employment and collecting (including hunting, gathering, fishing).

In the light of the transitions (from subsistence, to landlessness and to acquiring communal farm) within the Calais community, the study explores what livelihood activities the community members currently employ and whether these efforts have been resilient in the face of change.

Community

As the study takes place within a specified locality, it became incumbent to define the concept as it is utilised in this study. Two main approaches have been used to define community, namely, the geographical and functional (Rubin and Rubin, 1992). The former denotes a group of people sharing a common space or place and the latter refers to individuals or groups of people with a common vision and objective.

Another approach is one advocated by Lombard (1992) who believes the alternative definition is that of geographical functional communities. This concept attempts to strike a balance between the geographic and functional approaches. It refers to a functional community within a particular geographical area.

David Clark, however, argues, "the concept of community is one that is notoriously disputed and nebulous" (cited in Allen, Bastiani, Martin & Richards, 1987: 50). The dispute arises from the many definitions that the

term implies. The author illustrates five important approaches to understanding what 'community' is:

- I. Community as a human collective a group of people sharing a corporate life.
- II. Community as a territory people sharing a particular kind of place (the rural village).
- III. Community as shared activities shared events, ceremonials or customs
- IV. Community as close-knit relationships shared social relationships
- V. Community as sentiment emotions which individuals feel towards their environment and to their fellows.

The various definitions above serve to highlight the complex nature of the concept while at the same time, facilitating a broader understanding of the concept. The main point of divergence seems to be the lack of agreement about what the form and content of community should be. The fundamental point in all the definitions is the aspect of relationship between the individual and the group and vice versa. In other words, any definition of community must, in some way, facilitate the freedom of the individual and the cooperation and fraternity of the group.

The above definitions are deemed to be relevant for the purposes of this study. The relevance is not because of the lengthy definition but for their fluidity and changeability to different circumstances. These concepts also highlight the fact that there are many elements that can be used to define a community in such a manner that it would not be proper to perceive a community as a homogenous group. For instance, the Calais community consists of two groups of people who originated from different geographical areas, but are of the same ethnicity and shared similar experiences of forced removals, landlessness, subsistence living, etc.

Therefore, in using the concept of community this study takes into account both the geographical and functional approaches. This is based on the

understanding that the interests and values of members of any single geographical area such as (Calais village) may vary. For instance, in the community's collective ownership of a farm, there appears to be a lack of clarity of ownership and line of responsibility by all members whereas they perceive themselves as one community. This study acknowledges the difficulty of identifying a globally accepted definition of the concept 'community' but utilizes the broad definitions cited by Clark (1987) above as appropriate for this study. The concept of community helps to identify a group of people as one entity, with legal rights to access and acquire agricultural land for their livelihoods.

Communal Land Ownership

The social, cultural and economic context of Calais village was discussed in Chapter One, which demonstrated how a farming community underwent transitions from subsistence farming, to landlessness and later, to communal farm ownership. By communal ownership, it is meant that people own land or property together as a community or as a group. In South Africa, the Communal Property Association Act 28 of 1996, enables groups of people to hold and manage their land jointly through a legal entity registered with the Department of Land Affairs. This can be organised in trusts, Section 21 companies, voluntary organisations, and communal property associations (Busingye, 2002). It was also stated that agriculture is the main economic driving force in Limpopo province, hence the high value placed on land for most rural, subsistence farmers.

The South African democratic government has since 1994, adopted a land reform programme that is made up of three pillars: i.e. Land Restitution, Land Redistribution, and Land Tenure Reform (Hall, 2004). The land reform programme was adopted in an effort to redress social inequalities created in the past in order to provide secure land for the poor and landless. Thus the Land Redistribution for Agricultural Development Programme (LRAD), was established in 2001 with the intention of assisting the previously disadvantaged individuals to have access to commercial agricultural land, particularly in KwaZulu-Natal and Limpopo provinces. An informative study

conducted by the International Centre for Development oriented Research in Agriculture (2005) around the Rust de Winter Farms in Limpopo, incorporates some of the issues involved in this study. The study was undertaken to identify opportunities and possibilities for commercializing crop production on the Rust de Winter farms in the face of limited irrigation potential and a decline in production. The study recommends that the land claim issue be resolved so that possibilities for allocating more water can be pursued. Problems of water scarcity as cited in the study above, are also evident on the communal farm of Calais village, as shall be discussed in the Chapter on findings.

The concept of communal ownership started with poor people pooling their grants to purchase land because these grants were too small to purchase good land. This was the case in Calais village. The study therefore, explores the effects of communal ownership and management of a commercial farm by a community that has relied on indigenous farming knowledge for its livelihood. As mentioned in Chapter One, the communal farm has declined in production since managed by the Calais community. Some of the findings of the study on the Rust de Winter Farms shall be considered, particularly those that are relevant for my study since both study are characterized by low crop production. However it must be emphasized that the primary focus of this study is to elicit learning opportunities presented by the different life changing events in their lives, including the purchase and management of a communal farm.

In discussing and defining these key concepts, I endeavoured to establish the relationship between the concepts in the context of learning among the Calais community members.

2.2 The Learning Theories Employed in the Study

The study aims to answer two main research questions as outlined in Chapter One. Firstly, it explores what experiences the community has undergone in their transition from subsistence farming to landlessness, and to communal

farm ownership. Secondly, it explores the indigenous learning that has occurred. Literature related to the learning theories employed in the study is reviewed under the following themes: how adults learn, transformational learning theory, indigenous knowledge and its role in rural contexts, and learning through coping and adaptive strategies.

How adults learn

Any discussion on adult education must of necessity begin by defining what an adult is. As with any other concept, the definition of who an adult is varies. For this study, an adult shall be understood to be one who is "at an age of responsibility, self-direction and maturity" (Shirur, 1997:16). In his argument, Griff Foley (1995, 1999) provides what I consider to be the basis and focus of this study, namely, that all human activity has a learning dimension. The study recognizes that

people learn continually, informally and formally, in many different settings: in workplaces, in families, through leisure activities, through community activities, and in political action. (Foley, 1999: xiiii –xiv)

Furthermore, the study argues for the centrality and broad understanding of adult education as most of it is not acquired through participation in formal courses, but is gained through experience or through participation in an aspect of social life such as work, community action or family activities (Brookfield, 1986; Boud, Cohen & Walker, 1993). In the sphere of adult education and lifelong learning researchers have shown an interest in the concept of informal learning. For instance, Bentley (1998) has examined and termed this type of learning as 'learning beyond the classroom'; Coffield (2000) underscored 'the necessity of informal learning'; Marsick and Watkins (1990), Dale and Bell (1999) explored 'informal and incidental learning in the workplace' and McGiveney (1999) developed an argument for 'informal learning in the community'. Informal learning understood in this way means a combination of learning from other people and learning from personal experience in informal contexts and settings.

The focus on informal learning as a broad concept is motivated by the understanding of the community under study as consisting mainly of non-literate adults. Therefore, for them, the use and production of new knowledge is part and parcel of daily experiences tied in with working for survival within the framework of power (von Kotze, 2002). This is a notion that is shared by Jarvis, Holford and Griffin in arguing that knowledge "is inevitably associated with power, so that knowledge, power and learning form a kind of seamless web of experience" (2003: 43). Viewed in this way, learning becomes a reflective construction of meaning whereby knowledge is created through the transformation of experience (Fenwick, 2000; Schon, 1983 and Kolb, 1984).

Policymakers, academics and practitioners have been too eager to substitute learning with education. However, this study's focus on informal, experiential, lifelong learning is not meant to diminish or replace formal education. It is merely meant to validate the significance of informal and experiential learning as a way of constructing knowledge among most rural people.

Since the study aims to explore the experiences of the community members and learning opportunities elicited by such experiences, I have found Eraut's (2000) propositions to be informative. Much of Eraut's discussion of 'nonformal learning' is concerned with identifying different types of situations in which tacit or implicit knowledge may be gained or used (simultaneously or otherwise). Six main situations are named and they offer some clarification on informal learning:

- I. knowledge acquired by implicit learning of which the knower is unaware.
- II. knowledge constructed from the aggregation of episodes in long-term memory.
- III. knowledge inferred by observers to be capable of representation as implicit theories of action, personal constructs, schemas, etc.
- IV. knowledge that enables rapid, intuitive understanding or response.
- V. knowledge entailed in transferring knowledge from one situation to another.

VI. knowledge embedded in taken-for-granted activities, perceptions and norms (2000: 28).

These various types of situations in which knowledge is constructed or used are similar to those of Boud, Cohen and Walker (1993) in their submission that learning is stimulated by experience; that we attach meaning to events; that learning encompasses thinking, values and feeling, action and doing; that learning is socially and culturally constructed; that it is influenced by emotions and feelings, and that it can be collective or communal, particularly where it becomes crucial for survival. It is therefore, significant that for the purposes of this study, adult learning be viewed from these different lenses in order to enquire what and how the Calais community learned from their life events.

Transformational learning

The study of transformational learning emerged with the work of Jack Mezirow (1981, 1994, 1997). Transformational learning is defined as learning that induces more far-reaching change in the learner than other kinds of learning, especially learning experiences which shape the learner and produce a significant impact, or paradigm shift, which affects the learner's subsequent experiences (Clark, 1993). Mezirow uses the term 'transformational learning' to refer to the concept of emancipation through learning (1989: 171). However, a definition that appeals to me, and perhaps one that is relevant to this study is by Cranton:

Transformational adult learning is the process of freeing ourselves from forces that limit our options and our control over our lives, forces that have been taken for granted or seen as beyond our control. (1994: 17)

A considerable body of literature has dealt with various aspects of transformational learning, and they have collectively identified different factors, which produce transformational learning in adult students or learners. Of particular interest and significance, is a comprehensive review of the transformational learning theory by Taylor (1997) and Baumgartner (2001). They also identify unresolved issues in transformational learning such as recognition of other ways of knowing and relationships.

In one of his earliest writing on transformational learning Mezirow (1981) developed the concepts of "meaning perspectives" and "meaning schemes". Meaning perspectives refer to one's overall world-view, and meaning schemes denote smaller components which contain specific knowledge, values, and beliefs about one's experiences. A number of meaning schemes work together to generate one's meaning perspective. Meaning perspectives are acquired passively during childhood and youth, and are the target of the transformation that occurs through experience during adulthood. They operate as perceptual filters that determine how an individual will organize and interpret the meaning of his/her life's experiences. Meaning perspectives naturally change and evolve in response to life experiences, especially those which induce powerful emotional responses in the individual.

Often these life-changing events are personal crises such as divorce, death of a loved one, natural or human-made disasters and accidents, health crisis, financial upheaval, or unexpected job changes. It is these meaning perspectives, which Mezirow saw as the raw material of the changes that occur in transformational learning. Mezirow (1997) further states that we do not make transformational changes in the way we learn as long as the new material fits comfortably in our existing frames of reference.

There are three common themes, which characterize Mezirow's theory of transformational learning. These are experience, critical reflection, and rational discourse or dialogue. The learners' life experiences provided a starting point for transformational learning (Mezirow, 1991). Mezirow considered critical reflection to be the distinguishing characteristic of adult learning, and saw it as the vehicle by which one questions the validity of their world-view. He maintains that it is through critical self-reflection that learners reach the point where they question their 'taken-for-granted worldview' (Mezirow, 1996, 2000). Newman (1993: 171) also posits that through critical reflection, learners come to realize that what they had accepted as given, or real or normal is a distortion of their reality and the world they live in. Once the learners realise that their worldview was based on views that could be

challenged, they begin to construct new sets of values and assumptions upon which to build new and different lives.

Mezirow (1995) also identified rational discourse or dialogue as a catalyst for transformation, where one's new meanings are discussed and evaluated. In rational discourse, "we set aside bias, prejudice, and interpersonal concerns... to arrive at a consensus" (1995: 53). Rational discourse, according to Mezirow, is

that specialized use of dialogue devoted to searching for a common understanding and assessment ... reflective discourse involves a critical assessment of assumptions. It leads towards a clearer understanding by tapping collective experience to arrive at a tentative best judgement. (2000: 10-11)

He underscored the centrality of critical discourse in transformational learning among adults in further arguing:

individuals at the final stage of reflective judgement can offer a perspective about their own perspective, an essential condition for transformative learning. (Mezirow, 2003: 61)

Mezirow (1998) emphasized that transformational learning is rooted in the way human beings communicate, and does not link it exclusively with significant life events of the learner. Through this combination of reflection and discourse, the learner is able to make shifts in his/her worldview, which produces a more inclusive world-view. For Mezirow, one of the benefits of transformational learning was the development of greater autonomy as a person, a defining condition of adulthood (Mezirow, 1995: 54).

Boyd (as cited in Imel, 1998) differed from Mezirow's views in two major ways. First, he believed the emotional/kinesthetic component, rather than the rational component of the transformational experience was the major catalyst for change. Second, he believed the desired outcome of transformation was not autonomy, but a greater interdependent and compassionate relationship with other people. Merriam (2004: 60) on the other hand adds an important dimension to the transformational learning theory. She maintains that a learner must already be at a mature level of cognitive functioning to engage in

the transformational learning process. It would appear therefore, that for critical reflection and dialectical thinking to occur, emotional and intellectual maturity is necessary. This point is underscored by Sinnott (1998) and Brookfield (2000) in emphasizing the determining factors of critical thinking as education and age respectively.

As a constructivist model, transformational learning theory posits that 'knowledge is "not out there" to be discovered but is created from interpretations and reinterpretations in the light of new experience' (Baumgartner, 2001: 16). Viewed in this way, transformational learning could be related to indigenous knowledge as knowledge that is acquired by local people through creativity and innovativeness as well as through contact with other local people (Warren, 1991), It is these revised meanings that Mezirow calls 'perspective transformation' (Mezirow, 1996). In this kind of learning, learners come to think critically about their beliefs and perceptions about themselves, re-examine their values and assumptions through continuous critical appraisal. Learning for perspective transformation is therefore, concerned with enabling learners to know who they are, how they came to be who they are and the factors that continue to hinder and shape the way they see themselves (Mezirow, 1981, 1991, 1994, 1996).

Mezirow's theory of transformational learning is not without criticisms. One such criticism is from Collard and Law (1989), who argued that the theory undervalues the importance of collective social action and that it doesn't go beyond the individual learner. They were also critical of his failure to concede that structural inequalities hinder realization of the circumstances from ideal learning. However, Mezirow (1989, 1993) responded to these criticisms by admitting that social action is crucial, but that it is not the only goal of adult education.

This detailed discussion of transformational learning will be used to reflect on the experiences of a rural community's transition from subsistence farming, to forced removals and finally to collective farm ownership. This study hopes to explore what transformational learning has occurred among the rural people of Calais community.

Indigenous knowledge (IK) as knowledge for living

The concept of indigenous knowledge systems has enjoyed much debate and discussion as an alternative way of promoting development in poor rural communities in many parts of the world. As defined briefly in Chapter One, indigenous skills and practices play a vital role in how rural and illiterate communities learn. Indigenous knowledge (IK) has to do with people's way of seeing, their way of being, their way of negotiating life processes in different environments and their survival techniques (Odora Hoppers, 2002).

This study's main aim is to add voice to the various studies, which validate IK as knowledge for living and as knowledge that contributes to the global information content. The literature on IK does not provide a single definition of the concept. The African department of the World Bank launched the Indigenous Knowledge for Development Programme in 1998 and they offer the following broad definition:

Indigenous knowledge, also referred to as traditional or local knowledge, refers to the large body of knowledge and skills that has been developed outside the formal educational system...that is unique to a given culture or society. It is the systematic body of knowledge acquired by local people through the accumulation of experiences, informal experiments, and intimate understanding of the environment in a given culture (Rajasekaran, 1993).

Several interrelated aspects appear to be more or less specific to the nature of IK (UNESCO, 2002; World Bank, 1998 & 2000; Rajasekaran, 1993; Gorjestani, 2000) and they broadly include:

- adaptive skills of local people usually derived from many years of experience, which have often been communicated through "oral traditions" and learned through family members over generations.
- time-tested agricultural and natural resource management practices, which pave the way for sustainable agriculture.
- strategies and techniques developed by local people to cope with the changes in the socio-cultural and environmental conditions.

- practices that are accumulated by farmers due to constant experimentation and innovation (e.g. indigenous soil knowledge).
- trial-and-error problem solving approaches by groups of people with an objective to meet the challenges they face in their local environments.
- decision-making skills of local people that draw upon the resources they have at hand.

The above statements illustrate that indigenous knowledge systems are invaluable, diversified, and comprehensive and have proven so in areas that are largely poor and rural. While most of the examples cited above have been identified in during data collection, it must be mentioned that some of the above-mentioned elements of IK mentioned could not be found among the participants of the study.

2.4 Traditional Decision-Making Processes

Most rural communities in Limpopo province rely on indigenous skills and practices for decision-making in all spheres of their lives. For example, in the Calais community the *Ntona* (traditional headman) and his council are the custodians of land occupancy and access. Other indications of IK include what Gorjestani (2002) cites as an example of traditional community leadership in Mozambique, who managed about 500 000 informal land transactions and helped to settle about 5 million refugees and displaced people after a 15-year civil war. The people of Calais village also utilised their indigenous, customary laws to resolve potential conflicts and to manage the communal farm.

However, Briggs (2005) warns of the limits of indigenous decision-making processes in agriculture, particularly in commercial farming. Like Briggs argued, Watts (2003) also maintains that the communal system of land ownership lacks mechanisms for regulating and managing communal land. He further argues that this is exacerbated by the "inability of traditional institutions to sustain themselves in the face of mounting socio-economic pressures owing to population and consumption pressures" (2003: 342). This points to the fact that real power resided not in the traditional institutions, but in the white government that ruled them. Therefore, the limit of traditional

authorities in most cases is their inability to challenge those in power in seeking emancipation. Tom Inglis (1997) in his articulation of the issue of power, argues that true emancipation can only occur when oppressed people have been helped to unmask the various strategies and tactics through which power is exercised.

Another issue that is closely related to power in traditional decision-making institutions is that of gender inequality. One of the objectives of LRAD is to expand opportunities for women and young people who stay in rural areas. However, the gender inequality which puts women on a lower status in rural communities that are governed by tribal authorities, privileges men, yet most rural communities consist largely of poor, unemployed women (Wegeriff, 2004; Tinsely, 1997; Kilpatrick and Falk, 2003).

The concept of indigenous knowledge has enjoyed much robust debate and discussion on various levels and in recent times it has been used for development, however, it tends to be overlooked because of its oral tradition and the perception that it is primitive and unintellectual (Mitchell, 1995; Ellen and Harris, 2000; Herbert, 2000). Much indigenous knowledge research has tended to focus on the knowledge of the environment and natural resources, and how they can be used and managed in ways that provide material support for local communities. However, this study does not only explore indigenous skills and practices, but also aims to incorporate the economic and socio-cultural contexts of the Calais community and how IK has been used in such situations. This would validate IK as a body of knowledge for making a living, perhaps even as a conceptual or methodological framework, as the South African Parliamentary Portfolio Committee (2002) sought to achieve. This idea is further espoused by Reij, Scoones and Toulmin (1996: 26-27) in their suggestion that "much effort is expended on designing and disseminating 'solutions', but too little time is spent on understanding the problem." One characteristic of IK is that it is context-based and that such knowledge may not always be transposed to other contexts (e.g. soil knowledge), however such knowledge, when recorded, could benefit other areas with similar contexts.

Indeed, an increased recognition of the social, cultural and economic perspectives of rural people and context-based knowledge (skills and practices) would lead to a better understanding of their survival strategies (Kalland, 2000). Such understanding could assist policy makers and development workers in implementing solutions, which incorporate the IK knowledge base.

2.5 Learning through coping and adaptive strategies

Modern and rural societies in developing countries face climatic risks, economic fluctuations, labour or livestock loss and these prompt them to develop long and short-term survival skills and practices. In rural areas, when faced with change or risk, households employ a variety of activities to respond to change. Very often, informal arrangements develop between members of a group or village to support each other in case of hardships (Dercon, 2000). In the case of Calais village, the major shock in their livelihood system was the forced removals. Forced removals, as in the case of Calais village, carry risks of impoverishing the uprooted people, many of who are very poor even before they are displaced. Therefore, in exploring coping and adaptive strategies, it is borne in mind that fighting or coping with poverty has two sides: reducing the poverty that already exists and preventing the beginning of new causes of impoverishment. It is in the light of this that coping and adaptive strategies are explored as a natural and common way of responding to change.

The concept of coping and adaptive strategies has a direct bearing on the cultural, political, economic and physical environments of which the poor are often part. This concept is often aligned with situations of uncertainty or risk, particularly in periods of rapid change. Coping strategies are short-term responses to periodic stress such as responses to landlessness or drought. Such strategies are defined as "the bundle of poor people's response to declining food availability and entitlements in abnormal seasons or years" (Davies, 1993). Coping strategies are mechanisms employed by vulnerable individuals, households and communities, to minimise risk in their lives in

order to incorporate change into their livelihood systems. According to Titi and Singh (1994: 11), adaptive strategies are intricately intertwined with coping strategies. Adaptive strategies describe a process of change and they are the ways in which local individuals, households and communities have changed their productive activities, modified their community rules and institutions, in response to vulnerabilities, in order to meet their livelihoods on a long-term basis.

Titi and Singh (1994) further posit that adaptive strategies are a mix of traditional livelihood systems, modifications by local and external innovation, and coping strategies that have become permanent.

One of the objectives of this study is to explore coping and adaptive strategies employed by the Calais community in assisting them to survive the various transitions in their livelihoods (subsistence, landlessness to their current situation of collective farm ownership).

Therefore, learning is intricately intertwined with these processes of coping or adapting to change. Belonging to a community such as Calais involves a learning process, "a form of collective meaning making — of interpreting, acting, and reflecting on action" (Merriam, 2004: 210). The study is therefore, concerned with eliciting those coping and adaptive strategies, which enabled the poor of Calais community to be self-empowered, to increase their own capacities, to initiate and manage change and alleviate poverty. For instance, in the face of landlessness and unemployment, some of the community members of Calais developed entrepreneurial skills in initiating self-help projects such as brick-making and spaza shops. Such coping and adaptive strategies shall be discussed in Chapter Four wherein the findings are reported.

2.6 Theoretical Framework

The above section discussed learning theories and the different ways in which adults learn. This study, identifies both the transformational learning theory

and indigenous knowledge (IK) as the theoretical framework. Having discussed both concepts above, it was deemed necessary to isolate certain aspects of IK and transformational learning as forming the theoretical framework of the study.

Mezirow's transformational learning theory consists of three elements, namely; experience, critical reflection, and rational discourse or dialogue. People's life experiences form a basis for learning. It is through critical self-reflection that learners reach the point where they question their 'taken-for-granted worldview' in order to change or adapt to contexts. In rational discourse or dialogue, people engage in "reflective discourse" (Mezirow,2000: 11)). In other words, people engage in dialogue among themselves and that helps to review their previously held perspectives as they discover new meanings.

Indigenous knowledge (IK) on the other hand, is intricately interwoven with all other theories of learning. It is about "people's way of seeing, their way of being, their way of negotiating life processes in different environments and their survival techniques" (Odora Hoppers, 2002). Indigenous knowledge forms the basis for local decision-making and facilitates communication among rural communities. The creation of IK is influenced by internal creativity and experimentation and it is oral in nature. IK is also based on experience, often tested over centuries of use, adapted to local culture and environment, dynamic and changing (UNESCO, 2002).

These various aspects of transformational learning and indigenous knowledge are interrelated as they all involve dialogue among people, they are based on the experience of people and the creativity and experimentation are facilitated by critical reflection. These shall be utilized to assess what transformational learning has taken place among the people of Calais village and how they have used such knowledge to cope and deal with change.

2.7 Summary

This Chapter defined the key concepts used in this study. The definition of these concepts have laid the foundation for the exploration of the knowledge system of the Calais community's transition from subsistence farming, to landlessness, and to communal land ownership. The literature reviewed on how adults learn, indigenous knowledge and communal land ownership have set some parameters within which learning is seen to have occurred and how such knowledge has been used by the community.

While the study acknowledges the three broad fields of study (how adults learn, indigenous knowledge and land reform) as distinct areas of research, it was argued that they are interlinked as far as they all incorporate a learning dimension for the Calais community. It was argued that learning in rural, illiterate communities occurs in informal settings, through traditional or indigenous skills and practices which facilitate coping and adaptive strategies for survival.

In order to elicit what learning has occurred and how such learning has influenced the inhabitants of Calais village, Mezirow's transformational learning theory and indigenous knowledge were employed as the theoretical framework. The aim is to enquire what the community has learned, how learning has occurred and lastly, how they have employed such knowledge in their daily lives. The next Chapter describes the methodology that was used in the process of carrying out this research.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

Having explored literature that serves as a theoretical basis for this study, this Chapter discusses the research design and methodological paradigm adopted to achieve the objectives set out in Chapter One. The methodological paradigm chosen for this study includes qualitative sampling, data collection methods and data analysis techniques. This Chapter also discusses validity, ethical consideration and constraints encountered within the field.

3.2 Research design

According to Mouton (2001: 55) and Babbie et al. (2001: 75), a research design is a plan or blueprint of how one intends to conduct the research. It is also defined as a structure before data collection or analysis commences, a logical structure of inquiry. It specifies how the research is going to be executed in such a way that it answers the research question. Social and behavioural sciences have been incorporated into medical research since the 1970's and are an integral part of research design, methodology and theorising. Over the last four centuries there has been considerable interest in the role of philosophical assumptions and paradigms in doing research. Two main traditions or frameworks of research in the social and behavioural sciences have emerged. These two frameworks have become research These are the 'positivist' and the 'anti-positivist' paradigms. designs. However, there are many definitions of paradigms as different authors explain them differently. For the purposes of this study, the two main paradigms to be considered are positivism and anti-positivism.

Gephart (1999) observes that positivism seeks to predict and explain causal relations among key variables. This paradigm also requires statistical

samples which often do not represent specific social groups and which do not allow generalization to or understanding of individual cases. Positivism was later criticised because "it strips contexts from meanings in the process of developing quantified measures of phenomena" (Guba and Lincoln, 1994: 106). In other words, quantitative measures often exclude participants' meaning and researchers' interpretations from data which are collected.

As a result of this criticism, anti-positivist design (also known as phenomenologist or interpretivist) was developed. This developed as a general paradigm shift was experienced in the sphere of research, particularly in the Western world in the late twentieth century. Some of the paradigm shifts that influenced research included a move from modernity to post-modernity, from nationalism to globalization, from cultural supremacy of one group over others to the concept of multi-culturalism and the acknowledgment of cultural diversity. The phenomenologist recognizes the fact that human beings are consciously engaged in defining and making sense of their own lives.

It is important to make a distinction between research design and research method. Mouton (2001:55) observes that there is a tendency among researchers to confuse designs with methods by simply equating designs with quantitative and qualitative methods. These two are "very different aspects of a research project" (2001: 56).

In the above discussions an attempt has been made to show that a research design is about the type of inquiry or study that is being planned and what kind of result it is aimed at. What follows is an attempt to define research method as a process that uses tools and procedures to realize the implementation of the design. These tools include the process of sampling, collecting and analysing the data in accordance with the design.

3.3 Methodological paradigm

As social research developed in the past four centuries, three broad methodological approaches have dominated the sphere of social research: the quantitative, qualitative and participatory action paradigms (Mouton 2001). This study is grounded largely on qualitative methodological paradigm whilst quantitative methods shall also be employed as the need arises. The qualitative methodological approach is associated with phenomenology or interpretivism while the quantitative methodological approach is linked to positivism (Babbie and Mouton, 2001). The term "methodological paradigm" is used to include both the actual methods and techniques that social research uses, as well as underlying principles and assumptions regarding their use (2001: 49).

The quantitative paradigm emphasizes

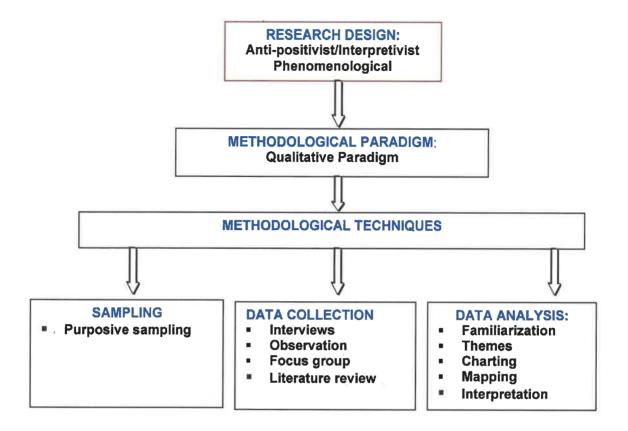
...the quantification of constructs. The quantitative researcher believe that the best, or only way of measuring the properties of phenomena (e.g. the attitudes of individuals towards certain topics) is through quantitative measurements, i.e. assigning numbers to the perceived qualities of things (Babbie & Mouton, 2001: 49).

The qualitative paradigm, however

action. Qualitative researchers attempt always to study human action from the insider's perspective (also referred to as the 'emic' perspective) (Babbie & Mouton, 2001:49).

The research design and methodological paradigm adopted in this study is demonstrated in Figure 3.1 below. What follows is a justification of the approach adopted by this study and a detailed discussion of qualitative methodological techniques (sampling, data collection and data analysis).

Figure 3.1: a summary of research design and methodological paradigm adopted in this study



To be able to explore the knowledge system of a rural community, I chose the qualitative paradigm which enabled me to examine the community members' experiences in their transition from subsistence farming, to landlessness, and to communal farm ownership. In order to realize this objective, the design needed to have the capacity to capture emotions, views, opinions and attitudes of the participants and understand the meaning that these participants give to their life experiences.

The study therefore, employed the anti-positivist or phenomenological design as a logical plan of inquiry. On the basis of this design, qualitative methodological paradigm was adopted. The phenomenological design attempts to understand people's perceptions, perspectives, and understandings of a particular situation. (Leedy & Ormrod, 2001: 153). Subsequently, qualitative procedures of sampling, data collection and data analysis were employed. It is worth mentioning that certain quantitative

techniques shall be employed as and when the need arises throughout the process of this study.

The choice of anti-positivist approach was informed by the recognition that social research has to consider the fact that human beings are not primarily biological organisms, but first and foremost conscious, self-directing, symbolic human beings (De Vaus, 2001). Qualitative research tends to be reported in a more fluid, rich, and redundant style which emphasise the importance of personal perspective and interpretation. This is chosen with the understanding that a quantitative approach would not have been suitable for this study as it assumes 'standardized, fixed and replicable procedures' (Fouché and Delport, 2002). The advantage of qualitative research in this regard was its ability to incorporate participants' accounts of their attitudes, motivations, feelings and behaviour.

Qualitative research is best for research questions such as, 'why', 'what' or 'how' which I used extensively to explore the villagers' experiences. These were questions which stressed how social experience is created and given meaning (Denzin & Lincoln 1998:8). It is in the light of this that I looked for explanations and processes rather than numbers, particularly in exploring what knowledge the villagers created and how such knowledge was utilized in coping with change. A day to day encounter with particular experiences or phenomena is understood as the main source from which the participants derived meaning and perspective.

Phenomenology has its origins in the thinking of the German philosopher Husserl and the French phenomenologist Merleau-Ponty, that which Crotty (1996) calls the classical phenomenologist approach. According to Van Manen (1990) it is an exploration of 'the essence of lived experience'. Phenomenology has been adopted by different disciplines as an appropriate way of exploring research questions, which led to a different way of knowledge being constructed. It is concerned with the study of experience from the perspective of the individual, 'bracketing' taken-for-granted assumptions and usual ways of perceiving. Phenomenological methods are

particularly effective at bringing to light the experiences and perceptions of individuals from their own perspectives, and therefore effective in challenging structural or normative assumptions.

It was felt that both the research design and methodological paradigm adopted for this study were capable of capturing stories of participants and the meaning they attached to their experiences of interacting with the land. In the following sections I examine the different methodological techniques used in the study.

3.4 Methodological techniques

Sampling

The population of this study consists mainly of rural, illiterate villagers of Calais community. As it was impractical to interview all members of the community, sampling of the population became necessary. This study used a purposive or judgemental sampling of seven (7) participants in an attempt to get a cross section of the village community in terms of age, gender, level of education/literacy and experience. In this type of sampling it was difficult to estimate how well the sample represents the population, however, the above characteristics of the sample were judged to be representative of the population. Schutt (1995) maintains that the fundamental factor of sampling is to select the subset of people or other entities to represent the population and that the findings as a result of engaging the subset are generalizable to the population. Bless and Higson-Smith (2002) on the other hand argue that purposive sampling often leads to non-representativity.

The other reason for choosing this non-probability type of sampling is that it is cheaper, faster and quite adequate (Bless and Higson-Smith, 2002) for a group of people who have had similar experiences such as the Calais villagers. While non-probability sampling poses a challenge, I attempted to alleviate this problem by using in-depth interviews which were lengthy and allowed participants to delve deeper in their experiences in order to identify common themes shared by the participants (such as forced removals and displacement). Interviews are discussed in detail below. Therefore, apart from

the 7 villagers selected, one commercial farmer was also selected as a key informant to provide the study with background knowledge of the history of the surrounding farms including Calais village.

Data Collection

Primary data for this qualitative study was collected using interviews, participant observation, and focus groups. Secondary data was collected through analysis and review of related documents in the field of the phenomenon under study, such as academic books, journals, current and completed theses and online databases. This also included course material used in class. References have been made throughout the study to acknowledge and cite different sources of data.

Access to the study area (Calais Village, Ofcolaco area in Limpopo Province) was negotiated with the local Induna and members of the village. I introduced the study to the local Induna in order to gain his trust and cooperation so that this could facilitate a smoother negotiation with the other participants identified in the village. As the local *Ntona* is known to me, I explained to him thoroughly what the study entailed and the type of people I wanted to interview. This facilitated a smooth access to the participants as he was able to even suggest a number of possible participants from which I could select according to the purpose of the study. I visited each person and explained the aims and objectives of my research and in turn, arranged for a time when we could have the interview. As Strydom (2003) observes, it is important to gain permission to conduct a study in any given locality as it also lets the people on the ground know what the study is all about and what it seeks to accomplish.

It was understood however, that gaining permission is not a once-off process. It became necessary to negotiate for permission and cooperation with each participant. Strydom further states that

"the permission granted at the beginning of the project does not entitle the researcher to all information and he should from time to time, gain further permission as and when necessary" (2003: 283). Further negotiations with the farm managers of the communal farm was sought in order to gain their cooperation as visits to the farm were necessary and the photographs of the farm shed were taken.

Interviews

The method of primary data collection consisted mainly of lengthy, in-depth and unstructured interviews. This was aided by an interview guide, which consisted of open-ended questions focussing mainly on issues relating to the research topic. This was necessary to ensure that the limited interview time was used mainly to cover the various elements related to the study. The main challenge was how to strike a balance between keeping a focus on the research issues and avoiding undue influence by the researcher. I therefore, strove to establish good level of rapport and empathy as it was critical to gain depth of information, particularly when investigating issues of land where the participants had a strong personal stake.

All the interviews took place in the homes of the participants. I was struck by the level of generosity and hospitality that was shown to me. The main objective in this type of interview was to listen closely to participants' description of their experiences and to be alert for subtle yet meaningful cues in their expressions, questions, and occasional sidetracks (Leedy & Ormrod, 2001: 153). This type of interview was preferred as it looked more like an informal conversation, allowing the participants to do most of the talking and the researcher interjecting only to probe or clarify. This approach was therefore, more appropriate as it represented the voices of the participants.

It was also advantageous because it allowed the researcher to develop further questions during the interview when necessary while allowing the participants to expand on the topic as they wished. Questionnaires were considered unsuitable for in-depth studies such as the phenomenological paradigm adopted and most of the participants in this study were non-literate and would have found it hard to fill in questionnaires let alone comprehend them. The interviews were conducted in Northern Sesotho and were tape-recorded. The length of the interviews was about two hours or slightly longer, depending on

the participant. I also took some notes where possible. As mentioned earlier, the interviews were conducted with seven village participants and one white commercial farmer was interviewed in English. Although this was not the original intention, it became apparent that the researcher needed to include one commercial farmer who could provide a broader historical perspective of the farmlands in the Ofcolaco area.

The in-depth interview presented a difficulty in that the researcher had to establish a relationship with the participants in order to gain their trust so that the researcher 'may not be seen as an intruder into the participant's life' (Denzin 1989). Therefore it involved issues of trust, truth telling, fairness, respect, commitment and justice (Hatch & Wisniewski 1995: 119) in interacting with the participants.

Observation

Observations were used to supplement data collection. This study employed the modified participant observation technique to observe particularly how decisions are taken in community gatherings and who influences such decisions (i.e. whose voices count in community decision-making?). According to Bless and Higson-Smith (2002), this is a method that restricts the researcher to participate only in major events such as village ceremonies and gatherings. In this scenario, data was collected through secret means by attending a court hearing and a community meeting at the *Ntona's* residence. It is acknowledged that observation is a very demanding way of gathering data and may involve long periods of residence in the village under observation.

I chose this method as I was aware of the limited time at my disposal in the village. The observations were planned to maintain a level of objectivity and to elicit issues of power relationships between men, women and young people as they went about taking decisions in community courts and gatherings. I was also aware of the possibility of this opportunity not being provided given my short stay in the village. It was pure luck on my part to have had access to such gathering and court hearing.

Focus group interview

The focus group discussion was adopted to reflect back the findings to the participants. One focus group of six participants was used as a follow-up to the interviews because through its discussions individual opinions, attitudes and ideas are revisited and clarified. This session was also used to stimulate additional input. Bloor et al (2001: 5) observe that focus group discussions are useful as they "...can provide the occasion and the stimulus for collective members to articulate those normally unarticulated normative assumptions."

However, I expected some tension in this regard as some of the participants were in positions of power (such as the *Ntona* and the previous farm manager) and I thought their presence would discourage freedom of expression. There were also ethical dilemmas to be considered, e.g. it was alleged that the previous farm manager was siphoning some money during his term as manager of the communal farm. In order to avert a possible conflict, I excluded the *Ntona* and the previous farm manager from the focus group. In spite of all these challenges, an attempt was made to encourage freedom of expression, full and free participation.

Data Analysis

Usually, data collected through qualitative methods is unstructured, text-based, consisting of verbatim transcripts of interviews, field notes and observations. The researcher therefore, had to provide some coherence and structure to the massive data that was collected. Data analysis is the process of bringing order, structure and meaning to the collected data. Some authors avoid using the term 'analysis' in phenomenological methods. For instance, Hycner (1999: 161) cautions that 'analysis' has dangerous connotations as it usually means 'breaking into parts' and therefore, often means a loss of the whole phenomenon. He therefore, suggests the term 'explication' as it implies an investigation of the constituents of a phenomenon while keeping the context of the whole. Nevertheless, for the purpose of this study, I used the term 'analysis' as it is generally applied in methodological approaches. This study employed a framework that enabled the researcher to sift, chart and sort material according to key issues and themes. According to Ritchie &

Spencer (2002: 311-312), the key stages in qualitative data analysis, among others are familiarization, identifying themes, indexing, charting, mapping, and interpreting. During the interpretation the key objectives of the study are addressed.

As a qualitative method of data analysis, the phenomenological approach of data analysis shares with other qualitative methods the weakness of being labour intensive and time consuming. Analysis is also messy, as data doesn't tend to fall into neat categories and there can be many ways of linking between different parts of discussions or observations. Something I had to bear in mind as a researcher was that phenomenological approaches do not enquire about the truth or falsehood of the stories but only what the storyteller has said (Catholic Encyclopedia, 2004).

Familiarization

The process of familiarization takes place before sifting and sorting. It is at this stage that the researcher gains an overview of the body of material gathered. Therefore, the researcher 'familiarized' or gained an overview of the data gathered by listening to the tapes, reading the transcripts and observational notes. The aim of this stage is "to achieve a holistic and intuitive understanding of the phenomena under investigation" (Holroyd, 2001:3). An observation made by Richie & Spencer (2002) is that this process begins with the actual interview process, if the interview was conducted by the researcher.

It is important at this stage for the researcher to 'bracket' all preconceptions and judgements they may have made about the phenomenon under investigation. Already during the interview process some hunches about key issues and themes began to emerge. This was advantageous as the researcher was also the analyst and could recall some of the hidden, takenfor-granted expressions and behaviours.

Identification of themes

This is a critical stage of analysing data. It involves isolating those statements that are seen to shed light on the research question. In other words, this

process involves identification of recurrent themes followed by coding such emergent themes according to the research aims. This is basically a process of setting up a framework for sifting and sorting data material. This is done by carefully scrutinizing the data of the individual transcript, considering the number of times a meaning was mentioned and also how it was stated (including non-verbal cues). Moustakas (1994) argues that after themes have been identified, those redundant units of statements not useful to the study must be eliminated.

The process of identification of recurrent themes is followed by coding such emergent themes in clusters according to the research aims of the study. Having sifted and sorted material according to recurrent themes, I was able to build a picture of the data as a whole.

Charting

This phase involved drawing charts or mind-maps for each thematic area and making entries for several participants on each chart. Though the analysis was mainly described in a qualitative perspective, simple statistical methods such as the use of charts, graphs and tables were used to create an in-depth picture of the participants' experience. This created a visual summary of the issues that emerged from the investigation.

Mapping and interpretation

The last stage of the data analysis is mapping and interpretation. This is the stage where the researcher creates links between the results presented in the form of thematic charts and the objectives of the study. Ritchie & Spencer maintain that

Although emergent categories, associations and patterns will have been noted and recorded during the index and charting phases, the serious and systematic process of detection now begins. It is here that the analyst returns to the key objectives and features... (2002: 321).

Having linked the themes with the original objectives of the study (thus creating relationships), the researcher is then able to make conclusions. According to Sadala & Adorno (2001: 289) the researcher at this point

"transforms participants' everyday expressions into expressions appropriate to the scientific discourse supporting the research".

3.5 Verification and Standards of Quality

This section makes an effort to explore how reliable and valid the research methods used in this study were. It is the intention here to also discuss the extent to which the findings of the study could be generalized.

Reliability denotes how well a particular research project has been carried out. In the methodology adopted in this study, it relates to whether a particular technique, applied repeatedly to the same object would yield similar results each time (Wisker, 2001:253).

Validity plays an important role in the entire research between conceptual framework methods, questions and findings. In other words, the methods, approaches and techniques utilized must be appropriate to the issues being researched so that the findings could be deemed valid. In an attempt to provide cohesion to the entire study, the researcher tries to answer the possible question: why should we believe it?

Generalizability refers to "the extent to which one can extend the account of a particular situation or population to other persons, times, or settings than those directly studied" (Maxwell, 1992: 293). Simply put, it relates to how other people can relate the study to what they are finding or what they are doing.

Qualitative research tends to be reported in a more fluid, rich, and redundant style and therefore it becomes difficult for such reports to be reliable, valid and generalizable as quantitative reports are. Furthermore, qualitative research emphasizes the importance of personal perspective and interpretation. The phenomenological design used n this study also emphasizes a person's perceptions of an event, as opposed to the event as it exists external to the person. It attempts to understand people's perceptions, perspectives, and

understandings of a particular situation. (Leedy & Ormrod, 2001: 153). Phenomenological studies therefore, do not lend themselves to direct generalization in the same way that survey research for instance, does. However, in conducting social research, it is important for researchers to strive for consistency and accuracy in the way the data is collected and analyzed.

The process of verification occurs throughout the data collection, analysis and report-writing of the study, while standards are criteria imposed by the researcher and others after the study is complete. There are multiple views of verification in qualitative research.

Other writers adopt a different stance on qualitative verification and standards of quality. Guba and Lincoln's (1994) model of trustworthiness was chosen for this study. This model is based on the classification of four aspects, namely, credibility, transferability, dependability and confirmability.

- Credibility during the period of data collection, I had opportunities to meet, interact with and observe participants in their varied settings. This afforded me with an opportunity to familiarize myself with the participants and their environment. The data collection methods I used included the use of field notes, data analysis and literature review to verify observation and categorization of data collected. This I believe, made the study credible.
- The second is transferability: a key test here is whether the data is sufficiently rich to enable other researchers to make judgements about its possible transference to other contexts. While a purposive sampling was used, which entailed a balance in gender, age, level of education and experience, the transferability of the findings may take place within the Calais Community (i.e., may be extended to other members of the village who did not take part in the study). Extending the results to areas outside of Calais may occur with less confidence. This is because the study is an exploratory one, aiming to record experiences which may differ in context, level of literacy, expertise and management/farming skills from those of other communities.
- Dependability denotes trustworthiness of the study, confirming whether it was carried out correctly. A complete description of the research methodology is given and pilot interviews were conducted before the actual data collection process. The various research instruments were used to triangulate and verify observations and categories identified during data analysis.

Confirmability implies making sure that personal or theoretical inclinations have not caused the researcher to bias the research. Throughout the data collection process, I was acutely aware of the need to bracket my personal tendencies and partialities. The interview guide I prepared helped me to focus on the issues under investigation and the phenomenological paradigm provided a framework for this to occur. It was observed that participants managed to identify forced removals as the single most life-changing event and this was confirmed by all participants.

3.6 Ethical Consideration

Increasingly, social researchers are expected to take ethical issues into consideration when undertaking a study. Searle (1998) maintains that the amount of attention to ethical issues required depends on the sensitivity of your proposed study. On the other hand, research has a potential to interfere or intrude into other people's lives because the moment a researcher moves into any community to conduct a research, there is a potential for interference. In this kind of situation, a conflict of interest could result. This point is articulated by Babbie et al in saying:

The scientist has the right to search for truth but not at the expense of the rights of other individuals in society ((2001: 520).

However, researchers are always urged to try and minimise risks to participants, colleagues and society while attempting to maximise the quality of information they produce. Ethical issues in social research are not always clear-cut. To this end, the researcher filled in an ethical clearance form in order to comply with the University of KwaZulu-Natal's Research Ethics Policy. The following aspects formed the code of conduct employed for the purposes of this study and are discussed in the following paragraphs:

- Voluntary participation
- Informed consent as dialogue
- No harm to participants, caring and fairness
- Confidentiality and anonymity

Voluntary participation

The data collection method in this study ensured that participation was voluntary by informing the participants about the nature of the research and its objectives. Participants in any research must be given the freedom to choose to participate or not to. During the process of consultation with the participants the researcher ensured that the participants were not led to believe that they were required to participate in the study. The main objective of the consultation was not only to gain access to the interviewees, but also for them to decide whether to participate or not. It is worth noting here that one potential participant declined to participate in the subsequent focus group as he felt that the inquiry would compromise his confidentiality. To that effect, the same participant was not coerced into participation. This point was also discussed above.

Informed consent as dialogue

As discussed before, I found it necessary to engage potential participants in dialogue about the study without providing detailed descriptions. De Vaus (2001) argues that simply providing detailed descriptions of the study does not mean that participants will be any enlightened as a result. Having gained initial access through the *Ntona* could have had some psychological coercive effects on the other potential participants due to his authority as tribal leader. In order to minimise this effect, participants were visited at home and both researcher and participant engaged in a dialogue about the study and what it entails. The potential participants also had an opportunity to ask questions of clarity before committing themselves to the inquiry.

Once potential participants indicated their willingness to participate in the study, they were issued with a consent form whose contents were explained in Northern Sesotho, and they signed.

No harm to participants, caring and fairness

While physical harm seldom happens to participants in qualitative research, some persons could experience personal humiliation and lack of interpersonal trust. Researchers therefore, have the responsibility to ensure that the study

does not cause the situation of the participants to be worse than it was before the study. This point is accentuated by Babbie et al (2001) in saying that "social research should never injure the people studies, regardless of whether they volunteer for the study or not".

While it is recognised that any study has the potential to embarrass people's lives, friendships, jobs, etc., it was hoped that the confidentiality procedures outlined in this study would have countered the most obvious problems in this regard. For example, during the focus group discussions, issues of power and status were taken into account so that the *Ntona* and the former manager of the farm were not included in these discussions as they had the potential of discouraging freedom of expression by their presence at the focus group discussions. This measure was taken so that participants would not feel constrained to share information because of fear of repercussions from within their village community.

Confidentiality and anonymity

Codes of ethics insist on safeguarding people's identities. Confidentiality is achieved when the researcher does not publicly link sensitive information to certain respondents. Therefore, confidentiality is important ethically and methodologically. Anonymity applies when the researcher cannot identify a given response with a given respondent. Having recorded the interviews, respondents cannot be anonymous as an interviewer collects the information from an identifiable respondent. Therefore, anonymity was not applicable to this study. However, the data was treated with the highest degree of confidentiality it deserves and that the respondents' right to remain anonymous in the course of reporting the findings was observed. The villagers interviewed have not been identified in this study. Partial identification of the *Ntona* is justifiable, though his name is not mentioned, as access was gained through him in his official capacity.

Summary of ethical consideration

While no obvious conflicts of interest were identified in this study, the discussion on ethical consideration demonstrates that conducting research

brings out the dilemma between the need for access to information and the rights of individuals or groups being researched. On the one hand research outcomes have the potential to benefit individuals or groups being researched while on the other hand, they could cause harm. Researchers therefore, have to be aware of this dilemma and seek to find a middle ground as they take into account the ethical issues discussed above. It is hoped that with these ethical measures in place, participants felt comfortable about sharing their experiences and perspectives openly and without fear.

3.7 Challenges Encountered

Many steps and procedures were undertaken to ensure that the data collection process is stress free. Contrary to what many researchers experience, the incident of gaining access was not as problematic for me. Perhaps this was due to the fact that the traditional leader of the village was known to me and that he was willing to participate in the interview process. Despite all the precautionary measures taken, there were still challenges encountered.

Firstly, the time factor was rather problematic. The time I envisaged spending to conduct interviews proved inadequate, particularly as rural life is not necessarily organised in a similar fashion as urban life. People have no access to electricity, so most of the interviews had to take place during the day (when most potential participants are at work). This challenge required patience and flexibility on the part of the researcher. Another related issue is that rural people's sense of hospitality is not time bound. I spent a considerable amount of time after individual interviews in conversation with participants as is customary among the villagers.

The greatest challenge was that of finance. Two trips from KwaZulu-Natal and Limpopo provinces proved to be financially draining, particularly as each of those consisted of two weeks and three weeks respectively. Another minor setback concerned an old tape recorder whose tapes were no longer

manufactured and I had to postpone an interview to travel to the nearest town to buy a new tape recorder.

One challenge that is experienced by most researchers is that of confusion of roles. At times the villagers confused the researcher with a development worker. Some of the participants had expectations that I would intervene in some of the social problems. I had to reiterate my role as researcher and make it clear that mine was to record their experiences and learnings without creating any false expectations.

CHAPTER FOUR

RESEARCH FINDINGS

4.1 Introduction

The previous Chapter dealt with the methods that were utilized in carrying out this research. This Chapter aims to present the findings in order to achieve a holistic and intuitive understanding of the phenomena under investigation. The main objective of qualitative research, particularly in using the phenomenological approach, is to investigate the constituents of phenomena by listening to the experiences and stories of the participants. An attempt was made to separate the findings from the interpretation, so as to let the data speak for itself. This Chapter therefore, endeavours to chart a vivid picture of the socio-economic and cultural context of the Calais community and explore the experiences and perceptions of the participants in an attempt to answer the research questions, namely:

- I. What experiences the community members underwent in the transition from subsistence farming, to landlessness, and to communal farm ownership.
- II. How these transitions offered them opportunities for learning.

This Chapter begins with the profile of the research participants, followed by the presentation of the broad themes identified, then ending with a conclusion of the Chapter. It was necessary to categorize the findings into themes as stated in Chapter Three, so as to identify the most significant meanings and distinguish these from redundant statements.

4.2 A Profile of the Research Participants

As mentioned in Chapter Three, the interviews were conducted with seven village participants in Northern Sesotho language and a key white commercial farmer was interviewed in English. Although interviewing the white farmer was

not the original intention, it became apparent that the researcher needed one of the local farmers who could provide a broader historical perspective of the farmlands in the Ofcolaco area. As some of the findings from the key commercial farmer were integrated into Chapter One, as background to the study, this Chapter summarized findings from the seven participants only. The following table provides a profile of the participants.

Table 4.1 Provides a profile of the research participants

Praise name of participant	Age	Place of origin	Gender	Level of literacy	Marital status
Phogole	65	Ofcolaco	Male	Illiterate	Widower
Tlou	87	Ofcolaco	Female	Illiterate	Widow
Phuti	62	The Downs	Female	Illiterate	Married
Mokwena	57	The Downs	Male	Grade 5	Married
Kolobe	46	Ofcolaco	Female	Illiterate	Divorcee
Monareng	40	The Downs	Male	Grade 12	Single
Kgabo	46	Ofcolaco	Female	College	Divorcee
Key Commercial farmer	62	Ofcolaco	Male	University	Married

Background data was obtained from the research participants

As can be seen from the table above, this section describes the participants in terms of their various socio-economic characteristics. These isolated variables were deemed essential for the understanding of the study and to provide background of the participants as explained below. The reason for this purposive sampling was to draw a pool of mature adults who would have experienced all the transitions that the community underwent.

I decided to use praise names to safeguard the identity of the participants, and to ensure anonymity as I mentioned in Chapter Three. The use of praise names is in itself an indigenous practice of addressing individuals and their clans with respect. Usually, the praise name or clan name lends itself to providing historical and cultural knowledge of the clan. The age of the participants ranges from 40 to 87 years of age. Four of the seven people are unable to read or write. While the findings could have been written in both Northern Sesotho and English for purposes of validating indigenous languages, I decided to write in English to avoid duplication.

The age of the participants would shed some light on whether the participants experienced the forced removals and the type of knowledge they possess. The place of origin tells how many of them were removed from the low lying area of Ofcolaco and how many came from the area of The Downs. The gender was also considered significant in showing the number of men and women who were involved in the study. The level of literacy was quite central to the study as it demonstrated how many could or could not read and/ or write, further pointing to the traditional or indigenous forms of learning and knowledge construction among the villagers of Calais. The variable of marital status simply endeavoured to show how some participants were dependant on other family members such as a spouse for their livelihood, and how many were breadwinners in the family. The following findings are elicited from the seven participants altogether. A brief biography of each participant is as follows:

Phogole

Phogole is a 65 year-old widower who came from an area around the Ofcolaco farmlands called Phokeng. Recently pensioned, he lives with four of his grandchildren that he supports in terms of school fees and clothing. Phogole is illiterate and yet has vivid memories of the time they were forcibly removed to make way for a nature reserve. He is from a subsistence farming background and the transition to a monetary economy is one of the greatest shocks he had to get accustomed to

Tlou

Tlou is an elderly woman of 87 who also came from the low-lying area of Ofcolaco farmlands. She has been a widower for about twenty-two years and now lives with her eldest son. Tlou never went to school because during their young age "girls were never sent to school as they learned funny things which were unnecessary for their adult lives". She is from a subsistence background and has continued planting seasonal crops on her residential plot of land as it is a way of life she is accustomed to. She also remembers the days of the forced removals and how they as a family had to sell their livestock in order to be allowed to settle on the present land, Calais village.

Phuti

Phuti is a married mother of three and she is 62 years old. She never went to school because priority was given to boys as the education of girls was regarded as a waste of resources. Phuti came from The Downs, the highland area, part of which became a nature reserve. Like the others above, Phuti comes from a tradition of subsistence farming even though her husband was a farm worker. She grew up in an environment where formal education was not encouraged much and as a result, her eldest son only has basic reading and writing skills as he never went far in his schooling.

Mokwena

Mokwena is a 57 year old male, married with four children. He also came from the area of The Downs. His family owned a lot of livestock and they had to give some of their sheep and cattle to extended family members living in the area of Mafefe during the time of forced removals. Mokwena considers himself lucky to have had access to primary education up to grade 5. he also concedes that formal education was never regarded as an important part of life as they were pretty much isolated from major towns and cities. Having grown up in a farming family, both in crop and livestock, Mokwena is very attached to subsistence farming. He cites the forced removals as a devastating event in his family's life.

Kolobe

Kolobe is a 46 year-old mother of three, from the low lying areas of Ofcolaco. She has been divorced for about 5 years. Kolobe never went to school as she was the eldest in her family and had to start helping with household chores at an early age, particularly in looking after her siblings while parents went to work in the fields. Life has been very difficult for her after her divorce. While subsistence farming has been a way of life for her, the transition brought about by the forced removals was a major shock in her family's livelihood. After settling in Calais village, another shock that unsettled their livelihood was the divorce, which left her with bare necessities. She is now financially dependant on two of her sons who work as migrant labourers in the

Gauteng area. She still continues with seasonal crop farming on her residential plot.

Monareng

Monareng is a 40 year-old male from The Downs. He comes from a family of six, with one other brother and two sisters. He is one of the lucky few who had formal education up to grade 12. He is still single and unemployed, but has steadfastly refused to work on the surrounding farms as he terms it "capitulating to the schemes of the apartheid government." Monareng recalls the time of the forced removals as a major upheaval in his life and that of his family. He and his brother are the only 'educated' people in the family. He has been actively involved in the management of the communal farm as a committee member.

Kgabo

Kgabo is a 46 year-old, divorced mother of three. She comes from the area around Ofcolaco farmlands even though she was married in the Mpumalanga province, just outside Nelspruit. Kgabo's upbringing involved a lot of farming as her family were subsistence farmers. After the forced removals in 1978, her father was employed on one of the local farms until he reached retirement age. Being the eldest daughter in her family, Kgabo had the privilege of high school education, later became a part-time teacher and finally, through her own efforts, obtained a teaching diploma from one of the local teachers' training college. She achieved this, even though the dominant practice among the rural villagers was never to educate girls. She currently works as a primary school teacher in Mpumalanga, though she regards Calais village as her home and still has the village's interest at heart. Whenever she is home, she makes sure to participate in all community affairs, including political gatherings, community meetings and gatherings.

The key commercial farmer

The commercial farm owner was interviewed with a specific purpose of providing information about the Ofcolaco farms. There are 8 farms in all, one of which was bought by the community. The commercial farmer's input was

deemed significant for the study because he is a direct descendant of the original owner, his father. His father was a British war officer, who was among the redundant officers who were given the land along the Selati River to develop into farms after 1919. His farm employs about 5 % of the Calais villagers. Being a direct descendant of the original farmer afforded this study with background information about the beginnings of the Officers' Colonial Land Company (Ofcolaco), which is a conglomeration of several farms, shortly after 1919. The farmer lives with his family on the farm.

What follows is a brief outline of the indigenous or traditional knowledge base of the community in terms of farming skills and traditional decision-making processes.

4.3 The Knowledge Base of The Community

One of the objectives of the study was to explore the community's indigenous knowledge in subsistence farming and the other was to explore power relations among the community members in terms of how decisions are made. The following findings outline the indigenous farming knowledge of the community:

Indigenous farming knowledge

In presenting the farming skills, the following factors shall be taken into account; knowledge of the soil, planting, weeding, harvesting and food storage.

Knowledge of soil

Most indigenous farmers can quickly identify major soil types and properties according to characteristics such as colour and texture. According to the participants, red soils are known to be moderately fertile, tend to be sandy with some organic content; dark soils are known to be more fertile with a greater organic content, while 'greyish' or 'whitish' soils are very infertile and contain very little organic content. Most of the participants concurred with the

assertion that soil next to river-banks is usually rich in nutrients and suitable for certain crops.

"it is easy to tell the different between fertile and infertile soil. Some of us can actually touch and feel the soil to test its richness. One of the telltales about rich soil is the presence of earthworm casts. That type of soil is usually suitable for ditshekgene³" (Phuti).

In preparing the soil for cultivation farmers also consider economic and geological factors including distance to the village, the slope of the terrain, they check for water-holding capacity and presence of rocks. One of the participant added that in looking for suitable ground:

"we try and avoid slopes because thy have poor water retention capacity" (Kgabo).

Planting

The traditional method of ploughing was a span of oxen or donkeys. Hand hoes were also used when there were larger groups of people. A hectare was a reasonable size for subsistence farming per household. The indigenous farmers had a way of staggering the crops, i.e. planting different crops at different times so that they are not all ready for harvest at the same time. This ensured year round availability of food.

"When the rainy season starts, we begin by planting maize and groundnuts, before these are ready for harvest, we would plant another type of nut" (Mokwena).

Crops that were planted included sorghum, millet, beans, sweet potatoes, nuts, pumpkin and maize. Some of the plants had a dual purpose: beans, sweet potatoes and pumpkin provided leaves for food and the actual crops also provided food.

Weeding

Indigenous farmers developed a farming system in which they practised fallowing, intercropping and selective weeding. Young crops do not provide

³ Ditšhekgene is a plant that yields potato-like crops, planted on raised beds, mounts and ridges to improve drainage. This plant usually needs a lot of moisture.

ground cover. The farmers understood that, if weeds are left to grow, they cover the soil, prevent it from heating up or drying out excessively, this practice stimulates crop growth and reduces erosion during rainfall. This is depicted in the following comment by one of the participant:

"Weeds are not always bad, they are simply unwanted plants that are in competition with the crops. If these are uprooted and left to decompose, they actually provide rich nutrients to the growing crop" (Tlou).

Crop rotation

Crop rotation, also called shifting cultivation, has been and still is practised to manage soil fertility. Crop rotation involves an alternation between crops and long-term forest fallow. At times after long fallowing, the forest would be burnt to clear the land and provide ash as 'fertiliser' or 'lime' for the soil. Farmers know that crop yields are typically high for the first few years but then drop on account of declining soil fertility or invasion of weeds or pests. The above method is explained as follows:

"...the fields are then abandoned and the farmer clears another piece of forest. The abandoned field is left to fallow for several years or decades and thus has a chance to rebuild fertility before the farmer returns to it to start the process again" (Phuti).

Shifting cultivation is often characterised by a season-to-season progression of different crops, which differ in soil nutrient requirements and susceptibility to weeds and pests. For instance, maize could be followed by root crops such as sweet potatoes and nuts.

Harvesting and storing

Harvesting depends on the type of crop. Maize is usually harvested first. It is left to dry, then harvested, husked and stored in *sebaba*⁴. Usually maize was protected from pests if stored in this. Sorghum and millet were also stored in

⁴ Sebaba is a big, round and hut-like basket woven with grass with a roof on top. It is raised on stilts with a bed of woven grass. The size depended on the crop yield for that year. It is built specially to store maize.

leshala⁵. These storage facilities ensured long-term availability of crops to the family. However, those crops set aside for seeds were usually tied up in a bundle and hung from the roof of the kitchen so that they could be smoked in order to ensure long-term incorruptibility by pests. One participant described this in this way:

"after harvesting, a portion of the crop would be kept aside for seed for the next season. In the case of maize, it would be husked and hung inside the kitchen where fire is always lit so that it is smoked. This prevents it from pests and insects." (Kolobe).

In terms of storing the green leaves (including pumpkin, green bean and sweet potato leaves), after harvesting, the leaves are cooked in bulk, with no salt added to ensure longevity, later sun dried and stored for the winter months.

Knowledge of appropriate and inappropriate technology

One of the largest and most intense uses of the forest involves the collection of firewood as fuel for cooking. While this was not part of indigenous farming skills, it was nevertheless, identified as one skill which contributed to people's livelihoods and also towards the conservation of natural resources.

Throughout the process of data collection, it became evident that firewood was the lifeblood of the village. It was also shown how the village community members, both men and women, were shown to possess intricate knowledge regarding the fuel wood they used. This is expressed in this elderly woman's comment:

"Look here, all the elderly people know that there are preferred species of wood for cooking use and we know which wood burns more intensely and at a higher temperature" (Tlou).

They also know which wood is difficult to burn, thus causing a lot of smoke while producing very little energy for cooking. Therefore, the task of collecting firewood is indeed, a specialised job demanding knowledge and expertise.

⁵ Leshala is also similar to sebaba. It is also woven with grass but looks like the roof of a hut built upside down, but covered on top. It is also raised on stilts.

On an ecological perspective, the villagers never cut down a live tree for the purpose of fuel wood. They only collected dry wood. Also, they didn't bother collecting wood, which is known to produce very little energy. Another woman participant commented on their reliance on traditional fire oven for its multipurpose use:

"Even after the introduction of paraffin stoves, the women still preferred their traditional fire oven, located in a central location in the kitchen, because it is also used to provide heat for the family" (Phuti).

The traditional fire oven is also a focal point for the family in the winter months, particularly during times of storytelling by grandmothers to their grandchildren.

Traditional decision-making processes

The second factor that contributed to the community's indigenous knowledge base was their traditional decision-making processes. There is a sense in which decision-making is intricately interwoven with subsistence living for rural communities as they deal with issues of landlessness, marginalization and food security – making a living. It is therefore, necessary to outline the social organization of the Calais community in order to have a better appreciation of how decisions are made by the community members, whose voices count and what the social status of men, women and young people is.

Structure of the tribal authority

The structure of the tribal authority consists of the *Ntona*, who is the traditional leader and presiding officer of the tribal authority, and his councillors locally known as *balata*. The councillors consist of elderly men who are chosen for their wisdom and at times, for their social standing in the community. Their chief function is problem solving and decision-making within the community. The problems addressed could be domestic in nature or communal.

Other parallel structures, which were formed at a later stage include the civic organisation and the community policing forum (CPF) which were established

to assist the tribal authority in dealing with matters of crime and social events that impacted on the community. One participant outlined the relationship between the tribal authority and the other committees as follows:

"The Ntona is the ex-officio member of such committees, but young people are in the majority during meetings. These committees deal mainly with crime, sometimes family feuds and issues concerning the development of the village" (Kgabo).

How decisions are made

When asked how decisions are made in the community, the participants all made a distinction between a general gathering (*lekgotla*) and a court hearing (*kgoro*). The former consists of every member of the community – men, women and young people while the latter includes women and only circumcised men. Any circumcised man is considered a mature man and can partake in such deliberations because he has been initiated into manhood. Uncircumcised men, regardless of their age, never hold much sway in making decisions because they are not considered mature. A general gathering has a much freer atmosphere as there are no restrictions for attendance as the following observation demonstrates:

"In such lekgotla (general gatherings), everybody is invited to come – men, women and young people. Everybody is encouraged to speak freely so that we hear the mind of the community" (Mokwena).

All meetings follow a similar pattern as the statement below alludes, except that court hearings constitute women and circumcised men only, no young people are invited. Most of the participants concurred with the following statement made by one of them:

"We blow the horn (phalafala) and call on the community to assemble at the Ntona's kraal. If there is an issue which needs the community to deliberate on, we then invite opinions from the assembled community and then discussions ensue. We reach consensus by listening to the many voices that are in agreement, then the Ntona and his councillors would consult among themselves whether they hear the community in what they are saying. The Ntona then summarizes the deliberations and communicates the decision to the gathered community" (Tlou).

Court hearings are conducted differently. The following comment clarifies the process:

"Someone would institute a case against another, ad a court messenger would be sent to the accused, and in due cause, the elders (balata) of the village would be called to a court hearing where the plaintiff and the accused would appear, accompanied by witnesses if applicable. When the court has listened to both sides of the case, the councillors, together with the headman, would consult among themselves and then make a ruling" (Mokwena).

Gender inequality in decision-making processes

As already mentioned above, uncircumcised men do not partake in decision-making. Although women are welcome in all meetings, they do not take part in the court hearings except if they are directly involved in particular cases. All the participants confirmed this in the words of some of the participants:

"You see, if you are not circumcised, you are not regarded as a man and therefore, cannot partake in decision-making meetings with other men. However, such a person would be allowed to attend other community meetings" (Mokwena).

"Although women are present during court proceedings, they don't take part in the deliberations except when one of them is involved or implicated. If this is the case, the woman is allowed to speak, but is not allowed to stand nor is she allowed to take her hat off. Only men can stand among other men...those are our ways" (Kolobe).

Young people are also excluded from such decision-making processes. They are regarded as minors and therefore, incapable of taking part in adult deliberations. A participant expressed this in these words:

"Young people, including uncircumcised young men, are not allowed to be part of the kgoro. They are regarded as minors who cannot engage elderly people on matters of consequence" (Monareng).

The above are mechanism that stimulate and provide a forum for discussion and decision-making in the community. Having provided the indigenous knowledge base of Calais community, we now focus on the two major events

that changed their lives: forced relocations and the buying of a communal farm.

4.4 Major Events Which Have Changed The Community's Way Of Life

Forced relocations

All the participants cited the forced removals of 1978 as the one major event that has altered their lives economically, politically, socially and relationally. The forced removals affected them on various levels. They had to leave their places of residence, thus losing their arable and grazing land and their livestock permanently. They were resettled on rocky land (Calais). This village settlement is situated in a crescent, surrounded by hills on the one side, commercial farms on the other, with the Selati River forming a boundary between the village and the commercial farms. The following participants attested to the above by saying:

"we were forcibly removed from that area below the mountains, near the river, Selati...We used to live informally here with our livestock — a few families were scattered along this river and beyond, living a subsistence life of crop farming and livestock" (Phogole)

"1978 was a difficult year for us. We were just told to leave, and we were not given any time to prepare ourselves...We lost a lot of things" (Mokwena)

"we were forced out of our land to move here because the government wanted our land to establish a nature reserve – the one which is called Lekgalameetse. We came here at the same time with the people from Ofcolaco. They too, had to leave their land to make way for the white farmers..." (Phuti).

The forced removals had an adverse impact on the people and this triggered other risk factors, which are attributable to most situations of forced relocation. These are: poverty, which includes landlessness, joblessness or loss of livelihood means, homelessness, loss of economic power, increased morbidity and mortality and social disarticulation.

Purchase of a communal farm

The 1994 democratic elections ushered changes throughout the country. For the people of Calais, the changes brought hope of accessing land for agriculture. All the participants saw this as a major event in the life of the village community. It was at this time that government, through the Land Redistribution for Agricultural Development (LRAD) programme, aimed to benefit poor households with grants to enable them to buy land for residential purposes and small-scale agriculture for subsistence.

According to Ramatlhodi (1999) in Limpopo, the provincial government had introduced a subsidy grant of R15 000 per household to access farms for rural people's own development. In Calais village the community pooled their grants, which were meant for a housing subsidy, to purchase a commercial farm that would be owned collectively. However, it could not be established whether the grants were compensation for the forced removals or part of government's drive to enable rural communities to access agricultural land.

According to the participants, some of the influential leaders of the village were convinced by the commercial white farmer to utilize the government subsidy earmarked for housing, to purchase his farm. The following are some of the participants' comments:

"After he heard about the grants, which were to be given to each household to build houses, Leon then decided to sell the farm to the community while he moved to Durban" (Tlou).

"Leon Bondesio, the commercial farmer, read from a newspaper that government was planning to give us grants. So, he initiated this to some members of the community whom he identified as influential. Those people initiated it to the community leaders. They tried to popularize it to the community in such a way that the community was convinced to buy his farm" (Kgabo).

The following participant gives a succinct description of the process they followed in finally purchasing the communal farm:

"...the white farmer came and approached the people of Calais through certain community members and said to us 'this land, Calais is small: So, I would like to give you (the community) my farm so that you could have a bigger piece of land for farming.' Then government people came and fetched a number of us to Pietersburg (now Polokwane), where we examined the size of Leon's farm on maps and the authorities were satisfied that indeed, our village was small. The government therefore, promised to give him lots and lots of money for the farm. That is how we came to own the farm" (Phogole).

However, not all the participants were in agreement on whether the farm was beneficial for the community or not. For instance, Monareng simply saw it as a consequence of

"coercive manipulation by those who wielded political and leadership power".

Phuti, on the other hand, saw it as a developmental decision that should be applauded. He felt that the decision to purchase the farm demonstrated:

"the maturity of the community in terms of decision-making and knowledge, particularly when you see where we come from as a community"

A farm manager was elected by the community (the same man who negotiated the purchase of the farm on behalf of the community) to oversee the smooth running of the farm. The community decided to send him to an agricultural college for training, but he failed the first semester and was disallowed to continue as a result. A management committee was also formed, headed by the manager. When asked why the farm had deteriorated in production, all the participants cited problems of management, lack of financial and commercial farming skills. The following comments summarize the participants' views:

"the problem is that people were just excited about the prospect of buying a farm, they didn't realise that it is a huge responsibility which none of us were equipped for" (Phuti).

"those responsible for the running of the farm do not have business skills to be able to work out expenses and profit, they could not even service the cars and tractors left by the previous farm owner. This is an indication of lack of management skills" (Mokwena). It appears that not all the community members were in agreement to purchase the farm.

"a number of us were unhappy about the purchase of the farm, now we have lost all the money that was due to us... we could have put it to good use" (Phogole).

"not all of us were in agreement with this arrangement, but the majority voted for the purchase of the farm" (Monareng).

Due to the apparent failure of the farm to yield high crop production, there is a feeling among most of the participants that the farm does not benefit all the community members. This perception is demonstrated in the following comment:

"As it is, none of us benefit from that farm – it is just owned by us in name, but we know nothing about it... we have never seen a cent from its produce" (Tlou).

4.5 Emerging Themes From The Major Events

Poverty

The forced removals rendered the community members vulnerable and powerless in terms of food security. All the participants cited poverty as the major shock from which they have continuously struggled to recover. Two of the participants summarized the participants' feeling about poverty in this way:

"we were all so poor that we scrambled for the meagre resources available; land in particular, and we kept having disagreements all the time. We could have eaten each other alive..." (Monareng).

"we came to this village settlement with very little to keep us going. As you can imagine, most of our property was given away and we struggled to make a living in the new place...we were all so poor" (Phuti).

One of the reasons given by the government for the forced relocations was that the people needed to be settled in an organized manner where it would be possible for the government to improve social services such as schools, hospitals, and water supplies. Most of the participants cited the single water

pipeline and the erection of toilets (long drop) by central government in the village as the only two constructions of value as the following comment demonstrates:

"we were just dumped there with only a single water pipeline and toilets which the government provided. Nothing else was done to help us to settle...particularly as most of us had lost a lot during the forced removals" (Mokwena)

Due to the effects of poverty and lack of resources for making a living, family households moved some of their children to go and reside with relatives elsewhere. In effect, this exercise resized the household and when times were favourable, children were re-united with the families. Three participants from The Downs and two from Ofcolaco cited this as a common practice induced by the forced removals and harsh living conditions. This phenomenon is expressed in the following comments

"As a result of the forced removals, many of our children grew up with relatives or grandparents although the reasons cannot all be attributable to resizing due to poverty" (Kgabo).

"I had to send my two children to Mafefe, to stay with my sister. We just couldn't cope with two children who needed to be fed, educated and clothed. Later when we were a bit settled, they came back to stay with us (Mokwena).

"My eldest son grew up with his grandmother because when we moved to Calais we were so poor. In the first two years we didn't have a school, so I wanted him to attend school at Kgapane where his grandmother lives" (Kolobe).

Loss of means of livelihoods

Another issue cited by some of the participants, attributable to the forced removals was the loss of means of livelihoods. Prior to their resettlement, the people had survived on subsistence living, however, there were a few individuals who depended on farm work for their livelihoods. Phuti attests to this in saying:

"when your only means of survival is taken away from you, what do you do? While most of us depended on subsistence farming, which was seasonal, there were a few others who worked on the farms and got free food in return for their labour. All this was lost when we were moved"

Most of the participants mentioned, amongst other things, the loss of livestock and farming land. Those who were moved from The Downs, who had relatives further towards the area of Polokwane sent or gave away some of their cattle and goats to relatives living in the area of Mafefe. The following participants expressed this as follows:

"we were told that we cannot take our livestock with us because the place we were relocating to was very small. We had to give these away to distant relatives" (Kolobe).

"we used to have ample grazing land for our livestock. Those grazing lands were a common property and anyone of us was free to let their cattle and goats to graze there. Even if we were able to bring our livestock with us to this place, we would have found no grazing grounds" (Phuti).

A similar occurrence among the people from the Ofcolaco area was determined. Some families who had livestock were also forced to give them away or sell. One participant recalled how rich her family was in saying:

"my father had a lot of cows which he was very proud of. Our family lived not far away from here – there was a palm tree right in the middle of the cattle kraal. We grew up having our own milk and meat, we even gave some to other families... but all that disappeared when we were moved. We couldn't take any livestock with us" (Phogole).

One of the realities brought about by the forced removals was the loss of land. All the participants concurred that, along with other belongings, the community members lost their major means of livelihood, which is mainly subsistence farming. One participant had this to say:

"we depended on the land for our well being. When you lose even that, it is an indication that life can no longer go on as usual. The loss of cultivating land changed our lives drastically" (Tlou).

In the newly resettled community, the villagers were landless, marginalized and had insecure food supply. However, a few years after the resettlements, they were organized as a community, and later identified farmland that was nearest to them and, without asking for permission to occupy – they simply seized it and subdivided it among themselves. There was a general sense of elation at the return to traditional forms of farming. This brought some relief to their plight, yet it was short lived, as one participant observed:

"we had longed for cultivating land for a long time and, due to our Ntona's persistence with the administrative clerk, we managed to secure land just outside the village. We were all so happy with the newly found land. But this was not to last...the farmland was turned into a cemetery as the village grew and grew. We were back to the drawing board" (Phogole)

Five of the participants indicated that after the forced removals, apart from the farm land they lost, it became difficult for certain families to utilise even the little residential land they had because they had settled on rocky ground which was not arable. One participant indicated this as follows:

"My small plot of land is even smaller because I was settled on the foot of the mountain with huge boulders which made cultivation impossible" (Kgabo)

Another participant summarized the situation as follows:

"Subsistence agriculture has come to be compromised by the fact that in most areas, some arable land is inaccessible because of rolling topography" (Mokwena).

Over the years there has also been persistent drought, which to a large degree, discouraged subsistence agriculture and contributed to the loss of economic power. One participant commented as follows:

"There were some years when we would have nothing to harvest because all the crops would have been scorched by the sun even before they sprouted. So, you see, the availability of rain is crucial for our agriculture. But in the past few years it has become more and more difficult" (Mokwena).

Shortage of labour

The changing socio-economic situation brought with it challenges that the community has to grapple with. In years gone by, there was never a shortage of labour because households joint forces in planting, cultivating, weeding and

harvesting crops. However, most of the participants cited the shortage of labour as one of the biggest problems, which discouraged subsistence farming. Children often provided labour, but then they had to go to school and those that have left school either work on the neighbouring farms or as migrant workers. One participant explains this situation in this way:

"you see, there are no more able bodied people available to work on the fields anymore. In the past, whole family households used to get involved but today young people do not want get dirty" (Tlou)

Another participant had a different view:

"most of our young men and women have to fend for their households, so they have to find employment to provide for their families. You couldn't survive now with subsistence crops... children need clothing, school fees and food" (Phogole)

Therefore, while subsistence farming is an important source of livelihood for the community, most of the community members used it only for food security but still diversify their livelihood efforts in generating income. There is a sense of nostalgia among the elderly whose way of life was characterized by subsistence farming, yet there is this realization that it can only be a complementary activity as there is a change of economy, which demands people to adapt or die.

Homelessness

Along with other risks induced by the forced relocations, communities lost their homes. This is articulated by some of the participants in these words:

"There is nothing painful and difficult as the loss of housing. Children were dispersed, some of us had invested in the buildings we erected. Now they lie forlorn while we are without proper homes. What can you achieve without a place to call your home?" (Kgabo).

"we had to rebuild our lives along with our homes after the removals. It was particularly difficult having children who needed the shelter more than anybody. This was the most difficult thing to have to deal with. They didn't realize what they were putting us through." (Mokwena).

Loss of economic power and decline in subsistence farming

When asked about the quality of their lives before and after the forced removals, all the participants concurred that the loss of belongings, separation from family members and loss of the means of livelihoods placed them on a lower socio-economic level. Most of them mentioned that the forced removals made them fall below poverty thresholds. They expressed the above sentiments in these or similar words:

"I was better off with the kind of life I had before they moved us. We didn't have much property, but we were happier then and we had enough to live on" (Mokwena).

The forced removals changed the lives of the individual participants in various ways, some of them gave personal observations. For instance, one participant had this to say:

"I have suffered greatly... it was one shock after another. After we were forcibly removed, we came to settle here in this place and five years later my husband left me for another woman...! was not educated, so I couldn't get a decent job. My sons were still at high school and they had to leave school in search of jobs in Gauteng as I couldn't afford to pay for their fees. Working away from home was the fate of many boys in this village" (Kolobe).

The change of life style also introduced new challenges. Both groups from the low lying areas of Ofcolaco and those from The Downs had had access to some farm crops while living informally around the farms and very often, they had family members working on the farms and therefore, benefited from some of the farm produce not suitable for export. However, this kind of life style was shattered when they were moved to the village, for suddenly they had to start buying every commodity using the little money that a family breadwinner made.

This introduction of cash into their subsistence economy seems to have impacted on their lives in a drastic way. All the participants confirmed that subsistence agriculture was an important traditional or indigenous livelihood activity.

"Our way of life depended on subsistence farming, but now that we have to start buying things for ourselves in order to survive, we no longer concentrate our efforts in subsistence farming" (Kolobe).

Although an element of cash has been introduced in their subsistence economy, most of the participants indicated that they had not abandoned subsistence farming albeit on a small scale. Therefore, in their present situation, they all recognized a decline in subsistence farming.

"We found ourselves needing more money to buy basic necessities and we were not accustomed to this kind of life" (Tlou).

"Look here, when you have been self-sufficient for your entire life, it is a struggle to get accustomed to a life style that is dependent on money. Our lives were changed, suddenly we needed more money – something we never depended on" (Monareng).

Traditional belief system challenged by new situation

One characteristic of rural communities is their firm traditional belief system. Traditionally, girls were never allowed to go to school and this was well entrenched in people's minds. The people from The Downs adhered seriously to this custom while some families from the Ofcolaco group did not hold fast to this belief. This is demonstrated by the fact that one of the female participants from Ofcolaco, Kgabo, was educated by her parents and later became a teacher. She would have been 18 years old when the forced removals occurred. It appears that after the resettlements, the two groups were compelled to review some of their traditional beliefs as they learned to live together. This change of perspective is expressed in these participants' words:

"girls were never sent to school, it was never the practice in our days. I still remember the words of my father saying 'girls learn funny things at school which will not help them in their future lives' But eventually we decided to send the girls to school" (Kolobe)

"it was unheard of for girls to go to school. It is a total waste because as they grow up, they get married and what does the father profit from that?" (Phuti). Four of the participants recalled another event, which challenged their traditional beliefs and added to the growing rift amongst the two groups of people. There was growing suspicion of witchcraft among the villagers and, a decision was made to invite a diviner from the area of Mafefe, in The Downs to come and identify the "village witches". The community members had been led by the diviner to believe that "the witches in the community far outnumbered the rest of the community members." Consequently, one old woman, and a local church minister, were identified by the diviner as the main village witches. The two were isolated and despised by the rest of the community. The event left a huge rift in the community as the woman came from the Ofcolaco area and the church minister from The Downs. One participant explained the situation in the following manner:

"the event caused a lot of mistrust among ourselves as a community and there was a lot of backbiting. I have watched the rift between the two groups of people grow bigger and bigger...even though we have outgrown it, I suppose the event has not gone unforgotten, there are some people who are still very suspicious of one another in the village" (Phogole).

Three of the participants cited the recent spate of HIV/AIDS as one phenomenon that is affecting many households and challenging traditional beliefs. There has never been HIV/AIDS education in the village on prevention, care and treatment yet the elderly people exhibited a fair understanding of the disease. There is growing concern among the adult community members about the recent inexplicable deaths of young people from the village. One participant verbalized this concern as follows:

"We have heard about this terrible disease from the radio. Recently our children have become sick but no one is talking about it. Most families have lost breadwinners. How do you explain a situation where children die before their parents in such alarming proportions? (Mokwena).

Another participant brought a different dimension to the issue of HIV/AIDS. She felt that the ignorance about the disease is perpetuated by antiquated beliefs of witchcraft. She expressed this observation in the following words:

"The problem in this village is that people are still old fashioned and believe that someone is out to get them through witchcraft. When a person contracts a disease that no traditional doctor knows, it is always concluded that the person must be bewitched... in fact, anything unknown or inexplicable is associated with witchcraft" (Kolobe).

Social disarticulation

The forced removals affected the villagers in different ways. The dismantling of community structures, social organizations and local associations resulted in a massive loss of social capital. One of the outcomes of the forced relocations was for the two groups of people to learn to live with each other. Although these two groups of people spoke the same language, their worlds were different. All the participants cited this as a major challenge in their interpersonal relationships as a community. Some of the participants described the situation in the following manner:

"...we were just thrown together and had to make the best of the situation. It was difficult to come to consensus about anything as we all came from different backgrounds" (Kgabo).

"One of the greatest difficulties was having to live with people we did not know. We were just thrown together and at first it was very hard to agree on anything." (Mokwena).

The issue of social disarticulation is expressed by one of the participants in the following comment:

"it is always difficult to start life anew with different people. Before the resettlements, we were a closely-knit community and we knew each other well. But life with a group of foreign people was hard" (Phuti).

In situations of forced removals, many informal and formal networks get dispersed. Such disarticulation often affects people's livelihoods in ways that are not easily recognized. One thing that the forced removals did was to shatter people's identities and relationships. These had to be created anew through traditional song, dance and poetry. According to Kgabo, one of the participants, these activities:

"Provided entertainment and were also used as educating tools, particularly in the area of HIV and AIDS".

Another serious outcome of the forced removals was the rise in alcohol abuse among the community members. During the focus group interviews, participants agreed that this was one of the biggest problems faced by the village. One of the participants, Tlou, articulated the problem as follows:

"One sad thing about our village is that there is a lot of drinking. Perhaps this is due to the lack of entertainment activities, well, the boys have their soccer, but among the elderly population there is a lot of drunkenness almost on a daily basis...even in my own family and this always leads to feuds and abuse in the family" (Tlou).

These emerging themes illustrate some of the effects of forced removals and display the socio-economic situation of the community members of Calais village.

4.6 Coping and Adaptive Strategies

Individuals, households and communities which are faced with vulnerable and changing environments, such as the Calais village, often develop ways of responding to vulnerabilities in order to create viable livelihoods for themselves. Coping and adaptive strategies are techniques developed by people to cope with the changes in the socio-cultural and environmental conditions. The following, are among the strategies developed by the community members of Calais village in response to the effects of the forced removals:

Establishment of a governing structure

As already recorded above, the first group of people were settled at Calais in 1978. Having come from two different backgrounds, they soon discovered that they needed a mechanism for solving problems as:

"they always had disagreements and life was difficult for all" (Phuti).

The difficulty was that they were under the direct authority of the commissioner, an agent of the central government. The only local representative was an administrative clerk who helped with the allocation of residential land for new arrivals to the village. Therefore, they needed a governing structure that would respond to the domestic disputes. One participant expressed this point in this way:

"As the number of disputes escalated, we undertook a lengthy process of electing a Ntona. Then we elected balata (councillors). This was in response to the many fights in the village, with no one to unite the people. You see, we were a divided community because we came from two different places" (Phogole).

It is worth noting that this system was not peculiar to Calais village. All the neighbouring villages had their own tribal authorities, which were endorsed by their respective homeland political structures. Calais village, however, was an anomaly in that it had no political ties with the homeland system since it was located within "white South Africa". The quest for a tribal authority structure was not only for internal purposes but it was also meant to reinforce the identity of the village community in relation to the others around them. The following comment sheds some light:

"When we first arrived here, we were told by the commissioner that all our needs shall be attended to by his office. But when we needed urgent help such as the police services, we couldn't call on the Lebowa police, even when they were closer to us. We had no clinic, no local home affairs office for identity documents, birth certificates... we had to go all the way into town for that. Yet the neighbouring villages had their own local services that they could have access to" (Phogole).

The election of a *Ntona* and a council was seen as a long term strategy to give the community an identity and a sense of cohesion. Comments such as "we were just thrown together... we would have eaten each other alive" (Monareng) only demonstrate the magnitude of the rift in the community and the lack of leadership at the time.

Alongside the traditional governing authorities, the community later formed other social committees that also helped to address village problems. These

provided forums for discussion and community decision-making, particularly in seeking ways to minimize risk and empower the community. The following participants had this to say:

"with the increase in crime levels, we realized that the tribal authority was not effective in combating crime, so we formed parallel structures such as Civic Organisation and the Community Policing Forum to assist the tribal authorities - Ntona and his councillors - in community matters" (Kolobe).

"The Civic organisation is very effective, particularly in dealing with crime. The only problem is that the police are so far away from the village...the civic is also concerned with issues of development in the community" (Phuti).

Innovation and industriousness

After settling at Calais village, there was much debate about establishing a school within the village. Once the school was established, it was appreciated by all, as can be observed from the following comment:

"education opened our eyes to other realities of life" (Phuti).

The establishment of the school was a milestone in the lives of the villagers whereby each family household contributed some money with which they bought planks and built two classrooms, which accommodated four classes (then standards 1, 2, 3 and 4). This was a mark of innovation and industriousness by a largely illiterate community. This is expressed in the following statements:

"we knew that education was the key to success, but we could not depend on the white government to provide us with a school. So we had to take the initiative as a community, two years after the removals, to build some kind of a shelter. This was a our first school" (Kgabo)

"we were so proud of ourselves. Our children could now learn, even though the classrooms were not enough. Some of the lower grades had their lessons under a tree" (Kolobe).

This was followed by the formation of a school committee whose function was to oversee the smooth running of the school. In 1985, the central government built a proper school, which replaced the old one. This sense of

industriousness was expressed by most of the participants in these or similar words:

"I suppose the government saw what we were capable of achieving from our own meagre resources and they built this beautiful school, fifteen years after our first school was built" (Monareng).

All the participants pointed to a rather disappointing event involving the principal who was found to have squandered the school fee fund for a period of about nine (9) years. He had been in sole control of the fund:

"This was a very sad event in the lives of the community. We were all so angry that after all our struggles, the principal could do something like that. We were all so poor and we didn't deserve that" (Phogole).

The suspicion arose when he built himself a huge house and people started asking questions. One participant made the following observation:

"when we saw him building himself a huge house, we became suspicious and we prompted the school committee to investigate. Of course, we were right. Although the principal was a feared man in the village, we instituted a case against him and he was tried and found guilty. That was a real achievement" (Tlou).

The principal was later indicted, tried and was found guilty by the central school governing body. He was asked to reimburse the money to the village community. This experience dampened people's efforts and for a while after the incident, there was general lethargy and lack of cooperation with the school committee. However, this changed afterwards as people began to take responsibility for the affairs of the village.

Community of practice

A very important inter-household strategy for livelihood security was that involving reciprocal labour relations. This was a mechanism developed during the times of subsistence living where it was commonplace for households to join efforts in groups locally called *letšema* in taking turns to work in each

other's fields. The reward was often in the form of traditional beer or $magewu^6$ at the end of work. As mentioned above, this exercise was reciprocal. All the participants cited this as a way of life among subsistence farmers in the olden days.

"this was our traditional way of life and many of us still practice this. It is a very efficient way of tackling a difficult task and, in those days, subsistence farming was difficult for some family households" (Monareng).

Another example of the community members drawing on social relations is the practice of traditional group savings (stokvel) for small-scale expenses. This had become a common practice among the women, in particular. It involves groups of women establishing group saving schemes to help one another in times of difficulties. Six of the participants confirmed being members of a stokvel.

Another long-term strategy of minimising risk and dealing with poverty was the formation of community support structures during times of deaths in families. It has become standard practice in the village that each household would contribute a log of wood (for fuel), a small bucket of maize meal (to feed those who come to the funeral), and a stipulated amount of money so as to help the bereaved family to meet the expenses of the funeral. This type of support structure is a practice that is unique to the Calais village and it is attributable to their situation of forced removals and the need for social cohesion among themselves. One participant expresses this in the following statement:

"the majority of us were poor, so we had to find ways to help each other to survive" (Tlou).

Migrant labour and reliance on wage labour

Migrant labour also emerged out of the need for income opportunities, particularly to mines in the South (mostly Gauteng area) and in Phalaborwa

⁶ Magewu is fermented soft porridge made from maize meal. It is either sweetened with sugar or drunk as is. It is a refreshing and nourishing drink, particularly for those who do not drink alcohol.

(in Limpopo). Five of the seven participants had a family member or more working in the mines.

"The Phalaborwa Mining Company (PMC) employed a lot of our men who continue to work there even up to today" (Tlou, Phuti, Kolobe).

This situation also had adverse effect on family life. Very often, unemployment or underemployment among resettled people often linger long after the actual physical relocation has occurred. As a result, many young men found themselves migrating in search of work. One participant observed:

"once a brother moves to Gauteng to seek employment, another sibling would follow and, before long, the entire nuclear family has migrated to the South, leaving the extended family behind" (Mokwena).

A shift in gender roles

One of the strategies employed by the resettled people was handling traditional gender roles more flexibly where women took a more active role in safeguarding the household, making decisions to increase food security in the absence of male household heads. This situation was brought about by various factors, including the migration of men in search of employment opportunities, or the absence of men in certain households. The two divorced participants were quite vocal on this point because theirs was an experiential situation:

"after my divorce, life was very difficult, I had to learn to take decisions which are normally taken by men. But I had to fend for my children" (Kolobe).

"I was lucky because I am a qualified teacher. When my husband divorced me, I didn't know how to proceed with life. But I made up my mind to care for my children as if their father was still around. This involved taking tough decisions such as getting policies for the children. I didn't know anything about such things — my husband took care of everything" (Kgabo).

Diversification of activities and household inputs

One of the most innovative adaptive strategies employed by the Calais community members is the diversification of activities and household inputs where different members of the family found different sources of food, fuel (firewood), cash and support in different ways at different times of the year. This was improvisation on the part of family members and it is explained as follows:

"as our situation changed, with no land for subsistence farming, we had to find other ways of generating income. It was just impossible to survive on the produce from our seasonal cropping alone" (Kgabo).

Being primarily an agricultural community, most households employed mixed-farming system (diversity of crops and mingling crop and livestock farming) until they were forcibly removed from their land. This mixing of crops allowed family households to generate enough crops for most of the year. The introduction of cash in their livelihood security necessitated diversification of household inputs, particularly in seeking other income generating strategies. Consequently, those who had the means established small income generating activities including spaza shops and cement brick-making schemes.

Pushing the boundaries set by governing authorities

Another strategy employed by the villagers was their persistence in pushing the boundaries set by the central government. They would identify vacant land, take control of it and divide it among themselves without seeking permission from the commissioner, until it was taken away from them for some other purpose, including the establishment of a cemetery. After purchasing the communal farm, which is beyond the river, some of the villagers decided to clear the land between the river and the farm for continued subsistence agriculture. One participant commented:

"we were no longer ruled by whites, so we were able to clear that land beyond the river to divide among ourselves" (Kgabo).

This behaviour of pushing boundaries continued throughout the transitions that the community underwent. It always involved the acquisition of land without asking the authorities for permission. This was due to their lack of understanding of the tenure system as outlined by the government.

While many of these strategies were viable for some families and households in the village, some were inaccessible to individuals and households due to the countless stratifications within the village, including different levels of poverty, educational status and family size.

4.7 Summary

This Chapter has presented the findings in the context of the research questions that guided the study. The Chapter gave a brief description of the socio-economic and cultural background of the participants by outlining their profiles with specific emphasis on their age, place of origin, gender, level of literacy and marital status.

Guided by a phenomenological method of study, this Chapter endeavoured to describe rather than explain the experiences of the sample participants representing the Calais community with a view to elicit learning opportunities presented by such experiences. Consequently, the different themes explored in this Chapter demonstrated the indigenous knowledge that exists within the community in terms of life experiences, coping with change, farming knowledge and making decisions to sustain life. These themes were discussed in such a way that the data spoke for itself.

Finally, the Chapter briefly discussed the challenges facing the rural community of Calais, which led to a decline in subsistence agriculture and concluded that subsistence farming now plays a complementary role in food security due to mitigating factors such as lack of rain and severe droughts. The next Chapter will analyse and discuss the findings in the light of the main objective of the study, namely, to explore the knowledge system of the rural community and enquire how such knowledge has been utilized in dealing with change. Pegged to this enquiry is the examination of what learning has occurred among the people of Calais village.

CHAPTER FIVE

DATA ANALYSIS AND DISCUSSIONS

5.1 Introduction

The previous Chapters introduced and oriented the reader to the subject of the study, its justification, the methods used, as well as the findings of the study. This Chapter serves to analyse and discuss the output with a view to interpreting the data in relation to the main questions of the study. Acknowledging, harnessing and validating indigenous knowledge systems as knowledge for making a living among rural, poor people depends on a broad understanding of its informal and experiential nature.

This Chapter maintains that whereas rural, poor communities' subsistence farming lifestyle has been affected by socio-economic changes, these communities possess indigenous, 'ready-to-use' knowledge and skills, which have been adapted to assist them in their struggle for survival and in achieving control of their own lives.

The Chapter is divided into three main parts. The first part examines and discusses the different sub-themes located within the broad themes and seeks to:

- I. Enquire what indigenous knowledge the community possessed.
- II. Enquire what learning has occurred from the key life events
- III. Discuss the effects of the key life events
- IV. Enquire what learning has occurred from coping and adaptive strategies

The second part analyses communal land ownership in relation to government's land reform programme. The third part discusses the transformational learning that has occurred among the inhabitants of the Calais community.

5.2 Discussion of The Knowledge Base of The Community

Indigenous farming knowledge

Traditional knowledge systems pertain to various cultural norms, social roles, or physical conditions because they are tuned to the needs of local people. By 'system' it is meant that indigenous or traditional knowledge is diversified and comprehensive (Rajasekaran, 1993) encompassing rural, poor people's ways of survival, of producing food, of providing for shelter or achieving control of their own lives.

Indigenous farming skills would include ways in which members of a society learn to mobilize and manage farming resources, in order to produce sustainable and evenly distributed improvements to their quality of life (Van Vlaenderen, 2000). It is hoped that a focus on the empirical and practical aspects of IK would help connect it to a context of landlessness, poverty and marginalization.

This Chapter has attempted to explore these varied ways in which rural people have adapted to changing environments, how they have used traditional processes to make decisions and how they have used indigenous farming skills in a changed agricultural environment.

As indigenous knowledge is context-based, the findings as outlined in Chapter Four situate it to a framework of landlessness, marginalization and poverty. The findings have identified traditional ways of preparing, cultivating, planting, weeding, harvesting and storing food, including appropriate and inappropriate technology for domestic use. According to the World Bank (1998), IK needs to be assessed in terms of its significance and relevance, (to solving one or several specific problems), reliability (not being an incidental occurrence), functionality (how well does it work), effectiveness and transferability.

However, it has already been established that the transfer of indigenous (agricultural) knowledge from one community to another may in most cases prove difficult (Rajasekaran, 1993; Haverkort, 1993; Odora Hoppers, 2002),

for instance, soil knowledge. This is because most IK is stored in tacit form, which in certain circumstances may make it transferable only through direct practice and apprenticeship. In Briggs' argument, the transfer of indigenous knowledge runs the risk of detaching it

From its cultural, livelihood and community contexts, the very things that helped to create indigenous knowledge in the first place, and hence, such a disembodied indigenous knowledge may end up by undermining the system itself (2005:110).

Proof of an efficient process at the point of origin does not necessarily ascertain its efficacy under seemingly similar conditions in other locations. In addition to this, the World Bank (1998) maintains that lessons from earlier transfers of modern as well as appropriate technologies indicate that the cultural, political, and economic environment and the level of technical competence of recipients are critical for sustainable adoption and adaptation of foreign technologies.

The central question still remains: Is indigenous farming knowledge still relevant in the lives of Calais inhabitants? The findings have elicited a wealth of farming knowledge embedded in the culture of the Calais community. Yet a critical question is: how have they utilized or adapted this knowledge in their current livelihood strategies, particularly in the commercial farm they purchased? The findings seem to suggest that most of this traditional farming knowledge was either lost or not transferred to the commercial farm. In spite of this lack of transferability of indigenous farming skills, it would be dangerous to generalize that no indigenous farming knowledge is operational at present.

There are indications that most of the community members, in their diversification of livelihood activities and household inputs, continue to practice small-scale, subsistence farming alongside other livelihood strategies. It is on their small plots of land that they plant seasonal crops such as maize, pumpkin and sweet potatoes where they utilize these indigenous farming skills. Generally, these farming skills have been used in a

subsistence economy where production of food was for family needs and not for the markets (Cutling and Saaiman, 1996). Therefore, the introduction of cash into their subsistence economy after the forced removals necessitated income generation as the major livelihood activity (migrant labour, creation of spaza shops and farm work). This caused a decline in subsistence farming, and along with it, some of the indigenous farming skills.

There are other factors that militate against the significance and relevance, reliability, functionality and effectiveness of the indigenous farming knowledge of the Calais community in their dual economy (subsistence and commercial). The duality of the economy has already been alluded to in the background of the study in Chapter One. Some of the militating factors include:

- Low value of subsistence farming in a commercial economy: while straddling two types of economies is a livelihood strategy that the community has adopted, it has become necessary to prioritize income generation so as to access other essential household goods. This has relegated indigenous farming to a secondary level.
- Conflicting interests on the use of communally owned, commercial farm: it was mentioned in Chapter One that the commercial farm is 450 hectares, with 220 ha of fruit plantation and 180 ha of open land, yet only 2 ha is utilized for crop production. As the findings indicate, there are conflicting ideas on how the commercial farm should be used, with some people wanting it to be subdivided among the villagers to facilitate both subsistence and commercial farming, while others insist on its continued commercial use. One perceived problem is lack of leadership capacity to tackle the managerial problems on the commercial farm, which has led to its collapse. Therefore, realistically, people are still landless apart from their small plots of residential land where they practice seasonal cropping.
- Drought: It appears that most of Limpopo province has experienced severe, persistent drought which has, to a large extent, discouraged subsistence agriculture. Due to a lack of irrigation infrastructure, most of the subsistence farmers had no way of dealing with drought. This necessitated alternative approaches to sustaining their livelihoods.
- Shortage of labour: as already discussed, subsistence farming also depended on reciprocal labour relations where the villagers formed a community of practice by mutually helping one other in various ways. As Watts (2003) argues, such interdependent strategies are eroded by increased individualism and competition for resources among the villagers. This has also minimized indigenous, subsistence farming at

Calais, as a result, diminished the use of indigenous farming knowledge.

It is the contention of this study that there is a wealth of indigenous farming knowledge that exist, along with other life sustaining mechanisms among the inhabitants of Calais village in their daily endeavour to make a living. However, this knowledge may not be altogether relevant to their current socioeconomic situation where cash is uppermost in sustaining livelihoods.

It has been argued that learning is a social as well as an individual activity because we learn from and alongside other people in all our social relationships. It has also been maintained that learning does not only consist of an extant body of knowledge to be taught and learned, but that there is autonomous learning that occurs throughout life and influenced by particular social settings and cultures. Based on lived experience, knowledge is always constructed in the taken-for-granted activities, perceptions and norms, and it is always contextual. 'Experience' in this study denotes not single episodes or incidents, but refers to an accumulated learning from a series of episodes. In the light of this, this section examines the autonomous learning that occurred outside the formal schooling system such as informal settings, life experiences and social context of the Calais community in relation.

Traditional decision-making processes

Decision-making entails how members of a society learn to mobilize and manage resources, in order to survive. In the case of Calais village we explore indigenous decision-making processes.

Structure of the tribal authority and how decisions are made

It has already been established that the tribal authority consisted of a hierarchical structure with the *Ntona*, as the traditional leader, presiding officer of the tribal authority, and second in command to the chief. Next came the councillors, locally known as balata. The court messenger also formed part of this hierarchical structure with a few more elderly men from the village as additional members of the *kgoro*. Later a second level structure (community

policing forum and civic organisation) was formed whose chief function was to assist the community in dealing with crime.

It was this structure that made decisions that mobilized, unified and helped the community members build a sense of cohesion. In discussing the lessons implicit in traditional decision-making processes, it is important to gauge the efficacy of such indigenous processes by what has already been achieved. As mentioned in the findings, the community organised itself through the tribal structure explained above. Secondly, decisions are carried out though the traditional deliberations within community gatherings (*lekgotla*) and in court hearing (*kgoro*). A closer look at the coping and adaptive strategies show that these mechanisms of dialogue and decision-making have influenced many decisions in the community and have contributed to the building of community structures. This is supported by Kilpatrick and Falk (2003: 503) in saying that

Networks and norms that allow people to act collectively are significant components of social capital. Community social infrastructure – in particular, organisations structures, rules and procedures, opportunities for meeting and human infrastructure – influences the effectiveness and efficiency of networks and associated norms... and increase the range of knowledge, skills, and expertise

However, Scotney Watts (2003: 346) is critical of traditional decision-making structures and argues that their effectiveness has generally waned throughout Africa due to illicit behaviour of traditional chiefs. Kilpatrick and Falk (2003: 504) also caution that "the capacity of social groups to act in their collective interest depends on the quality of the formal institution under which they operate". Thus, as the findings indicate, if the traditional structures are not transformed to "represent the interests of all stakeholders" (Kilpatrick and Falk, 2003: 504), they would legitimate the injustice and inequality that are inherent in such structures of power.

The above arguments point to the problematic nature of traditional institutions of governance. On the one hand they foster and develop shared values, norms, vision and community identity; while on the other, they have the

propensity to hinder creativity and freedom of choice and speech. This has already been discussed under gender inequality where voices of women, young people and uncircumcised men are drowned as they cannot partake in community deliberations.

In addition to the above, traditional institutions are inherently oppressive, as by their very nature, do not encourage creativity and freedom of speech for some people. In following Inglis' (1997: 5) definition of empowerment involving "expressing oneself and saying what one feels, likes, thinks, and wants", it cannot be said that traditional structures of leadership are sites of emancipation and transformation. Inglis views emancipation as concerned with critical analysis, resistance and challenging structures of power (1997: 4).

Learning from decision-making processes

Indigenous knowledge proponents say that learning is a social process embedded in the cultural as well as the interpersonal relationships that form the context in which it occurs (Ssekamwa, 1999 and Omolwa et al, 1998). Without these traditional mechanisms of carrying out decisions, rural communities run the risk of losing their identity and cultural heritage, hence one participant was heard saying "those are our ways". This is further expounded by Boud, Cohen and Walker in their proposition that learners actively construct their experience, uniquely influenced by their past. This denotes

the cumulative effects of learners' personal and cultural history: the influences of the events in their lives which have helped form the way they are now and their responses to the world (1993:11).

From a transformational learning perspective, traditional decision-making processes employ dialogue and reflection, two central aspects of transformational learning. While such traditional processes are not immune to some of the patriarchal injustices inherent in traditional societies, including the marginalization of women, they nevertheless, afford the community with tools for preserving cultural identities by tapping collective experience to arrive at a tentative best judgement (Mezirow, 2000).

5.3 Major Events Which Changed The Community's Way of Life

Forced relocations

The study takes place against the backdrop of forced removals. As discussed in Chapter One, during the 1960s, 1970s and early 1980s, the government implemented a policy of 'resettlement', to force non-whites to move to government-specified areas (Hall, 2004). According to the International Centre for development Oriented Research (ICRA, 2004), these resettlements were justified by the Bantu Homelands Citizen Act of 1970 and the Bantu Laws Act of 1972, which allowed for non-whites to be removed from where they lived without any recourse to parliament. The forced removal of Africans from their traditionally owned land through racially-motivated laws created a reserve of cheap labour. It comes as no surprise that all the participants cited the forced removals as an experience that had a severe impact on their lives. Cernea (2000) also argues that in any given situation, forced removals and resettlements carry severe risks of impoverishing the uprooted people, particularly when many of them have been very poor even before they were displaced. According to the Asian Development Bank (ADB, 2000), such involuntary resettlements cause people to lose capital in all its forms: natural capital, human-made capital, human capital and social capital.

There are various causes of forced removals. Very often, they result from the need to build infrastructure. In the case of the Calais community, the people were moved to make way for a nature reserve. However, Head and Cernea (2000) argue that the main socio-economic concerns in any forced resettlement operations should revolve around the reduction of risks and restoring the displaced people's livelihoods. This did not happen among the people of Calais. It would seem therefore, that the lack of intervention by government in minimising risk among the Calais settlers demonstrates government's deliberate strategy to expose people to more risk by not protecting their livelihoods. The placement of the community members on a village that is surrounded by farms further demonstrates the hidden agenda of providing cheap labour for the farmers. This point is argued further by the Human Rights Watch in maintaining that:

Progressively, the Apartheid government attempted to prevent Africans from farming in their own right and to force them into cash employment only... In addition, there are few alternative employment opportunities in rural areas, including the former homelands, which are also largely deprived of municipal services and support systems (2004)

The stories that were told indicate the inhumane manner in which the Calais residents were treated firstly; by uprooting them from their subsistence land and secondly, by taking away their livelihood activities without providing an alternative means of survival. Among rural people, the suitability of land for growing crops and for cattle grazing determined where people settled. As mentioned in Chapter One, this subsistence means of living often meant that few families would settle on a sizeable piece land in order to have ample farming and grazing land. However, the forced removals destroyed this way of life.

Purchase of a communal farm

The purchase of a communal farm occurred after the democratic changes in 1998, against the backdrop of the government's land reform programme. The historical development of the land reform programme was discussed in Chapter Two, section 2.2. The findings suggest that the indigenous knowledge base was either not enough or was unsuitable for the management of a commercial farm as it has now declined in production. Scotney Watts (2003) argues that common resources, such as communal land should be brought under more formal management. He cites the lack of state-community partnership in the management of communal land as contributing to land degradation. He argues that the state should play an advisory role and maintain law enforcement while the community undertakes the day-to-day management of such communal areas of land.

However, as elicited from the findings, the participants observed the lack of managerial skills as having contributed to the decline of production on the farm. While the community had a rich indigenous knowledge base, it became obsolete when they were confronted with a commercial farm. It should also

be noted that the management and cultivation of the communal farm did not involve many of the community members.

A mere look at the transitions within Calais village makes one wonder how a largely illiterate community chose to purchase and manage a commercial farm when its knowledge base has been indigenous in nature, geared towards "the creation, recreation and maintenance of immediate life" (Mies and Bennholdt-Thomsen, 1999: 20). In addition, Watts (2003: 346) argues that

Communal resources – both under the state and customary systems – are inappropriate for profit-based conservation of land resources.

He further argues that :

rural, communal dwellers are poorly organised - their ability to take collective responsibility for sustainable management of land resources, and in regulating access and use, is limited (2003: 248).

Therefore, central to this discussion is that despite government policy, the communal system of ownership lacks practical mechanisms for regulating and managing communally owned land (be it for food production or forestry), particularly in traditional institutions of governance. For instance, there appear to have been no mechanism to distribute benefits that accrued from the commercial products of the communal farm at Calais. This is clear from the participants' comments and observations. Once again, as with the apartheid government's lack of risk management during and after the forced removals, in places where the Land Redistribution for Agricultural Development (LRAD) programme has been implemented, there was a lack of post-settlement/acquisition support by government (Hall, 2004). This point is clarified by Ruth Hall, in saying:

Although there was a trilateral agreement on post-settlement support between the Commission on the Restitution of Land Rights (CRLR), the Land Bank and the National Development Agency in 2002... in practice, neither institution is contributing to restitution at the moment (2004: 19).

It would seem that the land reform programme tries to create a black commercial farming class with no theoretical or commercial knowledge of farming. The Calais community recognised the need for skill acquisition and they had the farm manager sent to an agricultural college, yet this effort was in vain when he failed and was expelled from the college.

The LRAD programme has an inherent problem in that it only deals with land for agricultural purposes. With LRAD having become the main form of land redistribution,

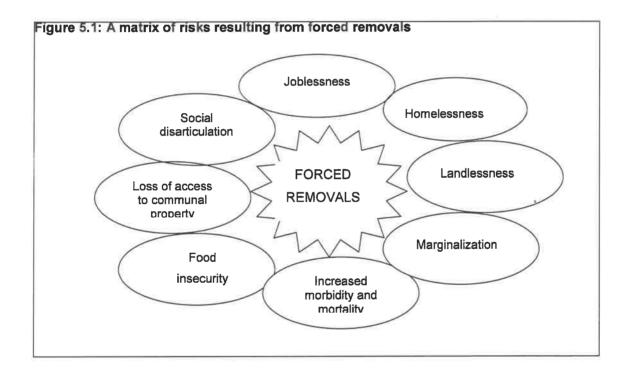
There is now, no programme geared towards those interested in non-commercial farming, or to those not interested in farming (Hall, 2004: 32).

Some of the participants of the study expressed their disappointment at the purchase of the farm and how they did not benefit from the community's joint venture. It would seem that there is a need for a viable programme for those wanting land for a combination of uses, which would allow rural and illiterate communities such as Calais to combine commercial and subsistence farming. One therefore, wonders, how much of these intricacies are known by the ordinary members of Calais village who supposedly own the farm?

On the other hand, there is nothing that prevents the community members at Calais to exercise their decision-making strategies to utilise the communal land for a combination of uses, including both commercial and subsistence farming. A binary fusion of subsistence and commercial farming would have probably provided an opportunity for community members to implement such indigenous farming skills and practices while learning commercial farming at the same time. However, the findings from the participants indicate that they learned the value of cooperation despite the failure of the communal farm to thrive. The community also learned democracy by acting democratically in their deliberations to purchase the farm despite the apparent lack of agreement among community members and the resultant failure of the farm to be productive.

5.4 Emerging Themes From The Major Events

As the findings in Chapter Four demonstrated, the forced removals had an adverse impact on the villagers and this triggered other risk factors, which are attributable to most situations of forced relocations. The Asian Development Bank (1999) outlines eight risk factors that are characteristic of forced removals, most of which have been identified by the participants of the study. Figure 5.1 below shows a matrix of risks, which summarizes the effects of forced removals among resettled people.



Poverty

There is a sense that all the findings link to the issue of poverty. The concept of poverty, as described in Chapter One, is viewed by Chambers (1994) not as an isolated entity, but rather as a condition in which a number of component parts are linked: poverty itself, physical weakness, isolation, vulnerability and powerlessness. The Asian Development Bank (1999) further defines poverty as "a deprivation of essential assets and opportunities to which every human is entitled". Viewed in this way, impoverishment is identified not only in terms of income, but also in terms of employment opportunities, health care, nutrition, food security, shelter and social capital.

The participants themselves cited poverty as a central theme and a major shock from which it was difficult to recover because they were defenceless, insecure and exposed to risk, shocks and stress for a long period of time.

Cernea (2000) argues that fighting poverty has two sides: reducing the poverty that already exists, and preventing the onset of new causes of impoverishment. He therefore argues that intervention measures need to take cognisance of this double-edged nature of poverty. Among these, the ADB's strategy for fighting poverty calls for "using new tools to make antipoverty operations more effective" (ADB, 1999). However, it would appear from the findings that no "tools" were ever implemented in fighting poverty. The promises that central government made were never realised, except for supplying the villagers with running water (a single water pipeline) and some toilets at the resettlement area and a school that was built 7years after the forced relocations took place.

Therefore, their impoverishment has to be understood in recognizing the processes that contributed to their poverty, i.e. lack of access to options and entitlements, which were social, political, economic, cultural and environmental (Singh and Titi, 1994). The comment "we were so poor...we could have eaten each other alive" communicates a sense of desperation from the lack of options of making a living. As the findings demonstrate, some households had to resize their family units by sending some of the children to reside with wealthier relatives elsewhere. This was a serious situation for families to relocate some of their children. Due to such high levels of poverty among the Calais people, their livelihood system could not be said to be sustainable.

Some adaptive and coping strategies have been identified among the community members and their reaction to poverty is characterized by high resilience and sensitivity, although they found it difficult to deal with contingencies, uncertainty and stress. During the time of the forced removals, the community did not have any safety nets to cope with the effects of the forced relocations. The fact that they survived this impoverishment at all is

indicative of their enduring tenacity in the face of strife. Yet the community members had no choice but to live with the harsh conditions.

Loss of means of livelihoods

The concept of livelihoods implies a dynamic process by which mainly rural households and communities rearrange their resources and activities to make a living. According to the Department for International Development (DFID), livelihoods are defined as comprising:

The capabilities, assets including both material and social resources, and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resources base (2001: 1).

As can be gleaned from the findings, the villagers' means of livelihoods included farming and grazing land, and labour tenancy, whereby they were partly paid by the right to grow their own crops on the farms. Therefore, the villagers' livelihood means encompassed these resources and activities. The forced removals effectively destroyed all their means of subsistence.

Land is an important natural asset for both urban and rural dwellers. Cernea (2000) argues that the expropriation of land removes the main foundation on which many people build their productive systems, commercial activities, and livelihoods. The removal of the people from The Downs and Ofcolaco areas from their subsistence land took away this asset and both their natural (land, water, forests) and human made capital (skills, knowledge of their land, good health) were lost. Very often, land is lost forever; sometimes it is partially replaced or compensated. In the case of Calais villagers, land was only partially replaced by the small residential plots of land that were allocated to them. As mentioned before, they also have a commercial farm that they own collectively. This was discussed as one of the major events, which changed the community's way of life.

While the Calais people practiced to a subsistence economy, there were among them those who worked on the neighbouring farms as labour tenants.

Their stay on such farms depended on relationships of working for a cash wage or as labour tenants. Usually, the arrangement was that they would partly be paid by the right to grow their own crops on the farm (Human Rights Watch, 2004). Progressively, however, the Apartheid government attempted to prevent black people from farming in their own right and to force them into cash employment only. Therefore, the forced removals rendered these people jobless, for as Head and Cernea (2000: 257) maintain, "unemployment or underemployment among resettled people often linger for a long time after the physical relocation has taken place". This is true of the Calais settlers. Their intermittent annexation of available land around them only points to the centrality of land as a means of survival among rural, subsistence communities.

Landloss, Homeloss and Homelessness

Another theme that emerged from the findings, triggered by the forced removals, was the loss of housing and shelter. Homelessness may be temporary for many resettled people. For some it remains a persistent condition and is usually felt as a loss of identity and culture. The people from The Downs had to send some of their family members to reside with wealthier distant relatives. This had consequences for family cohesion and mutual help patterns, particularly when family members needed one another to initiate new livelihood activities in the new settlements.

There is a clear interdependence between land and housing. Housing is usually dependent on the availability of land. Therefore, there should have been a measure of government multi-faceted intervention in assisting the poor people's livelihoods, as the Asian Development Bank suggests:

The interlocked risks inherent in displacement can be controlled most effectively when governments adopt broad national policies for risk reversals and safety nets. Single means — i.e. cash compensation alone — cannot respond to all risks. Asset compensation alone is not a substitute for the absence of multi-dimensional risk-reduction strategies (ADB, 2001).

While the villagers themselves developed their own coping and adaptive strategies, there is always a need for external intervention to reduce risks. According to the Impoverishment Risks and Reconstruction (IRR) model (Cernea, 1997), risk reduction strategies should operate on three levels, namely; prevention, mitigation and coping. Risk prevention involves measures to be implemented before potential risk becomes a reality. Secondly, risk mitigation denotes measures to reduce risks that cannot be fully prevented, such as landlessness and homelessness. Thirdly, risk coping, which involves measures to overcome the adverse effects of risks after they have occurred.

The findings demonstrate that there was very little government intervention in reducing the risks associated with resettlement of people.

Loss of economic power

As it was already mentioned above, the forced removals meant that families lost economic power when they were relocated and this relegated them to lower socio-economic conditions. Those who had livestock had to sell them or give away and this resulted in their falling below poverty thresholds. They were thus marginalized.

The theme regarding the introduction of cash into a subsistence economy emerged out of the stories told by both groups of The Downs and Ofcolaco. Both groups felt that their resettlement at Calais village required them to earn money in order to buy some of the commodities which they received freely before. It should be understood that Calais village was isolated from all amenities: no public transport system, no access to primary health care and the commissioner's office was about 50 kilometres away – their only lifeline in times of crisis. Therefore, the introduction of cost in their livelihoods necessitated urban migration and farm work as the only outlets of generating income. Even so, there were some who steadfastly refused to work on the farms.

The economic situation of the period also contributed to the need for income generation over the years: increasing unemployment for black people

throughout the province prompted young men to migrate to other provinces. The decline in subsistence farming due to lack of adequate seasonal rains led to drought and people had to find alternative ways of making a living. "The subsistence perspective depends not on money, education, status or prestige, but primarily on control over the means of subsistence" (Bennholdt-Thomsen and Mies, 2000:10). The one contributing factor to the total loss of subsistence means is the role of government's hidden agenda in stripping people of their only means of survival, thereby coercing them into providing cheap labour to the surrounding farms.

A careful observation of the participants' stories reveals that they were helpless, vulnerable and marginalized. Yet the only form of protest from some of the community members to such injustice was passive reaction, i.e. the refusal to work on the farms. One wonders whether more couldn't have been done to communicate their grievances against such inhumane treatment. There is a sense in which their respect for authority (white rule) could be seen as excessive. Phogole, a participant, recalls how "they 'worshipped' the commissioner whenever he visited the village" and how they were "silent when asked to present their grievances to the commissioner". Bennholdt-Thomsen and Mies are critical of such behaviour in the following argument:

...People, particularly women, should stop devaluing their own work, culture and power – and stop expecting the good life to be handed down to them by those 'on top'. This devaluation of one's own is a consequence of forced colonisation and degradation, and it has been internalised by all colonised people, including women (2000: 10).

On the other hand, the apartheid era, with its oppressive structures, rendered most black South Africans – particularly the rural poor – helpless and incapacitated. However, Phogole's remark demonstrates a critical review of past experiences and indicates a transformation of perspective in his worldview as Mezirow (1996) argued. He said that it is through critical self-reflection that learners reach the point where they question their 'taken-forgranted world view'. However, as a collective entity, the community seems to have failed to even air their concerns when opportunities presented themselves (such as meeting with the commissioner).

Traditional belief system challenged by the new situation

Lee and Smagorinsky (2000) maintain that learning is mediated first on the inter-psychological plane between a person and other people and their cultural artefacts; and then appropriated by individuals on the intra-psychological plane. Traditional beliefs, norms and values are orally transmitted and also appropriated by individuals in a community as they mould people's identity and culture.

The traditional beliefs in rural communities, as cited in the findings, include the general lower status of women and girls, who are denied the right to education, and witchcraft, which is associated with any malady that is inexplicable. Such beliefs have the propensity to paralyse people's rational capacity and stifle their growth. These beliefs are the lenses through which traditional people view their reality. This is demonstrated in Cranton's description:

Experiences are filtered through our meaning perspectives, which for most of us are uncritical assimilated ways of knowing, believing, feeling. They include distortions, prejudices, stereotypes, social context, and lack of knowledge. (1994: 27).

It is therefore, noteworthy that some of the participants were critical of witchcraft or the belief thereof, citing the divisions such beliefs brought into the community. This transformation of their meaning perspectives is what Mezirow (1991) sees as

The emancipatory process of becoming critically aware of how and why the structure of psycho-cultural assumptions has come to constrain the way we see ourselves and our relationships, reconstituting this structure to permit a more inclusive and discriminating integration of experience and acting upon these new understandings (cited in Newman, 1993:171).

It would appear therefore, that some change of perspective occurred among some of the participants. This is demonstrated by their evaluation of the HIV/AIDS pandemic in their community even though there has never been an active education on prevention, care and treatment of the disease. The

woman whose changed perspective of "education-for-boys-only" also decided to send her girls to school, thus acting on her new understanding of reality.

Beliefs such as those mentioned above act as a hindrance to growth and transformation, whereas, according to Mezirow's perspective transformation (2000), the final phase in the process of transformation, involves learners taking action on the new perspectives. This implies that they not only see, but also live the new perspective (Baumgartner, 2001).

Innovation and Industriousness amidst social disarticulation

Forced resettlements often result in the dismantling of community structures, social organization and local associations, whereby many informal and formal networks get dispersed. This results in a massive loss of social capital, which is often taken for granted. Social capital is simply defined as:

"The norms and networks that enable people to act collectively. It is a set of resources that resides in the relationships among people and allows them to share their knowledge and skills, or human capital" (Kilpatrick and Falk, 2003: 501).

In the findings, two groups of people with different worldviews and background were just thrown together and expected to carry on with life. This presented difficulties in their inter-personal relationships as demonstrated in one of the participant's comment: "it is always difficult to start life anew with different people" (Phuti). Such social disarticulation, as mentioned in Chapter Four, often affects people's livelihoods in ways that are not easily recognizable. For example, it cannot be taken for granted that people who speak the same language would easily form a unified community whose members share resources and livelihoods. On the contrary, village communities are "highly heterogeneous, factional and stratified" (Watts, 2003: 347). This encourages competition and struggle for the limited resources available. In some cases, this leads to avoidant strategies of coping including excessive drinking, as cited in the findings.

Yet, over time, there was marked innovation and industriousness among the resettled people. As Head and Cernea (2000) argue, the intensity and

severity of the risks associated with forced relocations tend to prompt people to rethink their roles and find new ways of being and of acting. This is how adults learn. The community members, two years after resettling, managed to re-establish their social capital by building a school, establish a school committee, and undertook punitive measures against a member of the community who defrauded the school. These social organizations included cultural and aesthetic groups, which helped them to restore, reproduce and re-invent their identities through poetry, dance and song. Alongside this, the community was able to form a community policing forum and a civic organisation, which provided another platform for discussion and decision-making. This is another aspect of informal learning that comprises learning from other people and from personal experience, and through participation in an aspect of social life such as community activities (McGiveney, 1999; Boud, Cohen and Walker, 1993). It is also a dimension of transformational learning where community members engage in dialogue to learn from one another.

5.5 Coping and Adaptive Strategies

The coping and adaptive strategies that were outlined in Chapter Four serve to express or communicate the complexity of village dynamics, particularly the interaction of livelihood systems among households. They are short (coping) and long-term (adaptive) mechanisms that the community members have developed to cope with or adjust to the changes in the course of the transitions. It is worth mentioning that strategies adopted by individual households are not necessarily homogeneous across the village; instead different individuals, households and village groups participate in and adopt different strategies to minimise risk, cope with change and increase food security.

Some of the adaptive skills of the community members were derived from years of experience, which have often been communicated through "oral traditions" and learned by family members over generations. Furthermore, coping and adaptive strategies constitute really useful knowledge that is geared towards making a living. Perhaps this is the crux of the matter

regarding learning and education in adult education and training. Most people, including the participants in this research, still equate learning with formal education and training, and assume that working and learning are two separate activities that never overlap (Eraut, 2004). The findings demonstrated the opposite, i.e. most knowledge that is created is experiential and is related to decision-making, to meaning making and to life's complexities in general.

Establishment of a traditional governing structure

Traditional, local authorities rely on indigenous, customary laws to resolve conflicts arising from various difficulties including competing claims to land, household disputes and the general well being of the village community. After the forced removals, the cohesion that was needed for self-defence collapsed and individualism began to set in, as there was no unifying local authority. In addition to this, Watts (2003: 347) maintains that

Changes in economic relations and in power structures generate changing needs for property rights and the institutions to regulate or enforce them.

The community therefore, learned that in electing a headman and tribal council, they were creating a long-term strategy of giving the community identity and a sense of cohesion. This was the re-establishment of social capital, which strengthens knowledge and identity resources among feuding groups. Kilpatrick and Falk (2003: 507) maintain that the interactions among such groups

Increase people's confidence to act for the benefit of the community and its members, develop shared values and build a commitment to members of the community and the community as a whole... as people got to know each other, they developed a sense of belonging, and a sense that all group members could make valued contributions.

As rural communities are heavily reliant on agriculture, it is no surprise that, as the findings show; most of the disputes were around issues of land. Therefore, the establishment of a governing structure helped the community

to re-establish and reinvent their identity in relation to other village communities around them. A community with no ruler (chief or headman) is a laughing stock among other village communities for it is regarded as cultureless and lacking historical heritage as most villages are named after the local chief. Learning through trial and error and from life experiences "assists people to receive, decode and understand information, and hence make better decisions" (Kilpatrick and Falk, 2003:502).

A constructivist view of learning holds that exploring others' values and attitudes assists in changing one's own values and attitudes. The traditional processes of community gatherings (*lekgotla*) and court hearings (*kgoro*), which are part of the governing structure, have influenced many decisions of the community, including building a school, dealing with challenges of land allocation and access, reinforcing harmony and collaboration among the two resettled groups, and in later years, purchasing a commercial farm. Seen in this way, the collective or group learning that has occurred within the community is "learning which is more than the sum of the individual learning of the members of the group...it is a mutual, proactive process" (Jarvis, Holford and Griffin, 2003: 51).

Community of practice

The resettled community also established adaptive strategies of cooperation on various levels. A very important inter-household strategy for livelihood security is that involving reciprocal labour relations. Women created reciprocal groups during the subsistence farming period, whereby labour was divided and shared in such a way that they all benefited. Examples cited in the findings such as stokvels and community groups, which served as shock absorbers in times of strife and risk emanated from such cooperation. In communities characterized by vulnerability, this was a very important function that established and strengthened fallback positions in times of stress, thus making households more resilient. As a community, they learned to face challenges together, including the identification of land.

These social relations cited in the findings also strengthen community bonds and help form what Lave and Wenger (1991) have termed "communities of practice." Merriam (2004: 210) defines community of practice as "groups of people who share insights and ideas and who help one another solve problems and develop a common practice". Reliance upon social relations also fosters communal meaning making. This is supported by Wenger (1998) in saying that belonging to such a community:

Involves a learning process, a form of collective meaning making – of interpreting, acting, and reflecting on action. Meanings are negotiated through participation in the community. Communities of practice can be considered shared histories of learning (cited in Merriam, 2004: 210).

The above description helps to view Calais village as a territory of people with close-knit relationships, sharing social activities, feelings and a sense of solidarity (Clark, 1987). The type of learning that occurs in communities of practice is in contrast to Mezirow's transformational learning, which focuses on individual transformation. Collard and Law (1989) critiqued Mezirow's transformational theory of learning in that it played down the importance of collective social action and that it never went beyond the individual learner. However, this study takes place within the background of informal settings that are unplanned and informal and looks rather at how individuals in a community have learned to adapt and cope with socio-cultural and political changes in their lives.

Migrant labour and reliance on wage labour

As already discussed above, among some of the consequences of forced removals was food insecurity and lack of resources in the new settlement area. It was also mentioned that forced uprooting diminished self-sufficiency and dismantles local arrangements for food supply (Head and Cornea, 2000).

Households in communities such as Calais, which have a lack of assets (in terms of land and livestock), are most likely the poorest, and possibly the most vulnerable. The decision by some members to go in search of work was a direct response to diversify households' sources of livelihood. As the

findings demonstrate, most young men migrated South in search of job opportunities. The findings further show that migrant labour has disintegrated family life where women and children remain in the village while husbands and brothers spend most of the time away as migrant workers.

However, this situation of migrant labour is not unique to the area of the study. As discussed in Chapter One, 90 % of the population in the province lives in rural areas with the major economic force being agriculture (Hall, 2004; Ramatlhodi, 1999). Migrant labour and farm wage remittances have therefore become a new and increasingly important livelihood strategy for most households.

Gender

Gender is the most acutely noticeable area of social inequality, particularly among traditional societies. Feminist and gender studies (Cunningham, 1992; Hart, 1990) have highlighted the plight of women in our society with regard to resource distribution and access to services. In this section, gender shall be discussed on two levels: shifting gender roles as a coping strategy, and gender inequality in traditional decision-making processes.

Some of the coping and adaptive strategies, such as those cited by the two widows in the study, are gender-specific (Titi and Singh, 1994). Examples of such gender specific strategies are women's labour in collecting fuel wood, establishing reciprocal labour relations and practicing traditional group savings. However, an interesting coping strategy is that of shifting gender roles where women assume roles which would have been performed by men in order to maintain or enhance their livelihoods, particularly in contexts where men are simply absent and cannot execute these roles.

Mezirow's critics have argued that the transformational theory does not show explicitly the role of power or dominance in the transformation process (Baumgartner, 2001, Inglis, 1997). At the centre of gender roles and inequalities lies the issue of power, which disempowers women and young people. Inglis (1997: 7) therefore argues that power should be articulated:

By laying bare its features and by announcing the various strategies and tactics through which it is exercised...to know and understand power and to see how it operates in heir lives.

In a situation of gender inequality, there is always an element of disempowerment as those with greater prestige, honour and respect acquire powerful positions and status while those without remain powerless. It is interesting to note that even those shifting gender roles cited by the women were issues of dependency and dominance (by the male). Newman (1993: 174) argued that among those who experience a disorienting dilemma such as the death of a breadwinner (husband):

Some may have experienced a breakdown, or developed an almost pathological blindness to allow them to continue functioning in the culturally induced dependency roles without breaking down.

Therefore, a woman who loses her livelihood activity through forced displacement suffers severely when she also loses a husband who is often the sole provider. This was evident in the life of the woman whose husband divorced her shortly after the forced removals. For her, the impact of risk was doubled. However, it would seem that even though there is a shift in gender roles, where some women take lead in making life-changing decisions for their families, there is still the danger of simply equating maleness with decision-making.

Another issue of gender is the inequalities embedded in tribal systems where women are often discriminated against and disadvantaged. The lower status of women is a dominant feature among the rural people of Calais village, particularly in situations of taking corporate decisions. This study found that women suffered the impact of displacement more severely than men because often they are in dependency relationships. The situation is worsened by gendered roles and accepted norms and practices which privilege men and marginalize women. Mezirow does agree that:

There are social practices and institutions, which also oppress others as well by legitimising and applying sanctions to support

distorted belief systems – ideologies which may be social, political, economic, occupational, educational, religious or technological (1993: 172).

Rural, subsistence communities though heavily characterized by women's unrecognised labour at home - cultivating the land and rearing children - are still male centred in that men are often the providers of household food and security.

Therefore, power relations and group dynamics have influence on how rural people think, act and view themselves. It would be misleading to think that a community is a homogeneous entity and that in Calais, the impact of risk was felt equally by all members of the community. Though communities of practice exist in the community, the findings regarding decision-making show that the community is made up of different interest groups. Women constitute a different interest group, one of lower status. Therefore, the impact of forced removals was felt severely by women who are often marginalized and vulnerable even before the risks of resettlement and loss of the means of subsistence. The lower status of women is exacerbated and maintained by the social inequalities, which privilege men and marginalize women and young people. While women bear the load of subsistence work they are, however, accorded a lower status than men.

Diversification of activities and household inputs

This is a coping strategy that is interlinked with the one of migrant labour above. Most households employed mixed-farming system (diversity of crops and mingling crop and livestock farming) until the forced removals. The mixing of crops allowed families to generate enough crops for most of the year. The introduction of cash in their livelihood activities necessitated diversifying household inputs, particularly in seeking other income generating strategies.

Diversification of multiple activities is a key dimension of livelihood security. All seven participants mentioned that they were engaged in multiple activities that secured diverse sources of household inputs and regularly brought either food (fruit and vegetables from the farms), income or other inputs into the household. This is what Chambers (1994: 17) describes as:

a diversified portfolio of activities with different members of the family seeking and finding different sources of food, fuel, animal fodder, cash and support in different ways in different places at different times of the year. Their living is improvised and sustained through their livelihood capabilities, through tangible assets in the form of stores and resources...

This system of diversifying activities and inputs adds to the resilience of the community in the face of strife. Woven into these activities and inputs are daily subsistence activities - particularly of women – including the collection of firewood, caring for families, and season-specific, agricultural activities of planting, weeding and harvesting. Through these diverse activities, people interact with one another in mutual dialogue, thus developing and maintaining important social relations. It is through these interactions that villagers "become possessors of many livelihood skills and develop intimate knowledge of the natural resources on which they depend" (Ham, 1998).

Learning from coping and adaptive strategies

The findings demonstrated that strategies adopted by households and families are not homogeneous across the village. Different individuals, households and groups participate in and adopt different strategies for different situations. They also showed that a village does not have one adaptive strategy to use when reacting to change and attempting to mitigate vulnerability; instead, there are a number of strategies, both long and short-term, that constitute a bundle of options in reacting to the forced removals and all resultant risks.

It must be mentioned that such a complexity is significant for the formulation of policy, whether by development agencies or by government ministries. In this case, policies should be put in place to support and reinforce rather than negate the already-established-strategies which have the capacity to contribute to the achievement of sustainable livelihoods. Furthermore, it needs to be acknowledged that these strategies represent people's own

indigenous responses to the numerous vulnerabilities within the framework of forced resettlements.

5.6 What Transformational Learning Has Occurred In The Community?

Transformational learning and indigenous knowledge were identified as the theoretical basis for this study. Of particular interest to the study were three elements, namely; experience, critical reflection and dialogue, which characterize both transformational learning and indigenous knowledge. In looking at the findings of the study, particularly the participants themselves, there was a realization that learning is actually the process of making sense of our experiences. As Mezirow (2000) argued, to make sense of our experiences, we need to make a change in one of our belief or attitudes or in our entire perspective. The lenses through which we make sense of the world or reality, is key to our own transformation and that of the community. However, questions such as whether personal transformation can lead to social change have already been responded to in discussing the role of power in traditional decision-making processes.

The objective of this study was to explore the various experiences that the Calais community has undergone and to enquire what learning opportunities such experiences presented them. The underlying principle was that regardless of the nature of the experiences, they shape the way individuals understand the world around them, the assumptions they make, the beliefs they hold, and the knowledge they continue to construct (Cranton, 1992). Therefore, this study endeavoured to make the previous experience of the people of Calais explicit in order to elicit learnings from such experiences. In the process of change (life transitions), previous experiences form a foundation.

The Calais community's disorienting dilemma – a major life experience that evolved into a crisis – was the forced removals experienced in 1978. The findings demonstrated that the community as an entity, provided a platform for learning to occur. The community is a meeting place for diversity and difference. It is a place where one can have an intense experience of oneself in relationship to the other. This interdependence with the other allows for the creation of a resilient community capable of embracing difference and diversity, and surviving adversity. A resilient community is capable of adapting to changing situations. In a nutshell, this is the central idea of transformational learning and indigenous knowledge creation.

Yet the learning that occurred is more problem-centred where the life transitions prompted people to base their goals on immediate needs and intentions as they struggled to deal with the transitions. Through their coping and adaptive strategies, the community members were able to critically reflect on their experiences and develop new ways of thinking, of acting and of recreating life. Through their decision-making strategies they were able to engage in dialogue with one another and seek consensus in matters that affected the community as a whole. Through their indigenous farming knowledge, they were able to initiate new livelihood strategies while retaining some of the old ways and abandon redundant strategies that have become obsolete due to modern economic and social demands.

The participants where asked what transformational learning they have acquired. The question baffled most of them because they found it difficult to describe such complex aspects of their lives and to view them as learning because much of it is invisible, taken for granted or not recognized as learning, thus they lacked awareness of their own learning. Many of them regarded their survival knowledge or skills as general capability, rather than something that has been learned. As Eraut (2000) argues, the discourse about learning is dominated by codified, propositional knowledge, so respondents often found it difficult to describe aspects of their life and experience as learning.

This Chapter has been concerned not only with discussing and analysing the themes, which emerged from the findings, but also in finding out what learning has occurred in each theme. Much of the discussions have also incorporated transformational learning.

5.7 Summary

Discussions in this Chapter have demonstrated that whereas rural, poor communities' subsistence farming lifestyle has been affected by socio-economic changes, these communities possess indigenous, 'ready-to-use' knowledge and skills, which have been adapted to assist them in their struggle to make a living and in achieving control of their own lives. It was highlighted how the community possessed a wealth of traditional farming knowledge which was used extensively during the various transitions. It was also acknowledged that most of the traditional farming knowledge was either redundant or inadequate to be transferred to the management of the communal farm for commercial production.

The Chapter also showed that traditional, rural communities' way of life is intricately intertwined with learning if the learning process is understood to be episodic rather than planned, problem-centred, utilising a range of coping and adaptive strategies and it is life changing. There was also an attempt to highlight some of the problems inherent in rural people's traditional decision-

making mechanisms and their knowledge. This also included the unequal relationships of power among men, women and young people and the lower status of women in decision-making processes which have the propensity to distort the legitimacy of other people's knowledge.

Furthermore, the Chapter endeavoured not to romanticise indigenous knowledge as a static, unchanging body of knowledge but acknowledged the need to view it as complementary to other ways of knowing and of making a living, as the findings demonstrated.

CHAPTER SIX

CONCLUSION AND SUGGESTIONS

6.1 Introduction

In the previous Chapter the findings of the study were discussed and analysed. This Chapter presents the conclusion and suggestions regarding areas of concern for further research, which this study was not able to address because of its own limitations.

6.2 Conclusion

The main goal of the study is to explore the indigenous knowledge system of a rural community in order to elicit what learning has taken place in their daily endeavour to sustain life, and how such knowledge has been utilised in dealing with change.

It is believed that the findings from the study would make a contribution to the growing body of research that validates indigenous knowledge (IKS) as knowledge for making a living and as knowledge that contributes to the global information content. IKS could provide problem-solving strategies for local communities, especially for the poor, yet they are at risk of becoming extinct. IKS is also relevant for the development process and yet it is an under-utilized resource in the development process.

Instead of adopting a developmental approach to the study, the phenomenological paradigm was seen as a best tool to explore the community members' perceptions, perspectives, and understandings of their particular experience of forced removals and in their daily endeavour of sustaining their livelihoods.

A rural community's experience of forced removals was used to explore what indigenous knowledge shaped and helped to create their lives as they went through the major shifts (transitions) in their livelihood patterns. The study

incorporated at least three areas of research namely; an exploration of how adults learn or construct knowledge in informal settings, the role of indigenous knowledge (IK) in rural contexts and the notion of communal land ownership, in particular, farm ownership. This exploratory study also linked three areas of research: (i) what is being learnt, (ii) how it is being learnt and (iii) how the knowledge is utilised in the community's day-to-day effort of making a living. The study was able to draw a relationship between the participants' experiences and their decision-making in food security, agriculture, and natural resource management, (mainly land management) and other vital activities.

While indigenous knowledge was indeed demonstrated as knowledge for making a living among subsistence farming individuals, it was however acknowledged that, for the people of Calais village, indigenous knowledge would not necessarily provide a sustainable answer to production challenges and management issues. It was also concluded that the diversification of indigenous strategies of survival and making a living among the Calais community presuppose an openness to the creation of financial capital in order to develop a holistic survival strategy.

Social research is always concerned with issues of transferability of findings to other areas, particularly in purposes of development. This study concludes that a key element of indigenous knowledge is that it is deeply embedded within the society which it has been developed, and it must therefore, be seen in its economic, political and cultural context. In this study, the politico-economic and cultural context of Calais village may not correspond exactly with other rural communities which experienced the phenomenon of forced removals, however, the risks may be same. It further highlighted the importance of risk reduction strategies for the resettling of people as outlined in the Impoverishment Risks and Reconstruction (IRR) model (Cernea, 1997).

How a community deals with risk is dependent on their knowledge base and their cultural orientation. This means that development workers and local government workers in their service provision, need to explore and consult the context of traditional rural communities because their knowledge does not thrive on abstract formulation but rather on experience and that it cannot be divorced from its context. The issue of the limited transferability of indigenous knowledge cannot be overemphasized. Indigenous knowledge cannot be developed as a generic development tool for other contexts, whereas some aspects of indigenous knowledge can be transposed to other situations with similar characteristics successfully.

Finally it is concluded that the land reform programme, with its three pillars of land tenure reform, land restitution and redistribution, has not benefited rural communities such as Calais adequately in that it did not provide land beneficiaries with a package of support measures, including theoretical and practical knowledge of commercial farming. For the residents of Calais, the idea of buying a commercial farm was a novel one and their expectations of huge financial gains far exceeded their knowledge of commercial farming.

6.3 Suggestions

Being an exploratory study the scope of this study was limited in that it endeavoured to explore and record the indigenous knowledge system (an intricate web of farming knowledge, decision-making knowledge and knowledge for sustaining life in coping with change) existing within the Calais community. Therefore, there are not many suggestions that could be offered. However, the current context within which the Calais community recreates knowledge, adapts and experiment with survival strategies suggests that improvements can be made.

Creation of partnerships among farm owners

Due to the failure of the communal farm to thrive, it seems that emerging black commercial farming communities could benefit from partnerships with experienced farmers so as to share knowledge and expertise. Teamwork is always needed to solve agricultural problems, and this is evident even on the Calais farm. Elsewhere in the province, farmers in partnerships are more capable of effective farm management and decision-making. They offer each

other guidance, technical advice, and financial management skills through the partnerships. These partnerships render the farmers more competent in their farming activities. Such partnerships are necessity for communities such as Calais. Their improved livelihood and upgraded life skills would offer them confidence and boost them in pursuing farming compared to other farmers. This will enable them to be self-sustained, self-reliant and competent. Partnership among farmers could lead to greater creativity and experimentation, particularly in exploring drought resistant crops in an area that is plagued by droughts and lack of rain.

Strengthening Community Leadership Structure

One perceived problem which seems to have contributed to the communal farm's decline in production is not so much the lack of transfer of indigenous farming knowledge, but rather a lack of leadership capacity to tackle the managerial problems on the commercial farm. There is a need to strengthen the existing management committee of the farm and also engender a sense of ownership and accountability among the community members. The fact that the farm is managed by a group of young men, which is currently dictating terms in the management and production of the farm, is an indication that they are the dominant group in the ownership and management of the farm.

A perceived weakness in the leadership's lack of capacity is the overall attitude of the community's learned helplessness. As a result, the community at large seems to have abdicated their responsibility and conferred it to the management committee, which is itself, incapacitated. The establishment of an effective leadership structure would need to be accompanied by intensive capacity building support system. An effective leadership structure could also help minimise vulnerabilities and optimise livelihood capabilities of the rural community. This opinion is not meant to demean the community's overall traumatic experience as it simply interprets the findings. More could be said about the paralyzing and traumatic effect of the apartheid system and indeed, all oppressive systems, however I felt that would go beyond the scope of this study.

The Need for an Adult Education Programme

It has already been discussed that indigenous knowledge is diverse and varied because it is an integral part of culture, therefore, it is self-sufficient. Moreover, IK is a combination of knowledge systems which needs be brought into the mainstream of explaining and understanding the world in order to establish its place within the larger body of knowledge. In terms of the Calais community, their indigenous farming knowledge was not always beneficial to the sustainable livelihood or social well being of the community. Not all indigenous knowledge provides the right solution for a given problem. An example of this is the patriarchal ideologies embedded in traditional decision-making processes (*kgoro* and *lekgotla*), which reinforce or reproduce social inequalities. As the findings demonstrated, there is a need for an adult education programme that would help sensitise the community in issues of class and gender (gender inequalities), power and oppression (agency of individuals), culture and tradition (interrogate norms and values that are oppressive).

There needs to be a learning programme that would help people question and assess the assumptions underlying villagers' decision-making, and their coping and adaptive strategies. Above all, there is need for mechanisms that would help people question the prevailing social forces that make people passive and dependent, i.e. an emancipatory or liberatory type of learning. Among the Calais inhabitants, there is an element of traditional authoritarianism that has helped maintain the socio-economic power structures that continue to oppress them. Throughout their transitions, they came to learn that the oppressive government and its leaders knew everything and they folded their arms and were contented with receiving handouts. Their learned dependency inhibited them from inquiring, from being creative in a way that is liberative and from engaging in dialogue with the agents of oppression.

Another area of sensitisation is in HIV and AIDS, in the related matters of prevention, treatment and care. While there is much information disseminated in the television, radio and print media, rural villages such as

Calais, need a peer-to-peer type of learning that would confront their traditional beliefs, attitudes of disempowerment and demoralization so that their

false consciousness is removed by the intervention of critical education and through such self-consciousness, achieved through reflection on their social conditions of existence (Jarvis, 1983: 85).

The stigma that is attached to HIV/AIDS is responsible for the death of many young people. This is indicated by the escalation in the number of deaths in the village. Any adult education endeavour cannot overlook this pandemic. Therefore, any adult education curriculum implemented must take into account two main issues: the gap between the learning processes that introduce education to learners, and the social roles, which sustain and support the effort of learning. The other issue is the intractable problem of unlearning internalised behaviour patterns. Therefore, the adult learning curriculum should take into account critical perspectives such as: race, class and gender, powerlessness and oppression. While the political situation in South Africa may have changed, critical issues such as racism, classism and sexism cannot be ignored in adult learning.

Having made such a suggestion, one is aware of the difficulties inherent in adult education and training, particularly for rural people, who still depend on subsistence living. Usually such people are concerned primarily with activities and inputs, which sustain their livelihoods that a learning programme that would deviate them from such livelihood means would be futile. John Oxenham et al (2001) makes some fundamental suggestions that would strengthen livelihoods with literacy or learning programmes. He maintains that education and training programmes for very poor adults need to offer very clear, concrete and immediate reasons to justify enrolment and ensure perseverance. He further posits that programmes that start from livelihood skills seem to stand a stronger chance of success as they can demonstrate an immediate reason for learning. Therefore,

Programmes that will clearly repay their investment through organising savings and access to credit, addressing the livelihoods

in which they are actually engaged and demonstrating the relevance of reading, calculating and writing to improving those livelihoods, would stand a better chance of attracting and retaining them (Oxenham et al, 2001:11).

In conclusion, the report makes the above recommendations or suggestions while acknowledging the fact that managing the diverse environments in which poor people live calls for flexibility, imagination and resourcefulness, and for institutions that can respond appropriately. Therefore, any developmental endeavour in such areas as the Calais village would need to take into account rural people's Indigenous knowledge (IK) which has to do with people's way of seeing, their way of being, their way of negotiating life processes in different environments and their survival techniques.

References

Adams, M, Sibanda, S & Turner, S 1999, 'Land tenure reform and rural livelihoods in Southern Africa', *Overseas Development Institute*, no. 39, pp 1-12.

Alen, G; Bastiani, J; Martin, I & Richards, JK 1987, Community education: an agenda for educational reform, Open University Press, Philadelphia.

Asian Development Bank 1998, Handbok on resettlement: A guide to good practice. Manila.

Asian Development Bank 1999, Involuntary resettlement, Manila.

Asian Development Bank 2001, Protection strategy, Manila

Babbie, E & Mouton, J 2001, *The practice of social research,* South African edn, Oxford University Press, Cape Town.

Baumgartner, L 2001, An update on transformational learning, *New Directions for Adult and Continuing Education*, no. 89, Jossey-Bass.

Bennholdt-Thomsen, V and Mies, M 1999, *The subsistence perspective:* beyond globalized economy, Zed Books, London.

Bennholdt-Thomsen, V and Mies, M 2000, Empowerment, subsistence, and the globalised economy, *Lola Press*, May/Oct 2000

Bentley, T. (1998) Learning beyond the Classroom: Education for a changing world, Routledge, London

Bless, C & Higson-Smith, C 2002, Fundamentals of social research methods: an African perspective, 3rd edn, Juta, Lusaka.

Bloor, M, Frankland, J, Thomas, M & Robson, K 2001, Focus groups in social research: introduction to qualitative methods, Sage, London.

Botha et al, 2005, Can we get them there? A case of commercialising arable farming at Rust De Winter farms of Limpopo Province, South Africa, Working Document Series 24, South Africa.

Boud, D, Cohen R, & Walker D 1993, *Using experience for learning.* SRHE & Open University Press, Buckingham.

Boyd, R D 1989, Facilitating personal transformation in small groups. *Small Group Behavior*, vol. 20, no.4, pp. 459-474.

Boyd, RD, & Myers, JG 1988, Transformative education. *International Journal of Lifelong Education*, vol. 7, no. 4, pp. 261-284.

Briggs, J 2005, The use of indigenous knowledge in development: problems and challenges, *Progress in Development Studies*, vol. 5, no. 2, pp.9-114.

Brookfield, SD 1995a, *Adult learning: An overview.* [online] available: http://www.computerschool.ca/adult learn Brookfield [2004, August 24]

Brookfield, SD 2000b, Adult cognition as a dimension of lifelong learning, in J, Field & M, Leicester (eds.), *Lifelong learning: Education across the lifespan* pp89-101, Falmer, Philadelphia.

Brookfield, SD 2000c, Transformative learning as ideology critique, in J, Mezirow & Associates (eds.) *Learning as transformation (pp125-150)*, Jossey-Bass, San Francisco.

Busingye, H 2002, Land reform in Africa: lessons for South Africa, Programme for Land and agrarian Studies (PLAAS), Johannesburg.

Cartwright, AP 1974, By the waters of the Letaba: a history of the Transvaal lowveld, Purnell, Cape Town.

Catholic Encyclopedia, 2004, Hermeneutics

Chambers, R 1994, *Poverty and livelihoods: whose reality counts?* A Policy Paper commissioned by UNDP for the World Summit for Social Development, New York.

Clark, C M 1993, Changing course: Initiating the transformational learning process. Proceedings of the 34th Annual Adult Education Research Conference (pp. 78-83), Pennsylvania Slate University, Slate College.

Clark, D 1987, The concept of community education, *The Journal of Community Education*, vol. 2, no. 3.

Coffield, F 2000, The necessity of informal learning, The Policy Press, Bristol.

Collard, S & Law, M 1989, The limits of perspective transformation: A critique of Mezirow's theory, *Adult Education Quarterly*, vol. 39, no. 3, pp. 99 –107.

Cranton, P 1994, Understanding and promoting transformative learning: A guide for educators of adults, Jossey-Bass, San Francisco.

Crotty, M 1996, 'Doing phenomenology', in P. Willis & B. Neville (eds.), Qualitative Research Practice in Adult Education, David Lovell Publishing, Ringwood, Victoria. Cunningham, P 1992, From Freire to feminism: The North American experience with critical pedagogy, *Adult Education Quarterly*, vol. 42, pp. 180-191.

Cutling, D & Saaiman, B 1996, Small scale farmers and growers in the Western Cape: the challenges of providing appropriate extension service, in Lipton, M & de Klerk, M (eds) Land labour and livelihoods in rural South Africa – Volume One: Indicator Press, Western Cape. University of Natal, Durban.

Dale, M and Bell, J 1999, *Informal Learning in the Workplace. DfEE Research Report 134*, Department for Education and Employment, London.

Daley, B. J. 2000. Learning in professional practice. *New Directions for Adult and Continuing Education*, vol. 86, pp. 33-42.

Davies, S. 1993. Are Coping Strategies a Cop Out? *IDS Bulletin*, vol. 24, no. 4, pp. 60 - 72.

Davis, SM 1987, Apartheids Rebels: Inside South Africa's Hidden Wars, New Haven, New York.

De Satgé, R 2002, *Learning about livelihoods: insight from Southern Africa*, Periperi Publications, South Africa.

De Vaus, D 2001, Research design in social research, Sage, London.

Denzin, NK 1989, Interpretive biography, Sage Publications, Newbury Park.

Denzin, NK & Lincoln, YS (eds) 1998, *The landscape of qualitative research: theories and issues*, 2nd edn, Sage, Thousand Oaks, CA.

Dercon, S 2000, Background paper World Development Report, *Income risk, coping strategies and safety nets,* Centre for the Study of African Economies, Oxford University.

Dirkx, J M 2000, Transformative learning and the journey of individuation. *ERIC Digest* no. 223, ERIC Clearinghouse, Columbus.

Ellen, R and Harris, H 2000, Introduction, in Ellen, R, Parkes, P and Bicker, A (eds) *Indigenous environmental knowledge and its transformations*, Harwood Academic Publishers, Amsterdam, 1-33.

Eraut, M 2004, Informal learning in the workplace, *Studies in Continuing Education*, vol. 26, no. 2, pp. 247 – 273.

Eraut, M. 2000 'Non-formal learning, implicit learning and tacit knowledge in professional work' in F. Coffield *The Necessity of Informal Learning*, The Policy Press, Bristol.

Fenwick, TJ 2000, Expanding conceptions of experiential learning: a review of the five contemporary perspectives on cognition, Adult Education Quarterly, vol. 50, no. 4, pp. 243-272.

Foley, G 1999, Learning in social action: A contribution to understanding informal education, Zed Books, London.

Fouché, CB & Delport, CS L 2002, 'Introduction to the research process', in A. S. De Vos, H. Strydom, C.B. Fouché, & C.S.L. Delport (eds.), 2nd edn, *Research at grass roots, for the social science and human service professional.* Van Schaik Publishers, Pretoria.

Gephart, R 1999, 'Paradigms and research methods', in *Research Methods Forum*, 4.

Gorjestani, N 2000, Indigenous knowledge for Development: Opportunities and Challenges, World Bank, Geneva.

Group for Collaborative Inquiry 1994, A model for transformative learning: Individual development and social action. 35th Annual Adult Education Research Conference Proceedings (pp. 169-174). Knoxville, Tennessee: University of Tennessee, Knoxville.

Guba, EG and Lincoln, YS 1994, 'Competing paradigms in qualitative research', in N. K. Denzin & Y. S. Lincoln (eds.), *Handbook of Qualitative Research*, Sage: Thousand Oaks

Gupta, AK 1991, Household survival through the commons: performance in an uncertain world, Draft, Ahmedabad, Indian Institute of Management.

Hall, R 2004, 'Land and agrarian reform in South Africa: a status report 2004', *Programme for Land and Agrarian Studies*, no. 20.

Hart, M 1990, Critical theory and beyond: further perspectives on emancipatory education, *Adult Education Quarterly*, vol. 40, no. 3, pp. 125-140.

Hatch, A J & Wisniewski, R 1995, 'Life history and narrative: questions, issues and exemplary works', in *Life History and Narrative*, The Falmer Press, London.

Haverkort, B 1991, Gender analysis: the farming systems research-extension training experience, *Journal for Farming Systems Research-Extension*, vol. 2, no. 3, pp. 1-10.

Head, J and Cernea, MM (eds) 2000, Report and recommendations for improving environmental protection and supervision of resettlement operations, Manila, Office of Economic and Social Development, Asian Development Bank.

Herbert, S 2000, For ethnography, *Progress in Human Geography*, vol. 24, pp. 550 – 568.

Holroyd, C 2001, 'Phenomenological research method, design and procedure'. *The Indo-Pacific Journal of Phenomenology*, vol.1, no.1, pp1-12.

Human Rights Watch 2004, *Unequal protection: the State response to violent crime on South African farms*, [online] available:

http://hrw.org/reports/2004/southafrica0504/6.html

Hycner, RH 1999, 'Some guidelines for the phenomenological analysis of interview data', in A. Bryman, & R. G. Burgess (eds.), *Qualitative Research*, vol.3, pp143-164.

ICRA 2004, Goat production and livelihood systems in Sekhukhune District of the Limpopo Province, South Africa. Working Document Series 118, North West Province, South Africa.

Imel, S 1998, Transformational learning in adulthood, Columbus, OH.

Inglis, T 1997, Empowerment and emancipation, *Adult Education Quarterly*, vol. 48, no. 1, pp. 3-17.

Jarvis, P 1983, Adult and continuing education: theory and practice, 2nd edn, Routledge, London.

Jarvis, P, Holford, J & Griffin, C 2003, *The theory and practice of learning,* 2nd edn., Kogan Page, London & Sterling.

Kalland, A 2000, Indigenous knowledge: prospects and limitations, in Ellen, R, Parkes, P and Bicker, A (eds) *Indigenous environmental knowledge and its transformations*, Harwood Academic Publishers, Amsterdam, 1-33.

Kilpatrick, S and Falk, I 2003, Learning in Agriculture: building social capital in island communities, *Local Environment*, vol. 8, no. 5, pp. 501 –512.

King, K. P. 1996, Research diary- factors that promote Transformational Learning. [online] available: http://www.fordham.edu/gse/kpking/transpromote.html [2005, July 12]

Kolb, DA 1984, Experiential learning: experience as the source of learning and development, Prentice-Hall, Englewood Cliffs.

Langeveld, C F H 2000, Mandate to negotiate restitution package: Matshatini Nature Reserve/Madimbo Corridor, Regional Land Claim Commission.

Lave, J. and Wenger, E. 1991, Situated Learning. Legitimate peripheral participation, University of Cambridge Press, Cambridge.

Lee, CD and Smagorinsky, P 2000, Constructing meaning through collaborative inquiry, in Lee, CD and Smagorinsky, P (eds), Vygotskian perspective on literacy research: constructing meaning through collaborative inquiry, pp. 1-15, University Press, Cambrige and New York.

Leedy, PD & Ormrod, JE 2001, *Practical research: planning and design,* 4th edn., Prentice-Hall Inc., New Jersey.

Lengrand, P 1970, An introduction to lifelong education, UNESCO.

Limpopo Department of Agriculture 2005, The strategic plan for South African Agriculture. From farming to agricultural development.

Limpopo Provincial Department of Agriculture 2004, Annual Report 2003/04.

Lombard, A 1992, Community work and community development: Perspective on social development, HAUM-Tertiary, Pretoria

Marsick, V. J. and Watkins, K. E. 1991, *Informal and Incidental Learning in the Workplace*, Routledge, London.

Maxwell, JA 1992, 'Understanding and validity in qualitative research', in *Harvard Educational Research*. Vol. 62, no. 3, pp 279-300.

McDonald, B., Cervero, R M & Courtnay, BC 1999, An ecological perspective of power in transformational learning: A case study of ethical vegans. *Adult Education Quarterly*, vol. 50, no.1, pp. 5-23.

McGiveney, V. 1999, Informal Learning in the Community. A trigger for change and development, NIACE, Leicester.

Merriam, SB 2004, Changing landscape of learning theory, in Comings, J, Garner, B & Smith, C (eds), *Review of Ault Learning and Literacy*, pp 199 – 220, Lawrence Erlbaum Associates, Publishers, London.

Merriam, SB 2004, The role of cognitive development in Mezirow's transformational learning theory, *Adult Education Quarterly*, vol. 55, no. 1, pp. 60 – 68.

Mezirow, J & Associates (eds.) 1990. Fostering critical reflection in adulthood. Jossey-Bass, San Francisco.

Mezirow, J 1981, A critical theory of adult learning and education, *Adult Education Quarterly*, vol. 32, no. 1, pp. 3-24.

Mezirow, J 1989, Transformation theory and social action: A response to Collard and Law. *Adult Education Quarterly*, vol. 39, no. 3, pp. 169-175.

Mezirow, J 1991a, *Transformative dimensions of adult learning*, Jossey-Bass, San Francisco.

Mezirow, J 1991b, Transformation theory and cultural context: A reply to Clark and Wilson, *Adult Education Quarterly*, vol. 41, pp. 88-192.

Mezirow, J 1994a, Understanding transformation theory. *Adult Education Quarterly*, vol. 44, no. 4, pp. 222-232.

Mezirow, J 1994b, Response to Mark Tennant and Michael Newman. *Adult Education Quarterly*, vol. 44, pp. 243-44.

Mezirow, J 1995, Transformation theory of adult learning, in M. R. Welton (ed.), *In defence of the lifeworld*, pp. 39-70, SUNY, New York.

Mezirow, J 1996, Contemporary paradigms of learning. *Adult Education Quarterly*, vol. 46, no. 3, pp. 158-172.

Mezirow, J 1998, On critical reflection, *Adult Education Quarterly,* vol. 48, no. 3, pp. 185-191.

Mezirow, J 2000, Learning to think like an adult: Core concepts of transformational theory, in J, Mezirow & Associates (eds.), *Learning as transformation*, pp. 3-34, Jossey-Bass, San Francisco.

Mezirow, J 2003, Transformative learning as discourse, *Journal of Transformative Education*, vol.1, no. 1, pp 58-63.

Mies, M & Bennholdt-Thomsen, V 1999, *The subsistence perspective.* Beyond the globalised economy, ZED Books & Spinifex Press, London/New York & Australia.

Mitchell, T 1995, The object of development: America's Egypt, in Crush, J (ed), *Power of Development*, Routledge, London, 129-157.

Moustakas, C 1994, *Phenomenological research methods*, Sage, Thousand Oaks, CA.

Mouton, J 2001, How to succeed in your Masters and Doctoral Studies, Van Schaik Publishers, Pretoria.

Newman, M 1993, *The third contract: Theory and practice in Trade Union Training*, Stewart Victor Publishing, Paddington.

Odora Hoppers, CA 2002, *Indigenous Knowledge and the integration of knowledge systems*, NAE, University of Pretoria.

Omolewa, M 1998, Literacy, tradition and progress: enrolment and retention in African rural programme, UNESCO Institute for Education, Hamburg.

Oxenham, J et al 2001, Strengthening livelihoods with literacy, *Institute for International Cooperation of the German Adult Education Association*, Human Development sector of the Africa Region, World Bank.

Palo, M & Mercy, G (eds) 1996, Sustainable Forestry Challenges for Developing Countries, Kluwer Academic Publishers, Dordrecht.

Paralegal Advice, 2002, *Land and Housing,* [online] available: http://www.paralegaladvice.org.za/docs/chap05.html [2005, November 1]

Pietrykowski, B. 1998, Modern and postmodern tensions in adult education theory: A response to Jack Mezirow. *Adult Education Quarterly* vol. 49, no.1, pp. 67-69.

Pilling-Cormick, J. 1997. Transformative and self-directed learning in practice. *New Directions for Adult and Continuing Education*, vol.74, pp. 69-77.

Poonan, U 2000, Community-Based Conflict Resolution and Conservation: A Case study of the Makulekes, submitted as a thesis for Masters Degree, Johannesburg. South Africa.

Published 31 March 2004.

Rajasekaran, B 1993, A framework for incorporating indigenous knowledge systems into agricultural research, extension, and NGOs for sustainable agricultural development. *Studies in Technology and Social Change*, no. 21. lowa State University, Ames.

Ramatlhodi, N 1999, State of the province address, Polokwane.

Rantso, TA 2001, Multi-National Corporation and Sustainable Development in the Rural Economy of Lesotho: The Case of Small-scale Peasant Commercial Farming (Asparagus Cultivation) in the Maseru District, Masters Thesis, University of Natal, Durban.

Reij, C, Scoones, I and Toulmin, C (eds) 1996, Sustaining the soil: indigenous soil and water conservation in Africa, Earthscan Publications, London.

Richie, J & Spencer, L 2002, Qualitative data analysis for applied policy research, in A. M. Huberman & B. M. Matthew (eds.), *The qualitative research companion*. Sage, London.

Roberts, C. (n.d.) Adult learning: perspective transformation versus andragogy. [online] available: http://chas.pineview.org/Papers/adult_learning.htm [2005, September 13]

Rubin, HJ and Rubin, IS 1992, *Community organization and development*, Allyn and Bacon, London.

Sadala, MLA & Adorno, R de CF 2001,' Phenomenology as a method to investigate the experiences lived: A perspective from Husserl and Merleau-Ponty's thought', *Journal of Andvanced Nursing*. vol. 37, no. 3, pp282-293.

Schön, DA 1987, Educating the reflective practitioner, Jossey-Bass, San Francisco.

Schutt, KR 1995, Investigating the social world: The process and practices of research, Black Rose Books., California.

Searle, C (ed.) 1998, Researching Society, Culture, Sage, London.

Shirur, RR 1997, A synergy of theory, practice and strategies in adult learning, Sterling Publishers Pvt. Ltd., New Dheli.

Singh, N. and Titi, V 1994, Adaptive Strategies of the Poor in Arid and Semiarid Lands: In Search of Sustainable Livelihoods. International Institute for Sustainable Development, Winnipeg.

Singh, NC and Strickland, RS 1994, Sustainability, poverty and policy adjustments: from legacy to vision, International Institute for Sustainable Development, Canada.

Sinnott, JD 1998, The development of logic in adulthood: Postformal thought and its application, Plenum, New York.

Ssekamwa, JC 1999, *History and development of education in Uganda*, Foundation Publishers, Kampala, Uganda.

Strydom, H 2003, 'Information collection: participant observation', in A. De Vos, H. Strydom, C. B. Fouché, & C. S. L. Delport, (eds.) 2nd ed. *Research at grass roots, for the social science and human service professional,* Van Schaik Publishers, Pretoria.

Taylor, EW 1997, Building upon the theoretical debate: a critical review of the empirical studies of Mezirow's transformative learning theory, *Adult Education Quarterly*, vol. 48, no.1, pp. 34 – 60.

The Department for International Development, 2001, Sustainable livelihood guidance sheets, DFID, London.

Thomson, M 1993, The North starts to catch up with the South: the Himalayan village as a clumsy institution and its lessons or policy, The International Academy of the Environment, Paper prepared for the workshop on *Risk and Fairness*, Laxenburg, Austria.

Thwala, WD 2003, Backgrounder-Land and Agrarian Reform in South Africa, Land and Research Action Network. [online] available: http://www.landaction.org/display.php?article=60 [2005, August 10]

Tinsley, R L 1997, Reflections on sustainable agriculture, *Agro-chemicals Report*, vol. 20, no. 2, pp. 1 – 6.

UNESCO 2002, Best Practices on Indigenous Knowledge, Social and Human Sciences, Netherlands.

Van Manen, M 1990, Researching Lived Experience: Human Science for Action Sensitive Pedagogy, State university of New York Press, Albany, New York.

Van Riet, W 1984, *Planning proposals for The Downs.* [online] available: http://sea.unep-wcmc.org/sites/pa/0669p.htm [2005, July 9].

Van Vlaenderen, H 2000, Problem solving: a local perspective, *Indigenous Knowledge and Development Monitor*, vol. 8, no.1.

Von Kotze, A 2002, Producing knowledge for living, Studies in Continuing Education, vol. 24, no. 2, pp.234-246.

Warren, DM 1991, *Using indigenous knowledge in agricultural development,* World Bank Discussion Paper No. 127, World Bank, Washington.

Watts, S 2003, The effects of communal land resource management on forest conservation in northern and north-eastern Namibia, *Development Southern Africa*, vol. 20, no. 3, pp. 337 – 358.

Wegerif, M 2004, A critical appraisal of South Africa 's market-based land reform policy: The case of the Land Redistribution for Agricultural Development (LRAD) programme in Limpopo, Programme for Land and Agrarian Studies, Cape Town, University of the Western Cape (Research report; no.19).

Wenger, E 1998, *Communities of practice*, Cambridge University Press, Cambridge London.

Wisker, G 2001, The postgraduate research handbook. Palgrave: Hampshire.

Woolcock, M & Narayan, D 2000, Social capital: implications for development theory, research and policy, *World Bank Research Observer*, vol. 15, no. 1, pp. 225-249.

World Bank, 1998, Indigenous Knowledge for Development: a framework for action, *Knowledge and Learning Centre*, Africa Region, World Bank, [online] available: http://www.worldbank.org/afr/ik/ikrept.pdf [2005, August 11).

World Bank, 2000, World development report 2000-01: attacking poverty, Oxford University Press, Oxford.

APPENDICES

8.1 Appendix no.1 Interview Guide

Personal information

- Date of birth
- The original place of birth
- Gender
- Educational/literacy status
- Marital status

What major events have changed the community's way of life?

- When forced removals occurred and why
- When the Calais community was established
- Major events that have taken place in the people's way of life
- Nature and sequence of the events
- How the events have affected the lives of the people

How did they react to the events

- The strategies/mechanisms the community members have developed to cope with the changes in the course of the transition
- How the people reacted to those life-changing events

Decision to purchase the farm

- Tell the story of the communal farm
- When was the farm purchased and why
- How the decision to purchase the farm was reached
- Any mechanisms for regulating and managing the communal farm

What indigenous farming skills did the community have prior to their participation in communal farm ownership and management?

- The indigenous farming skills
- Commercial farming knowledge/skills
- How the members of the community have utilized indigenous farming knowledge in the communally-owned farm

What indigenous decision-making processes are commonly employed by the community?

- Social organization of the community
- Social activities of the communities
- Social relationships among the community members (between women, men & young people) in terms of decision-making

What have you learnt from the different events within the transition?

What do you think the community has learnt from the different events

8.2 Appendix no. 2: Letter of Consent

Faculty of Education



LETTER OF CONSENT

l,					. agree	to	part	icipate	in	this	study	by	Mr.	Mc	ses
Thabethe,	a student	at the	University	of	KwaZul	u-N	latal	(Stude	nt	No.	99226	374	2, 1	el.	031
202 4666)	. The focus	of the	study is:												

"Tides of change: Exploring the knowledge system of a rural community's transition from subsistence farming, to landlessness, and to communal farm ownership."

The purpose of the study is to explore the experiences of the community members in their transition from subsistence farming, to landlessness, and communal farm ownership and to what extent this has offered them an opportunity for learning.

I do understand that:

- I. The information I provide will be used as part of the data needed for writing Mr Thabethe's Masters dissertation.
- II. The data will be kept with the highest degree of confidentiality it deserves and that my right to remain anonymous in the course of reporting the findings will be observed.
- III. My participation in the study is voluntary.
- IV. I have the right to withdraw from the study at any time of my choice.
- V. I am entitled to question anything that is not clear to me in the course of the interview.
- VI. In the event of wanting more clarification concerning my participation in this study, I can refer to the supervisor of the research project, Dr. Sylvia Kaye of the University of KwaZulu-Natal on Tel. 031 260 1219.

On the basis of the above points I hereby give my consent to participate in an interview that will be conducted by Mr Thabethe.

Signed	Date