

**AN APPRAISAL OF THE IMPACT OF THE FAST
TRACK LAND REFORM PROGRAMME ON LAND USE
PRACTICES, LIVELIHOODS AND THE NATURAL
ENVIRONMENT AT THREE STUDY AREAS IN
KADOMA DISTRICT, ZIMBABWE**

A Thesis submitted in fulfilment of the
requirements for the degree of

MASTER OF SCIENCE

of

RHODES UNIVERSITY

by

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January 2006

ABSTRACT

This research appraises the impact of the Fast Track Land Reform Programme at three resettled communities in Kadoma District, Zimbabwe. In particular it assesses the livelihood practices of land recipients and their effects on the natural environment. Two of the communities, Lanteglos and CC Molina were resettled under the A1 villagised and self-contained settlement scheme and are found in the Natural Farming Region III. Pamene, the third community, was resettled under the A2 small-scale commercial settlement scheme and is found in the Natural Farming Region IIb. Multiple research methods including household surveys, interviews, observations, reviews of literature and map construction through the use of Geographic Information Systems, allowed for the collection of empirical, descriptive, and spatial data to provide for the appraisal.

The land use practices included dry land crop production, livestock rearing, vegetable gardening and exploitation of the natural environment for a variety of purposes. Farming was mostly subsistence with the use of traditional equipment by all three communities. Tenure was perceived to be insecure by beneficiaries and although a variety of papers to show ownership were held, none provided for leasing or freehold tenure.

Despite acquiring natural capital from the resettlement process, the findings of this research show low levels of financial, physical and social capital amongst beneficiaries. Moreover climatic variability, the declining macro-economic and unstable political environment and little support from government have adversely affected the livelihoods of beneficiaries. The implication of all this has been a reduction in livelihoods that are based solely on agricultural production, leading to

off-farm practices primarily exploiting the natural environment. The long term effect would be increased degradation of the environment, leading to reduced arable and grazing land, and thereby hindering sustainable livelihoods from farming. Recommendations are proposed based on this research's findings being typical in Zimbabwe. Central to this is the need for government to revise its present land policy and, provide for a comprehensive and holistic land policy that should be based on the vision of how agriculture should evolve in Zimbabwe.

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ACKNOWLEDGEMENTS

Many thanks, to Professor Fox, for his encouragement, constructive criticism and invaluable advice in carrying out this research and in writing this thesis. Professor Fox and Professor Rowntree took time off their busy schedules to visit my study area in November 2004, which helped in providing the direction for my thesis. Plates 8.1, 8.2 and 8.3 used in this thesis were taken by Professor Fox on this particular visit.

This research was made possible through sponsorship from the Andrew Mellon Foundation and Professor Kate Rowntree's research grant from the National Research Foundation (NRF). Many thanks.

To Gillian McGregor for assisting me with the GIS component of this thesis, thank you so much.

To my parents, I thank you for your support, and encouraging me to pursue my Masters, providing contacts and giving up your valuable time to transport me in and around Kadoma. Much of this research was made possible by you.

Mlungisi Velempini, thank you for your support, constant encouragement and giving up your time to proof read and edit my work.

My siblings, Theo, Margaret, Gillian and Aaron, thank you for all your help, input into this thesis and prayers, it was most appreciated.

Doug, Jamie and Kathy Alexander, many thanks for providing contacts for this research and for accommodating Professor Fox and Professor Rowntree.

To the staff, colleagues in the Geography department and friends, thank you for your support, prayers and encouragement.

ACRONYMS

AFC	Agricultural Finance Corporation Act
AREX	Agricultural Research Extension
BSAC	British South African Company
CFU	Commercial Farmers Union
CIO	Central Intelligence Organisation
Cottco	Cotton Company
DA	District Administrator
DDF	District Development Fund
DfID	Department for International Development
DLIC	District Land Identification Committee
ESAP	Economic Structural Adjustment Programme
FTLRP	Fast Track Land Reform Programme
GDP	Gross Domestic Product
GIS	Geographic Information Systems
GMB	Grain Marketing Board
ICA	Intensive Conservation Area
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
JAG	Justice for Agriculture
LRRP	Land Redistribution and Resettlement Program
LSCF	Large Scale Commercial Farms
LTC	Land Tenure Commission
LTFM	Land Task Force of Ministers
MDC	Movement for Democratic Change
NALC	National Acquisition Land Committee
NCA	National Constitutional Assembly
NGO	Non Governmental Organisation
PF-ZAPU	Patriotic Front - Zimbabwe African People's Union
PLIC	Provincial Land Identification Committee
RDC	Rural District Council
SARPN	Southern African Regional Poverty Network
UDI	Unilateral Declaration of Independence
UNDP	United Nations Development Programme
ZANU-PF	Zimbabwe African National Union - Patriotic Front
ZJRI	Zimbabwe Joint Resettlement Scheme
ZRP	Zimbabwe Republic Police

CHAPTER ONE: INTRODUCTION

1.1 Introduction

In this chapter, the reader will be introduced to the aim of the research and the context of the Fast Track Land Reform Programme (FTLRP) in Zimbabwe and Kadoma District. The objectives, constructs and methods of the research are then addressed followed by a description of the structure of this thesis.

1.2 Aim

The aim of the research is to provide an appraisal of the impact of the FTLRP on livelihoods and the natural environment through a case study of three communities resettled between 2000 and 2004 in Kadoma District, Zimbabwe.

1.3 Context of research

According to Deininger *et al.* (2002) land reform disappeared from the development agenda after a period of great interest in the 1950s and 1960s. However, the revival of interest in land redistribution as a means of poverty alleviation in conjunction with debates pertaining to the viability of smallholder versus large-scale farming in order to improve rural livelihoods have brought land reform back to the fore of the developmental agenda (Lipton, 1996, Deininger *et al.*, 2002;). Furthermore, the recent land occupations, extensive land reforms and processes of agrarian change in Zimbabwe have resulted in growing research, debates and interest in Africa's land question, and its relevance to the global context and developmental agendas (Harts-Broekhuis and Huisman, 2001; Glover, 2001; Lebert, 2003; Moyo, 2004b, 2004c; Waeterloos and Rutherford, 2004).

In July 2000, after countrywide land 'occupations', the government of Zimbabwe officially embarked on the FTLRP to redistribute land to the 'land hungry'. This followed immediately after a majority rejection of the government sponsored draft constitution at the February 2000 referendum. According to the Centre of Housing and Evictions ([COHRE], 2001) this draft constitution proposed extended powers for the president and the acquisition of large-scale commercial farms without

compensation. Moreover, for the first time since independence, the ruling party, Zimbabwe African National Union-Patriotic Front (ZANU-PF), faced a strong electoral challenge in the form of the Movement of Democratic Change (MDC) at the 2000 general elections, which followed the referendum, and the 2002 presidential elections. This prompted commentators, the media and scholars to view FTLRP as a politically driven process that did not have the rural poor in mind, but was aimed at preserving the political status quo (Moyo, 2004a; Chitsike, 2004; Made, 2004; Sachikonye, 2004).

Since the FTLRP, the operating environment for the agricultural sector has been characterised by severe macro-economic challenges such as inflation, shortages of foreign currency and key commodities such as fuel and inputs (Hanyani-Mlambo *et al*, 2002; World Bank, 2004; Kanyenze, 2004). Additionally, the prevailing unstable political environment has had the effect of discouraging private investment, particularly in the agricultural sector. According to Jansen and Rukovo (1992) strong linkages exists between a country's agrarian policy and both its macro-economic and political environment that tends to affect agriculture either positively or negatively, which in turn affects the livelihoods of farmers. In the case of Zimbabwe, political agendas and associated poor macro-economic conditions have had a negative impact on agricultural production, subsequently reducing Zimbabwe from a net exporter of grain to a net importer (Kanyenze, 2004). These poor macro-economic conditions also negatively impacted upon the livelihoods of the populace in the Kadoma District by increasing unemployment and therefore increasing vulnerability to poverty (Chigumira, 2000).

Income from large-scale commercial farming had been the mainstay of the economy in Kadoma District contributing towards employment and agro-based industrial development. After 2000, a relatively large number of households were resettled in Kadoma District under the FTLRP. This was done at the expense of commercial agriculture and impacted the livelihoods of those previously employed and those newly resettled.

1.4 Zimbabwe

Zimbabwe covers an area of 390 757 square kilometres and is landlocked. It borders on South Africa, Mozambique, Zambia and Botswana (Figure 1.1). According to the preliminary results of the 2002, census the population was reported to be 11 634 663 (Central Statistics Office, 2002), with a density of 30 persons per square kilometre most of whom resided in rural areas.



Figure 1.1 The location of Zimbabwe and its major urban centres

The country consists of eight provinces namely: Masvingo, Midlands, Mashonaland East, West and Central, Matebeleland North and South; and two cities, Harare and Bulawayo (Figure 1.2). Kadoma District is located in Mashonaland West Province (Figures 1.2 and 1.3) and lies about 140 kilometres south west of Harare and about 300 kilometres north-east of Bulawayo. The provinces are divided into 57 administrative districts and are mostly rural, with the exception of Harare, Bulawayo and Mashonaland West. Most Zimbabweans speak either Chishona or Sindebele;

however, the official language in the country is English. This study used Shona in rural interviews and English with government and key officials.

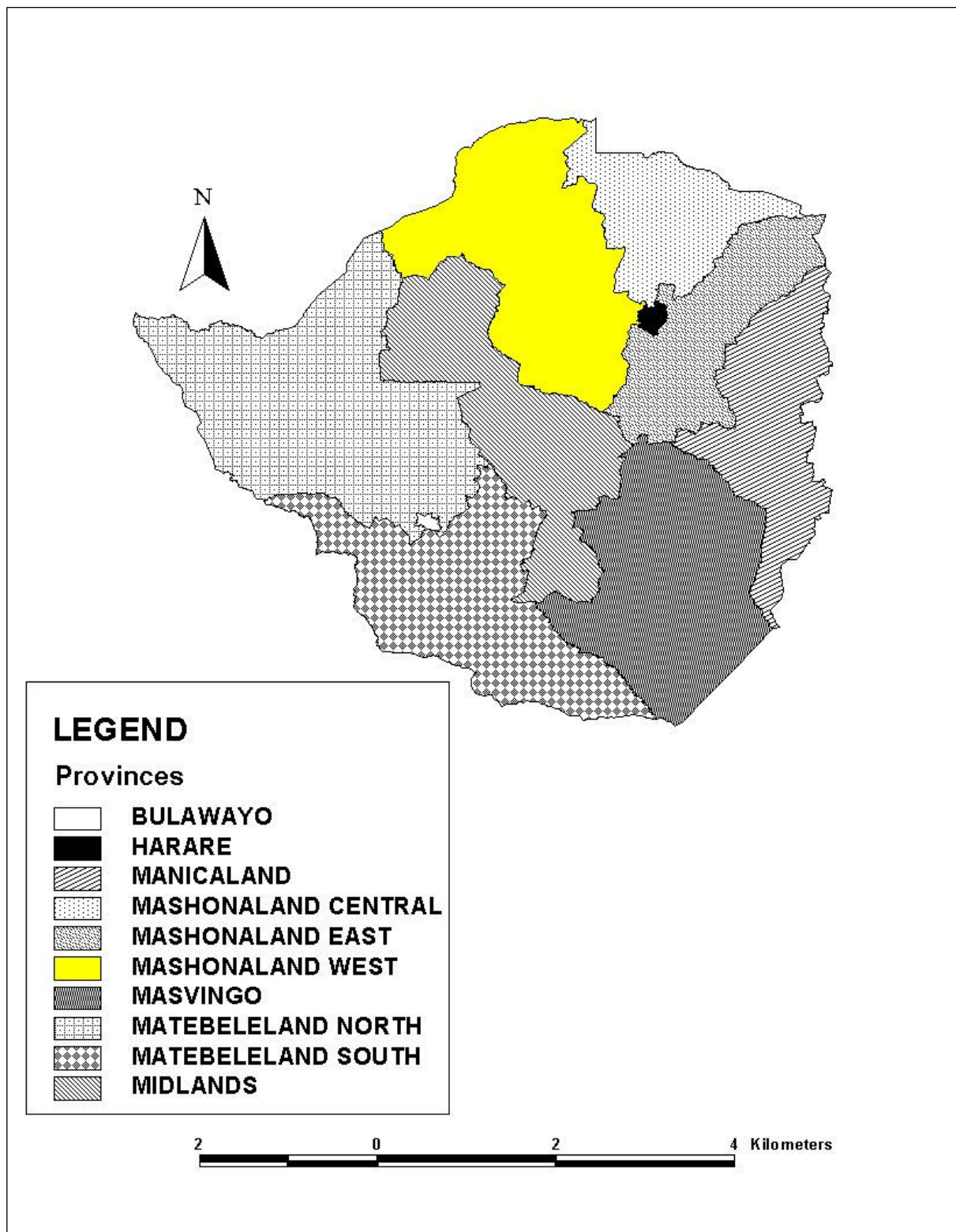


Figure 1.2 Zimbabwe's Provinces

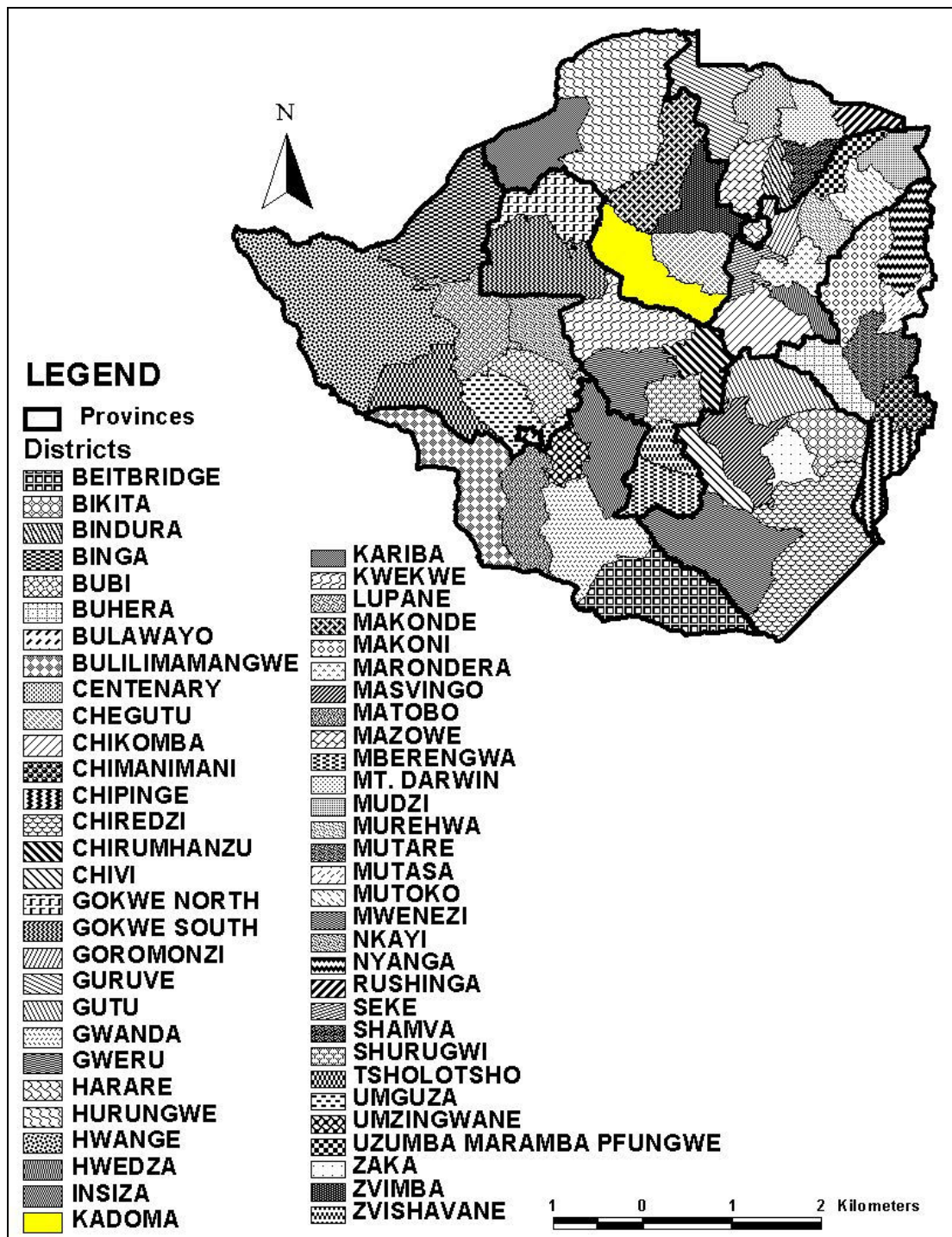


Figure 1.3 Zimbabwe's Districts

1.5 Objectives

1. To provide an historical overview of land reform in Zimbabwe and the events that led to the FTLRP.
2. To conduct a survey of the land use practices of resettled households, collect information on their demographic characteristics, socio-economic and life history.
3. To conduct interviews with former commercial farmers from each of the study sites.
4. To collect spatial data to facilitate the production of maps and analysis of changes in the spatial environment since FTLRP.
5. To assess the livelihoods of resettled farmers, their natural environment and the sustainability thereof.
6. To provide a critical analysis of government land policy, land institutional structures and the political economy of the country, in order to contextualise the case studies within a political ecology framework.

In order to achieve these objectives, the constructs detailed below have been established for use in this research. These were constructed from the review of literature detailed in Chapter Two and the accepted natural meaning of terms (Chambers, 1995; Kinsey, 1999; Neefjes, 2000; Elliot and Campbell, 2002; Mapedza *et al.*, 2003; Scoones, 2005).

Livelihood:	This will be taken to be the beneficiary's ability to achieve food security, to purchase goods and services, access adequate housing and amenities.
Farming practices:	These will be taken to be the methods and type (dry land or irrigated) of cultivation practiced, the total area under cultivation, type of labour employed (family versus hired), gardening and livestock rearing.
Natural environment:	This will be taken to be the climatic conditions, quality of soils and vegetation cover.
Land use practices:	These will be taken to be the manner in which land is utilised for economic gain.

Sustainability:	This will be taken to be the maintenance of a current situation or practice.
Appraise:	To formulate a justifiable valued judgement concerning positive and negative changes in livelihoods, farming and land use practices, the natural environment and sustainability after due consideration of research findings.

1.6 Methods

A variety of methods were used to meet the different objectives, resulting in the generation of both qualitative and quantitative data. These included the administration of semi-structured questionnaires and interview schedules to resettled households and key informants respectively; observation through transect walks in the study areas; the collection of secondary data and electronic spatial data. Detailed examination of these methods will be undertaken in Chapter Four.

1.7 Thesis Outline

This thesis is divided into ten chapters. Chapter Two provides a review of literature relating to the theoretical framework and issues surrounding the research. A critical examination of land alienation during the colonial period, post-independence land reform experiences and the present FTLRP constitutes the bulk of this chapter. Chapter Three provides a geographical and historical overview of the study area. Chapter Four presents the methodology adopted for the research. Chapter Five gives a descriptive account of the land use practices of the former commercial farmers, prior to the FTLRP, whilst Chapter Six records the results of the household surveys of the beneficiaries of resettlement. Interviews with key officials are recorded in Chapter Seven. A descriptive account of spatial changes in the environment of the study areas is presented in Chapter Eight. Chapter Nine critically appraises the household surveys, spatial data and interviews in order to determine the impact of the FTLRP on the sustainability of livelihoods and the environment. Conclusions are drawn in Chapter Ten.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter begins with a discussion of the theoretical approaches, debates and factors discussed in the literature on international and regional experiences of land reform, followed by an historical overview of land reform in Zimbabwe.

2.2 Theoretical overview: introduction to political ecology and critical realism

This section will review the theoretical approaches adopted in the research. In order to ascertain the nature of the changes in livelihoods, land use practices and their impact on the natural environment in Kadoma District, one has to ask questions with regards to what makes them happen, what produces, generates or determines them (Sayer, 1992). The field of political ecology within the critical realist framework provides the necessary tools to do this.

This theoretical approach places socio-economic, political, cultural and ecological factors as significant determinants of livelihoods, productivity and the natural environment (Awanyo, 2001) in land reform programmes. Scholars (Blaikie, 1985; Blaikie and Brookfield, 1987; Bryant and Bailey, 1997; Keil *et al.*, 1998; Stott and Sullivan, 2000; Awanyo, 2001; Zimmerer and Bassett, 2003 and Robbins, 2004) have used this perspective to explore the linkages and interaction between human agencies and their physical and social environment, particularly in rural areas of developing countries.

The field of political ecology provides an understanding on how society and the environment are ‘everywhere thoroughly interconnected’ (Bryant, 1998, in Awanyo, 2001:94) and how these interlinks take place ‘within the context of a specific geographical region’ (Bryant and Bailey, 1997:23) and contribute to ‘our understanding of nature and society from a geographical perspective’ (Zimmerer and Bassett, 2003:3). This then allows for case study approaches at the global, regional and local levels, in order to reflect the realities of how beneficiaries of land reforms organise production and the ‘inextricable links between society, its land use and the

environment' (Awanyo, 2001:94). Through this approach, Awanyo (2001) described the trends in a particular locality that would facilitate advanced debates over the effects of policymaking, social change and the political economic environment on farmers and their resources.

Robbins (2004) has shown that research using the political ecology approach proceeds from central questions that seek understanding of knowledge on the cause and effect of certain activities rather than the symptoms of problems. Robbins (2004), similarly to Awanyo (2001), said that political ecologists have followed a mode of explanation that evaluates the influence of variables acting on a number of scales, and that these are nested within each other, with local decisions influenced by regional policies, which in turn are subjected to international policies. Robbins summarised political ecology as an explorative framework that is empirical and attempts to explain linkages in the condition and change of social environmental systems, whilst considering the influence of power relations and how our ideas are directed through economic and political processes

According to Bhasker (1978), critical realism regards the objects of knowledge as structures and mechanisms that generate phenomena and these are real structures that remain and operate independently of our knowledge, experience and conditions, which allow us to access them. Since objects and social relations are viewed as having causal powers (Sayer, 1992), a key aspect of this paradigm is its concern with identifying and explaining causal mechanisms in social phenomena (Kitchin and Tate, 2000). Furthermore, Zimmerer and Bassett (2003:3) explained critical realism as 'a philosophical embrace that regards the environment as having an ontological basis and dynamic role as an agent in its own right ... combined with an understanding of nature's agency as socially mediated'.

Hartman (1998) showed that the political ecology framework naturally blends itself with the critical realist paradigm because of its concerns over reality, which it views as the product of social and ecological forces. Hartman described the environment as the physical reality, whilst social forces (habits, customs, institutions, laws and ideologies, modes of reasoning, language and politics) are the distinct subsets of

ecological forces. Therefore, for Hartman (1998), humans have the ability to form social relations that affect their behaviour and ecological relations

2.3 Perspectives of and debates over land reform programmes

2.3.1 Introduction

For many developing countries in Africa, Asia and Latin America, land has been identified as a chief source of livelihood, security and status, since an estimated 70 percent of their population is rural (Deininger and Binswanger, 1999; Moyo 2000; Toulmin and Quran, 2000; Deininger and Luvandez, 2004). Because of this, land-related issues have been the principal sources of grievance between the landowners and the peasants. In contrast, industrialisation, urbanisation and capital accumulation in most developed countries have provided for broader sources of livelihoods, and therefore minimised conflict related to agricultural land. It is therefore reasonable to expect that Zimbabwe, as a developing country, will exhibit some conflict between those that have tenure over land and the landless.

From the literature the main debates that have emerged that have a bearing on land reform in Zimbabwe have been over redistribution of land through market versus radical state-led reforms; smallholder versus large-scale farming and debates over the best form of tenure. Therefore, this section of the literature review will examine these debates, discuss the political and economic ideology on which they are grounded and provide a case for integrating sustainable livelihoods and the natural environment in land reform discourse.

In this section, the world-historical perspective has been included in order to contextualise the political and economic ideologies in which land reform debates are embedded. A consideration of the world-historical perspective follows as a precursor to descriptions of the debates over land reform programmes.

2.3.2 The world-historical perspective

Based on past evidence worldwide, Adams (1995) described approaches to land reform as either being revolutionary or evolutionary. The premise of a revolutionary approach is drastic, planned, public intervention to redistribute land versus an

evolutionary process, which aims at improving access and security of tenure (Adams, 1995). Furthermore, Bernstein (2003) points to the fact that the implementation of land reform programmes through either a revolutionary or an evolutionary approach is often shaped by the political ideology of the country. This ideology rests either on a capitalist or a communist/socialist framework. This research will highlight the changes that have occurred in the political ideology pursued by successive governments and responsible authorities in Zimbabwe.

There are three main tenets behind land reform programmes, which are redistribution, tenure reform or restitution. Most of the major debates have evolved around the implementation of these reforms. Redistribution as a form of land reform has been favoured worldwide, particularly in countries with a colonial history, which seek to redistribute land as a form of social justice. Emerging rural development agenda of the 1990s for developing countries began to place land reform programmes, especially through redistribution and tenure reform at the front of poverty alleviation strategies.

Moyo (2004b) and Bernstein (2003) used the world-historical perspective to provide an overall framework for understanding how the capitalist and communist/socialist ideological dispensations have influenced debates and directions of land reform and agrarian transition worldwide, particularly in the case of Zimbabwe. In doing this, Moyo and Bernstein contextualise the path pursued by the post-independence government of Zimbabwe.

Bernstein who followed the seminal work by T. J. Byres (Moyo, 2004b), put forward that the ‘classic’ agrarian question

‘was driven by concerns with economic and political problems and prospects of capitalist, and then socialist, development in the peripheries of northwest Europe where industrialist capitalism was first established, this then extended further to the vast colonial, quasi colonial and former colonial zones of Asia, Africa and Latin America’.

Therefore, communist ideology for agrarian transition in countries like Russia, China, Cuba, Tanzania, Zambia and Mozambique focused on nationalisation of land and collectivisation of agriculture (Bernstein, 2003; Moyo, 2004b). The presupposition, according to Moyo (2004b:6), was that this would resolve the problem of ‘agrarian

class accumulation and tensions of the worker-peasant alliance, vis-à-vis landlords and emerging capitalists'. On the other hand, Bernstein (2003) wrote that, where capitalism developed through the transition from the classical agrarian system, land markets and private/freehold tenure were advocated. In Zimbabwe, the agrarian question was largely framed by capitalist development during the colonial era and then an attempt at a socialist approach in the decade after independence. However, capitalist development that had already been established, as shall be detailed later, remained prevalent and influenced agrarian and land reform transitions in the country after independence.

Having established the ideologies that have shaped the various perspectives of land reform, it is now possible to describe the debates surrounding the different approaches to land reform programmes, so as to place issues of sustainable livelihoods and the natural environment within these debates.

2.3.3 The farm size productivity debate (small versus large scale farming)

Proponents of smallholder agriculture (World Bank, 1974, Berry and Cline, 1979; Lipton, 1996; Faruque and Carey, 1997; Deininger and Binswanger, 1999; van der Brink, 2003; Twyman *et al.*, 2004) argued that smallholder farms are efficient and are able to sustain the local economy and that they are desirable from both an equity and efficiency perspective. These scholars argued that observed empirical evidence suggested that smallholder farmers generated more profit for every dollar invested (either in cash or in kind). However, they point out that this does not mean that they are richer than large-scale farmers are, but it shows that they make relatively more out of the little they have. Their arguments rest on the notion that family labour is more efficient than hired labour, smallholders use their resources intensively and they have the ability to provide for economic growth, poverty reduction and sustainable livelihoods through farming.

Since the publication of its land reform policy paper in 1974, the World Bank has favoured smallholder farming rather than large-scale or plantation farming. Scholars (Lipton, 1996; Quan, 2000, Moyo, 2000, 2004b, 2004c) and those sponsored by the World Bank (Deininger, 1999; Deininger and Squire, 1998; Deininger and

Binswanger, 1999), as well as a number of donor agencies such as the Department for International Development (DfID) and the International Food Policy Research Institute (IFPRI) advocate this policy. They believe that smallholder farming is efficient and can induce growth and development, thereby alleviating poverty and improving livelihoods. Scholars such as Bernstein (2003), Dyer (2004), Sender and Johnston (2004) have emerged as strong proponents of the theoretical supposition mentioned above.

Subsequent debates put forward in the literature concerning smallholder farming are placed into three subsections that are: arguments over labour and efficiency, the inverse relationship of farm size to productivity, and arguments over the right means to achieve poverty alleviation and sustainable livelihoods.

2.3.3.1 Labour and efficiency

Berry and Cline (1979) claim based on their studies of smallholder farming in Latin America and Asia, that smallholder farmers applied higher inputs per unit of land. Deininger and Feder's (1999) studies in Latin America, which indicated successful changes from mono-cropped large plantation farms to labour intensive and diversified all year round smallholder farming, confirmed this supposition. Deininger and Binswanger (1999) and van der Brink (2003) indicated that beneficiaries of small farms make sure that their individual farms work by taking greater care of their land, making independent entrepreneurial decisions and using their land and labour resources more intensively compared to their larger counterparts. It can be noted here that the abilities of farmers to take good care of their land and to make good independent entrepreneurial decisions are to a large degree, dependent on factors that are specific to the individual smallholder farmer and their particular situation. With the exception of a few studies in Africa, review of literature has shown that not all smallholder farmers in Africa have experienced the same level of success as those in Latin America and Asia.

However, panel studies of some resettled households, and empirical research in resettlement areas in Zimbabwe since its independence in 1980, conducted by Weiner *et al.*, (1985), Kinsey (1999), Hoogeveen and Kinsey (2001), indicated varying

degrees of success among smallholders following land redistribution and resettlement. Similarly, Moyo (1987) and Nagayets (2005), pointed to varying degrees of success of smallholders in Kenya, Malawi and Ethiopia, following the switch to smallholder farming.

Van der Brink (2003) postulated that large farms are inefficient compared to smallholder farms, because of the transaction costs of hired labour and supervision thereof by the farmer. Arguments put forward by Lipton (1996) and van der Brink (2003) against large-scale commercial farming included its failure to contribute to employment. They argued that due to mechanisation, large farms employ fewer people and therefore their contribution is negligible compared to smallholder agriculture. Moyo (2004a) held this perspective and believed smallholder farming in Zimbabwe would contribute to aggregate employment, despite the initial setbacks incurred under the FTLRP. This outlook implies an improvement in livelihoods in the long term, as long as smallholder farmers are able to satisfy their needs from farming and are not forced to supplement their income by partially returning to formal employment or seeking aid.

Countermanding arguments by the Commercial Farmers Union (CFU) in Zimbabwe and the South African Agricultural Union criticise the conceptual notion of labour as the basis for efficiency in smallholder farming (Justice for Agriculture [JAG], 2003 Lipton, 1996). Opponents (Dyer, 2004; Sender and Johnson, 2004) argue and proponents, previously mentioned, concede that there are several factors besides labour that should be taken into account when evaluating the viability and productivity of the two farming systems. These factors include economies of scale, access to credit, information technology, markets, financial institutions and risk aversion. It is argued that when one aggregates these factors, smallholder farming does not fare well compared to large-scale farming.

2.3.3.2 Inverse relationship between farm size and land productivity

In the opinion of Dyer (2004), many writers regard the work of Berry and Cline (1979) as the definitive work on the inverse relationship between farm size and productivity. Berry and Cline concluded, based on a wide range of empirical studies,

that an inverse relationship exists between farm size and productivity in developing countries and that this relationship is in fact the norm.

In support of Berry and Cline (1979), studies of 15 developing countries conducted by Cornia (1985) showed that, in the majority of cases, the output per acre declined with increasing farm size. Cornia (1985) went on to suggest that redistribution would, if thoroughly implemented, provide immediate beneficial effects in terms of output growth, enhanced income distribution, poverty alleviation and improved livelihoods. Rosenzweig and Binswanger (1993) used econometric models to argue for the inverse relationship by comparing the profit to wealth ratio of large-scale versus smallholder farming. In this model, they illustrate that the profit to wealth ratio of the smallest category of farmers is always at least twice that of the largest.

On the other hand, Dorward (1999) and Sender and Johnston (2004) indicated that there are few studies in sub-Saharan Africa that have shown the success of the inverse relationship in smallholder production. Dorward (1999) held that in his study of the farm-size productivity relationship in Malawi, evidence pointed to a positive relationship between size and productivity. He argued that in the absence of capital-intensive technology, the inverse relationship may not hold for smallholder farmers. Comparisons of production levels and capital-intensive technology of the former commercial farmers and of the resettled communities in Kadoma will be undertaken later in this research to determine the applicability of Dorward's notion.

Sender and Johnston (2004) contributed to this line of argument by pointing to Kenya where it was realised that the 'inverse relationship' was weaker in areas, that were less fertile, suggesting that this relationship was, in part, determined by the agro-ecological potential of the area, rather than farm size *per se*. Deininger and Binswanger (1999) previously collected data that showed large-scale commercial farms, particularly plantations in Zimbabwe, to have been more productive, achieving higher yields than smallholder farmers from the communal and resettlement areas. In the Zimbabwean case, however, large-scale plantations were not necessarily located in areas with the same agro-ecological potential as the communal and resettlement areas. This serves to point out that the relationship between farm size and productivity is dependent on many variables and that farm-size/productivity relationships may

have many methodological flaws, due to the complexity of issues involved, particularly in developing countries (Binswanger *et al.*, 1995; Dyer, 2004). Berry and Cline's inverse relationship between farm size and productivity in developing countries may therefore not apply in much of sub-Saharan Africa and may in fact not be the norm.

2.3.3.3 Rural development, poverty alleviation and sustainable livelihoods

According to Singh (1990: xix), quoted in Ellis and Briggs (2001: 441), 'the growth of non farm economy depends on the vitality of the farm economy, without agricultural growth in rural areas, redressing poverty is an impossible task'. This has subsequently placed the need to develop smallholder agriculture as the engine for growth and sustainable livelihoods at the centre of land policy and reform programmes in Africa.

The sustainable livelihood framework developed in the 1980s and 1990s by Sen (1981), Chambers (1983), Swift (1989) and Chambers and Conaway (1992) cited in Ellis and Briggs (2001) is presently pursued as the appropriate form of rural development particularly where land reform programmes are concerned in developing countries. This framework focuses on the levels of social, natural, physical and financial capital that a farmer or community possess and the fact that an increase in these forms of capital is likely to increase the sustainability of the livelihoods of these farmers (World Bank, 1999; Neefjes, 2000; Ellis and Briggs, 2001; Scoones, 2005).

Parayil (1996) and Banerjee (1999) attributed the achievement of poverty alleviation and a comparatively better standard of living and development of the state of Kerala, India, to meaningful land reforms based on smallholder redistribution. According to these scholars, land (natural capital) was the catalyst for the attainment of high levels of social capital advocated in the sustainable livelihood paradigm and hence the high levels of development in Kerala compared to other states in India. Furthermore, Parayil (1996) emphasised that these successes coupled with political stability amongst the three religious groups, contributed to improving environmental stability through frugal and efficient uses of energy and the natural resources. Although Parayil (1996) did not use political ecology *per se* in his analysis of the development

of the state of Kerala, the fact that he acknowledged political and economic factors contributing to environmental stability and sustainable livelihoods lends itself to this paradigm.

Empirical evidence from Hoogeveen and Kinsey's (2001) studies of households in certain resettlement schemes in Zimbabwe indicated that redistribution of land to smallholder farmers in the 1980s was associated with improved agricultural productivity, increased assets and incomes and, in turn, improved livelihoods. Adams (1995) and Lipton (1996) noted that the industrial take off in East Asian countries was preceded by the redistribution to smallholders of farms in Japan, Taiwan and China, which led to economic growth and rural development. Van der Brink (2003) therefore held that smallholder agriculture as an economic system can generate poverty-reducing linkages in the earlier stages of development as evidenced in the above-mentioned countries. However it must be noted that key components of the successes of the above mentioned cases were state support for the smallholder farmer and foreign aid.

Human Rights Watch (2002), Sachikonye (2003), Sender and Johnston (2004) and Hartnack (2005) noted that land reform programmes in countries like Ethiopia and the present FTLRP in Zimbabwe have exacerbated rural poverty, particularly amongst the former commercial farm workers. This is because land redistribution measures have resulted in a substantial decline in casual and seasonal wage employment, without providing sufficient alternative sources of income for former labourers.

2.3.4 Tenure reforms

This section explores the debates over the merits of adopting modern tenure with individual titling in Africa, Latin America, Asia and the Pacific region. The particular focus will be on Africa, in order to provide a contextual background to the question of land tenure in Zimbabwe and that under the FTLRP.

Adams *et al.* (1999) defined land tenure as the terms and conditions by which land is held, used and transacted. Therefore, for these scholars, tenure reform refers to a planned change of these terms and conditions with the goal of enhancing and securing

peoples' land rights. Adams *et al.* (2000) believed that this would prevent evictions, landlessness, breakdown of local arrangements for managing common property resources and social instability and that it would also allow people to invest in and use their land in a sustainable manner.

Kalabamu (2000) described modern land tenure as a system whereby the law defines land rights and documented evidence is often in the form of title deeds, which then show ownership of the land. This type of land ownership is referred to as freehold tenure which Shiviji (1998) quoted in Kalabamu (2000:306) calls a 'bundle of rights ... which are defined, secure and guaranteed and most important of all can be transferred on the market at the will of the owner'. Neo-classical economic theorists regard freehold tenure as superior and therefore advocate land ownership, titling and registration (Platteau, 1996; Izumi, 1999).

Firmin-Sellers and Sellers (1999) indicated that proponents of freehold tenure argue that land titling is an essential foundation for economic growth as it provides a precondition for long-term investment, access to credit and the development of land and labour markets because of the notion of security associated with it. These factors are inclusive of financial, natural and physical capital and will therefore provide for enhanced livelihoods through smallholder farming. This viewpoint is held by many scholars, administrators, investors, donors, financial credit managers and institutions such as the World Bank, USAID and DfID.

Generally, the line of argument mentioned above is conceived to be a neo-liberal economic framework similar to that propounded in debates over 'small versus large' farming. Deininger and Binswanger (1999) held that freehold titling increases incentives to clear and cultivate land, thereby increasing peasant production, as demonstrated in studies on tenure reforms in China, Burkina Faso, Ghana and Niger. They believed that freehold titling would benefit rural livelihoods by addressing the shortcomings associated with smallholder farming without title in terms of securing collateral or access to capital, as title under market forces allows for the provision of capital. This will in turn address issues of poverty and lead to sustainable livelihoods based on farm production for most rural households. So these scholars would suggest

that titling of acquired land should occur in Zimbabwe for the FTLRP to be a successful rural development strategy.

Conversely, according to Deininger and Binswanger (1999), opponents such as Bruce *et al.* (1993) as quoted in Lastarria-Cornhiel *et al.* (1999) argued against titling, because they believe it does not necessarily increase or lead to land security and collateralised lending. Moyo (2004b, 2004c) wrote that empirical evidence of land titling in Africa indicates that, contrary to expectation, benefits with respect to increased financing, investment and productivity have been minimal. He argued that titling therefore is not a necessary precondition for agricultural development. Moreover, he gives examples of problems associated with titling, such as the exclusion mostly of the poor and women, disputes over inheritances at family level and conflicts at village level over access to commons such as burial and spiritual places. He also noted that instead of benefiting the majority titling has frequently increased the concentration of land in the hands of powerful elites.

Furthermore, Deininger and Binswanger (1999) and Lastarria-Cornhiel *et al.* (1999) revealed that, in some cases, titling had not increased the willingness of banks to lend to the rural sector, particularly to smallholder farmers, where for varying reasons repossession of land cannot occur or where land sales and mortgages are restricted. This research will examine the tenurial issues under the FTLRP and the ability of these new farmers to access credit from financial institutions.

2.3.5 Market-assisted versus state-led land reform

There has been on-going debate over what role the state or the market should play in land reform programmes, particularly in the cold war context and since emergence of neo-liberal economic paradigms. These debates have characterised the Zimbabwean land reform scenario since independence with the eventual application of state-led market-assisted land reform programmes in the 1980s and 1990s.

Adams (1995) and Deininger and Binswanger (1999), amongst others, advocated the redistribution of land under market forces as propounded by the neo-liberal economic theory. Market-assisted reforms are believed to provide efficiency and equitable

distribution of land with minimal loss of production and to result in an expansion of commercial agricultural activities. These reforms favour private tenure of land.

Arguments that have emerged from populist media, farmer organisations and the World Bank are that radical state-led redistribution of land is likely to reduce agricultural productivity and adversely affect the food self sufficiency of the particular country. This view is supported by the food shortages and reduced self sufficiency of Zimbabwe since the FTLRP and will be examined in the context of the FTLRP in Kadoma District. However, Moyo (2002) argued against this notion because he believed that market-assisted land reforms generally lead to foreign ownership and local elites benefiting rather than the majority of the rural poor. Furthermore, he argued that market-assisted approaches tend to slow radical redistribution of land and this leads to land conflicts and occupation movements, as exemplified by the intensive land occupation movements of 2000 in Zimbabwe. Moyo (2002) argued that state-led reform, which allows for radical redistribution, addresses demands for land and quantitatively is able to redistribute more land to beneficiaries in a shorter period of time compared to market-assisted land reforms.

Evidence from Latin America and the Caribbean indicates that poor people have not been able to secure land from the market and therefore, according to Shearer *et al.* (1991) this created constraints on their ability to participate in the land reform process, leading Adams (1995) to argue that market-assisted reform would not necessarily transfer land to smaller farmers, unless these groups are able to secure grants and credit. This was the case in Zimbabwe prior to the FTLRP, when the black elite was able to purchase more land than the poor.

Following failures of mainstream neo-liberal theories to provide for the equitable redistribution of land, several countries like Brazil, Colombia, Guatemala, the Philippines and South Africa, are experimenting with a 'community-based' model of land reform. Deininger (1999) and Deininger and Binswanger (1999) noted that this type of land reform is based on voluntary land transfers based on negotiations between buyers and sellers, and that the role of government is restricted to availing a land purchase grant to eligible beneficiaries and the provision of technical support. These scholars said this programme is advantageous because it allows beneficiaries to

seek run-down unproductive farms and prevents a negative effect on aggregate production as happens with radical land reforms. They believe that, because of the collaborative attitude associated with this model, it will stimulate rather than undermine land markets. Furthermore the involvement of the private sector, non-governmental organisations (NGOs) and the community in developing, financing and administering the projects would improve the capacity of the smallholder farmers to make productive use of the land.

Deininger and Binswanger (1999) and Deininger (1999) indicated that pilot programmes in Colombia showed superior results to previous land reform programmes and that the formerly landless were able to establish highly productive agricultural systems. However, Moyo (2002) criticised this model of land reform on the basis of its idealism and presumptuousness in thinking that fair negotiations can take place between the landed and those who do not have land within a capitalist society. He commented that negotiations are often curbed through repression by local political organisations, rural communities under a chieftaincy and dominant political parties. Moyo did not believe that such a model would be as successful in Africa it had been in Latin America. He based his argument on the fact that land reform in Latin America is strongly supported by radical NGOs, whilst Africa is faced by a weak civil society, which, in the case of Zimbabwe, is repressed by government. He further stated that in South Africa the effectiveness of this model is likely to be compromised by the often hidden agendas of private consultants and NGOs in the process of negotiations.

2.4 The natural environment

Emerging literature on land reform is currently placing environmental issues at the core of its appraisal of landscape and environmental changes. Mertens *et al.* (2000); Elliot and Campbell (2002); Mapedza *et al.* (2003); Elliot and Kinsey (2003); McCusker, (2004); UNDP, (2004) and Elliot *et al.* (2005) are exploring plural methodologies through the use of GIS technology and participatory interviews to analyse socio-environmental and landscape changes linked to land reform processes. Chaumba *et al.* (2003) have assessed the process of subdividing farms during and after the farm invasions in the Chiredzi District, in an effort to assess the impact of the

farm seizures in Zimbabwe on land use patterns. McCusker (2004) used both multi-temporal landsat© imagery and household surveys to assess the impact of South Africa's land reform program and land use changes on redistributed farms in the Limpopo Province. This research aims to contribute to this growing body of literature by using landsat imagery, together with household surveys, to show the impact of FTLRP on livelihoods, land use practices and the environment at the three study areas in Kadoma District, and, by so doing to evaluate, to a reasonable extent, the success of the FTLRP in Zimbabwe.

2.5 Land apportionment and redistribution in Zimbabwe

2.5.1 Introduction

This section provides an overview of the evolution of land distribution patterns in Zimbabwe from the pre-colonial to the post-colonial period. Firstly, the physical geography of the country is provided in order to understand the influence of the agro-ecological zones on land distribution. This is followed by a historical description of the land pattern prior to the 1890 occupation of the country by the British South Africa Company (BSAC). The changes that resulted from the expropriation of land and racially discriminatory legislation passed by the company, settler government and Ian Smith's regime up to 1979 are reviewed. Lastly, a description and critical appraisal of the post-independence land reform programme will be given.

2.5.2 Physiography

Geographically, Zimbabwe consists of four major regions based on relief, namely, the Eastern Highlands, the highveld, the middleveld and the lowveld (Kay, 1970) shown in Figure 2.1. The Eastern Highlands consists of a narrow belt of mountains and high plateaux (Moyana, 1984). The highveld is Zimbabwe's central plateau, which traverses the country for 160 kilometres from the southwest to the northeast, forming the central watershed between the Zambezi River to the north and the Limpopo and Save Rivers to the south (Kay, 1970; Moyana, 1984). It covers 25% of the total area of the country, is well watered and fertile (Palmer, 1977) and most of the white-owned Large Scale Commercial Farms (LSCF) were located in these two

aforementioned regions. The highveld is the region in which the case studies are located

According to Kay (1970) and Palmer (1977), on either side of the highveld, land recedes to form a dissected and undulating area known as the middleveld, which covers 40% of the country. The fourth region, the lowveld, is hot and dry, and comprises 35% of the country lying mostly in the Limpopo and Save basins, which consist of gently undulating terrain.

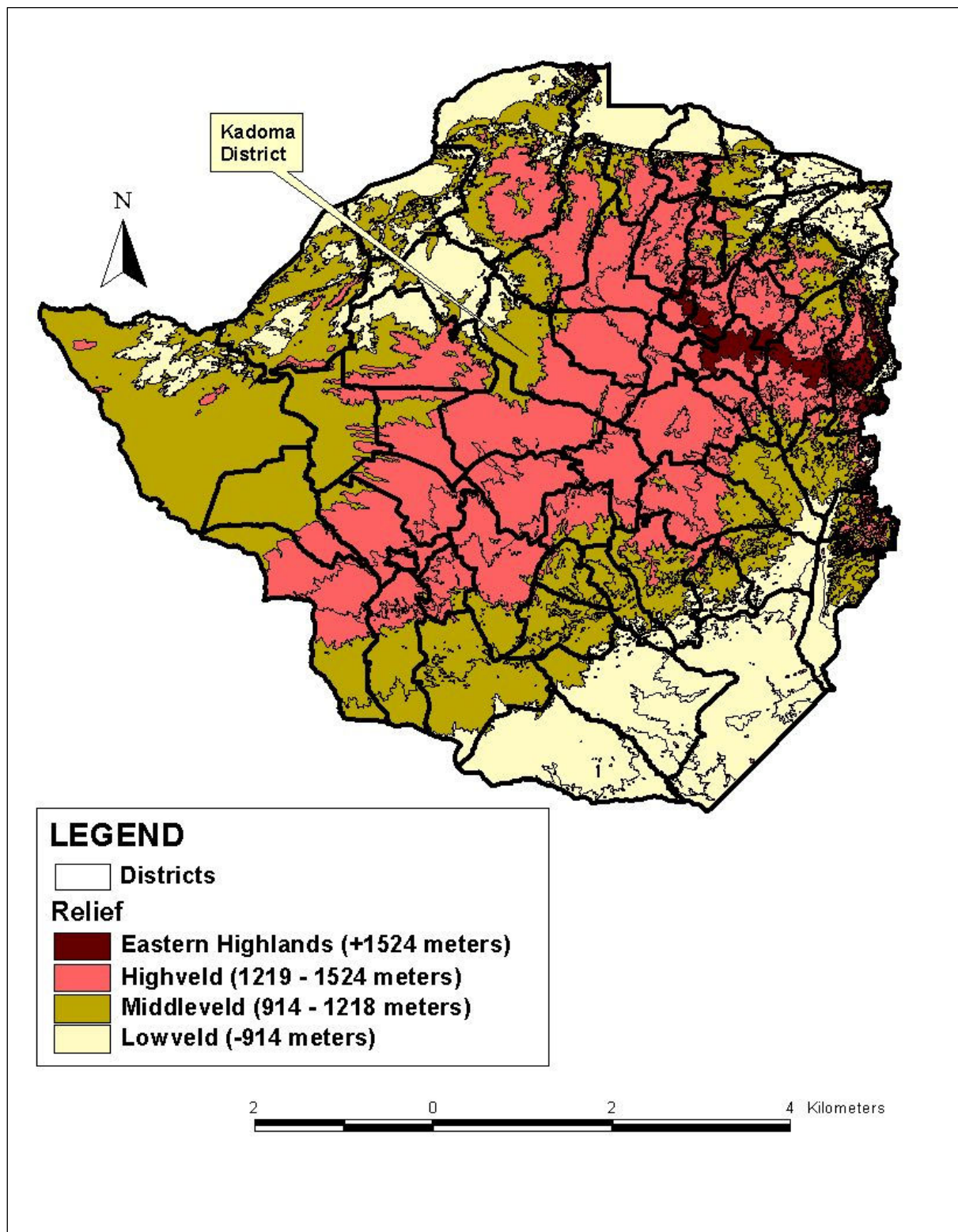


Figure 2.1 Relief Map of Zimbabwe

2.5.3 Climate

According to Kay (1970) and Vincent and Thomas (1960), four climatic seasons can be distinguished in Zimbabwe, being the warm, dry season; the main rainy season; the post-rainy season and the cold, dry season.

The **rainy season** starts from November to mid/late March, whilst the **post-rainy transition season** from mid/late March to mid May (during) which the occurrence of moist air and the frequency of showers starts to decrease and temperatures fall steadily. The **cool dry season** from mid May to mid August; and the **warm dry season** from mid August to the onset of the rainy season, which usually occurs in November (Kay, 1970:16).

Throughout the country, the rainy season lasts not more than five months and is primarily a result of the Inter-Tropical Convergence Zone (ITCZ), which covers a considerable part of Southern and Central Africa between November and March (Kay, 1970; and Pikirayi, 2001). Rain brought by the ITCZ falls mostly in the north and north-east of the country, whilst districts in the southern, south-western and western parts receive the least (Kay, 1970). The rainfall pattern of the Kadoma District will be detailed in Chapter Three and later sections will show that rainfall is critical as resettlement operates in rain-fed systems.

Owing to the differential distribution of rainfall countrywide referred to above, rainfall has an ‘overriding limiting factor in agricultural production’ (Vincent and Thomas, 1960:11), as the natural growing season is confined to only four or five months, the period when there is reasonable moisture. Agricultural production is also affected by the El Niño and La Niña phenomena that generate periodic droughts once in every five years and unusually high rains, which in some cases cause flooding, respectively (Pikirayi, 2001).

Figure 2.2 shows that Zimbabwe is divided into five agro-ecological zones, termed Natural Farming Regions and the study areas are located in regions IIb and III. These regions are distinguished primarily by the quantity and variability of average rainfall (Stoneman and Cliffe, 1989). Factors such as altitude, soil type and other climatic conditions were also taken into account within this classification (Vincent and Thomas, 1960). According to Moyo (1995), these regions provide a guide to farming practices and potential farm output. Table 2.1 describes these regions and places the study areas, Pamene, CC Molina and Lanteglos farms according to the region. Sender and Johnston (2004) described in the preceding sections the agro-ecological potential of an area as a significant determinant to the productivity of smallholder farmers.

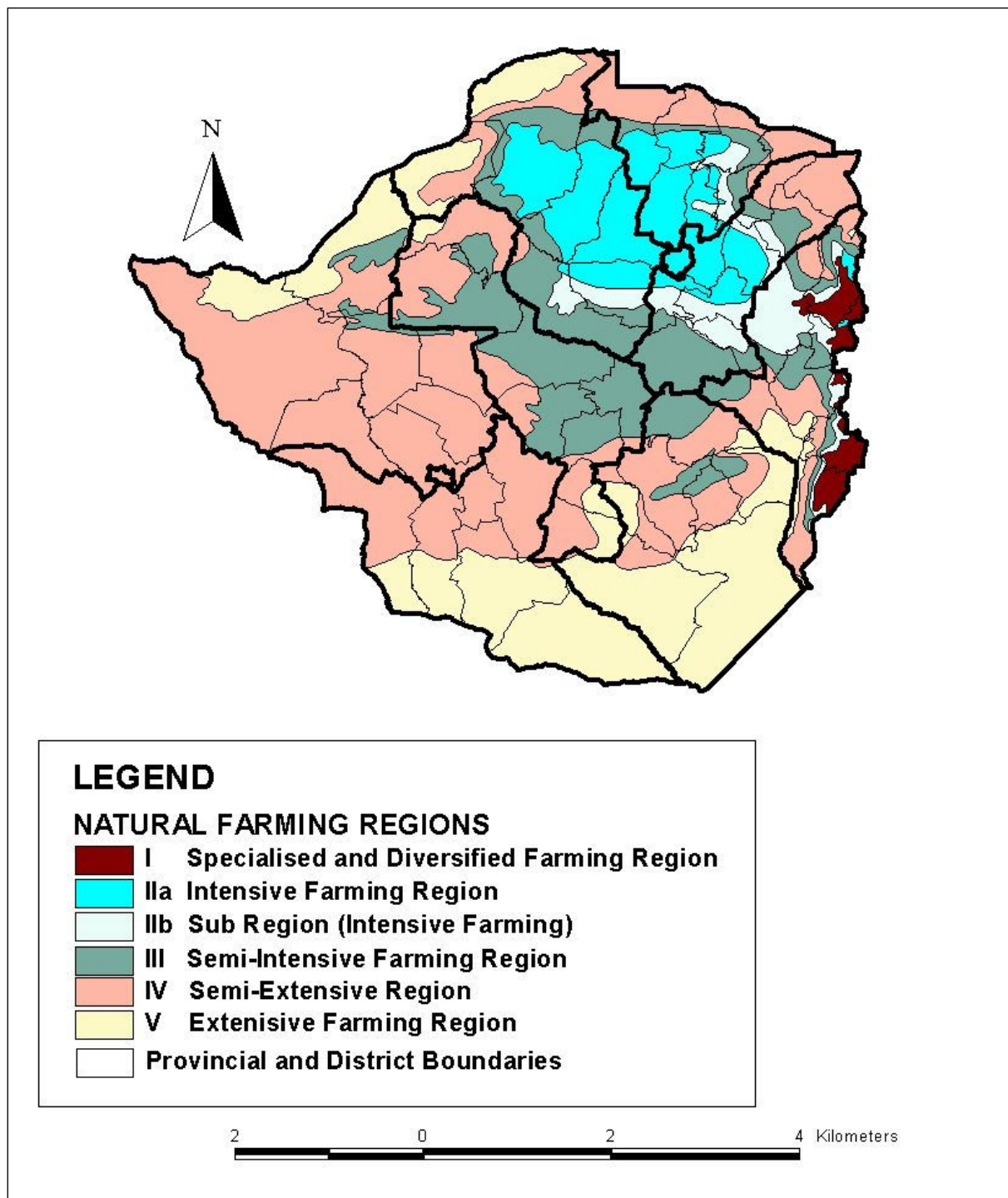


Figure 2.2 The Natural Farming Regions in Zimbabwe

Table 2.1 A description of the Natural Farming Regions in Zimbabwe

NATURAL REGION	HECTARAGE	RAINFALL	CROP PRODUCTION	TENURE
I: Specialised Diversified Farming	700,000	900mm - 1000mm all year round.	Forestation, fruit, tea, coffee, macadamia, intensive livestock production.	Mostly LSCF.
Ila: Intensive Farming	-	18 rainy pentads.	Intensive crop and livestock production.	Mostly LSCF.
Ilb: Sub Region (Intensive Farming)	-	16 - 18 rainy pentads. Dry spells in rainy season.	Intensive crop and livestock production.	Mostly LSCF, Pamene located.
III: Semi-Intensive Farming	7,290,000	650-800mm. Severe mid-season droughts experienced.	Semi intensive crop production. Region marginal for solely crop production.	Mostly communal and post-independence resettlement areas. Some LSCF: CC Molina and Lanteglos located.
IV: Semi-Extensive Farming	14,780,000	450-500mm. Vulnerable to periodic seasonal droughts and severe dry spells in rainy season.	Semi-extensive livestock production. Risky for dry-land crop production.	Mostly communal and some LSCF.
V: Extensive Farming	10,440,000	Below 650mm. Low and erratic rainfall.	Extensive cattle ranching.	Mostly communal and some LSCF.

Adopted from Moyo (1995)

2.5.4 Soils

Vincent and Thomas (1960); Moyana, (1984); Gore, *et al.* (1992) and Rukuni (1994) commented that the nature and distribution of soils in Zimbabwe is strongly dependent on the geological nature of the underlying rock formation from which they are derived. Vincent and Thomas (1960) classified soils according to the following geological formations: soils of the Gold Belts, the Basalt Areas, the Great Dyke, Granite areas, Lomagundi sediments, Umkondo sediments, Paragneisses, Permian, Triassic and Cretaceous sediments, Kalahari and Forest sandstones and Mopani soils.

According to Vincent and Thomas (1960:18):

...the granite and the sediments give rise to predominantly sandy soils, whereas the basic igneous rocks of the gold belts, the Great Dyke, and the basalt areas, give rise to clayey and loamy soils. Thus, the general picture of

[Zimbabwe] is one of predominantly sandy soils, with scattered, relatively small areas of loamy and clayey soils. Moyana (1984:31), states that about 53% of the country consists of granite soils. These soils are described as being ‘highly weathered and leached under low rainfall conditions ... [and] of low fertility and rapid decline in productivity under continuous cultivation’; however, they respond well to manure and fertilisers (Vincent and Thomas, 1960). According to the above mentioned scholars, rich, red and chocolate loamy soils of basement schists, greenstones and epidiorites comprise 7% of the country and these soils have good structure, are fertile and can be maintained with good management practices for long periods of intensive cropping. The soils at all three-study areas varied from fertile, red, clay soils to infertile mopani and granite sandy soils. Sandy soils were predominant in all the study areas.

2.5.5 Vegetation

Vincent and Thomas (1960) classified Zimbabwe’s vegetation into areas of forest, grassland, woodland and bushland whose formation was governed by climatic factors, primarily rainfall and temperature. The main vegetation type of the country is savannah woodland, interspersed with vleis and approximately 75% of the country is covered by woodland and bushland vegetation (Gore *et al.*, 1992:147). Chapter Eight provides an analysis of changes that have occurred in the land cover of the study area during the FTLRP. Vegetation is therefore used as a means of quantifying the impact of the FTLRP on the environment.

Montane and Riverine forests

Montane rain forest and gallery or riverine forest are the two groups of forest found in the country, of which the former is climax vegetation and the latter is governed by edaphic and micro-climatic conditions (Vincent and Thomas, 1960). Montane forests are found in the high rainfall areas of the Eastern Highlands, whilst riverine forests are found on the fringes of rivers throughout the country and in Kadoma. This research will explore the impact of human activities, since the FTLRP on these and other vegetation types, in the study areas.

Grassland

Mountain grassland is found at high altitudes in the Eastern Highlands, whilst extensive areas of grassland are found through out the country in ‘... areas of open rolling topography... whose hydrological conditions are adverse for tree growth’ (Vincent and Thomas, 1960:28).

Woodland

Zimbabwe is mostly covered by woodland vegetation. This vegetation formation consists of many different types depending on climate and soil factors and is

... characterised by trees spaced closely or widely apart, associated with medium and tall perennial grasses in the more favourable rainfall areas and mixed perennial and annual grasses in the lower rainfall areas (Vincent and Thomas, 1960:28).

Most of the central plateau is covered by miombo (musasa/mutondo) woodland and, as altitude decreases, the vegetation is dominated by musasa and mupfuti woodland. The south east lowveld is dominated by mopani woodland; whilst teak woodlands are mostly found in the west and south west of the country on Kalahari soils and acacia vegetation, primarily in the Bulawayo area. The study areas were dominated by both mopani and miombo woodland. This thesis will examine the impact of land clearing on the natural environment.

Bushland

According to Vincent and Thomas (1960:29), ‘when effective rainfall becomes too low and sustained high temperatures are experienced, woodland gives way to bushland vegetation’. This vegetation type is characterised by closely spaced shrubs and small trees, with taller trees scattered throughout and sparse annual grasses.

2.5.6 Historical and structural contexts of the land question in Zimbabwe

2.5.6.1 Introduction

History and context are important to the understanding of the complex nature of the land question and land reform in Zimbabwe today. For the purposes of this research, a historical overview will be provided from the pre-colonial distribution of land to settler occupation of the country in 1890, which resulted in a systematic apportionment of land by race, thus creating the ‘crisis’ or ‘question’ on land, to the

present designation of land by government under FTLRP. The pre-colonial period and the colonial period are subdivided as follows: 1890-1923, 1923-1956, 1956-1965, and 1965-1980. The post-colonial period is subdivided as follows: 1980-1990, 1991-1999 and 2000 to the present. These periods represent changes in the political economy of the country, land distribution and land ownership.

2.5.6.2 Pre colonial

Before the arrival of European settlers, the economy of what is now known as Zimbabwe was essentially agricultural and pastoral. Subsistence agriculture was extensively practised, through a system of shifting cultivation. Crops cultivated included Indian corn, beans, melons, pumpkins, millet, potatoes, groundnuts and peas (United Nations Development Programme [UNDP], 1998). Cattle, goats, sheep and fowls were kept to supplement diets (UNDP, 1998).

Moyana (1984) and the UNDP (1998) stated that land tenure was communal and therefore the rights of the individual to use land were guaranteed by the society. According to Moyana (1984), the king or chiefs served as trustees of the land and the land could not be transferred or sold, it was inalienable, sacred and considered a natural endowment that could not be owned by individuals.

2.5.6.3 1880 – 1923: Land Apportionment under the British South Africa Company

In 1880, the principal authority in the land which today encompasses Zimbabwe was Lobengula, king/chief of the Matebele, who exercised his authority from his headquarters in Bulawayo (Leys, 1959; Tindell, 1967). Towards the end of the 1880s, Cecil John Rhodes, a politician and businessman from the Cape Colony, sent his agents northwards to Rhodesia (Zimbabwe) with the objective of acquiring mineral concessions from the local chiefs (Leys, 1959; Bowman, 1973; Martin and Johnson, 1981; Moyana, 1984; Ranger, 1985; Lemon, 2000; Elich, 2002). It was envisaged that the country was rich in gold, a source of wealth that should be exploited. Rhodes' agents, like Rudd and Selous, received various concessions from tribal chiefs in Mashonaland and from Lobengula and other chiefs (Tindell, 1967) to extract gold.

The Rudd Concession, given by Lobengula in 1889, after extreme pressure and manipulation, was significant in that it gave Rhodes mineral rights over all the land in Lobengula's sphere of influence, which was interpreted to be the whole of (present day) Zimbabwe and Zambia (Leys, 1959; Ranger, 1960; Bull, 1967; Bowman, 1973; Palmer, 1977; Martin and Johnson, 1981; Elich, 2002).

On the strength of the Rudd Concession, Rhodes obtained a Royal Charter from the British government for the BSAC (Leys, 1959; Bowman, 1973). The Charter allowed the BSAC to extract mineral resources according to the Rudd Concession (Tindell, 1967) and gave the BSAC 'authority to administer and hold land rights ... subject to having regard for the laws and the customs of the people' (Bull, 1967: 25). However, the latter prerogative angered Lobengula as it had not been included in the Rudd Concession and therefore contravened the agreement. Lobengula, in order to curb and weaken the growing power and influence of the BSAC in his territories, granted a land concession to a German financier Edward Lippert in 1891 (Tindell, 1967). According to Leys (1959), Tindell (1967) and Kay (1970), the terms of this concession gave Lippert exclusive land rights for 100 years to any of Lobengula's domains. In the same year, Lippert sold this concession to the BSAC for £30 000 and for some shares in the BSAC (Mutambirwa, 1980). The acquisition of the Lippert Concession provided legality for the administration, selling and leasing of land by the Company.

Under the auspices of the Company, a pioneer column comprised of 400 prospective settlers and police was dispatched to Mashonaland and established settlement near present day Harare on the 14th of September 1890 (Leys 1959; Tindell, 1967; Bowman, 1973). The members of the column disbanded and dispersed throughout the country, first focusing on mining, then turned to farming when they failed to find abundant reserves of gold.

In 1893, the Company waged a military campaign against the Matebele on the pretext of Matebele aggression against the settlers. According to Tindell (1967) and Palmer (1977), the war was waged for political and economic reasons. The Europeans who had 'superior organisation and technology' (Bowman, 1973: 6) overpowered the Matebele. Those Europeans who had participated in the military campaign were

rewarded with 6000 acres (2400 hectares) of land each. (Martin and Johnson, 1981; Moyana, 1984; Lemon, 2000).

The victory resulted in a large influx of settlers into Matebeleland that transformed Bulawayo into a settlement with a population of 2000 white settlers (Tindell, 1967: 167). This population increase resulted in more conflict over resources between the settlers and the indigenous people in Matebeleland (Ranger, 1960) that in turn led to the British government's appointment of a Commission to organise the settlement of the Matebele. According to Ranger (1960), the Commission made it mandatory for the Company to set aside land for Africans that was appropriate for their pastoral and agricultural needs. This was intended to protect the Africans from settler expropriation and resulted in the establishment of the Gwai and Shangani reserves (Figure 2.3) covering 850 000 hectares of land on the middleveld, north and north-west of Bulawayo (Kay, 1970; Moyana 1984). Consequently, the principle of land segregation in order to meet the needs of the Africans was introduced. The creation of these reserves is significant because it provided the institutional and spatial framework from which successive settler governments appropriated land for white agriculture, by resettling Africans to marginal areas within the country, thereby creating the land crisis which exists today.

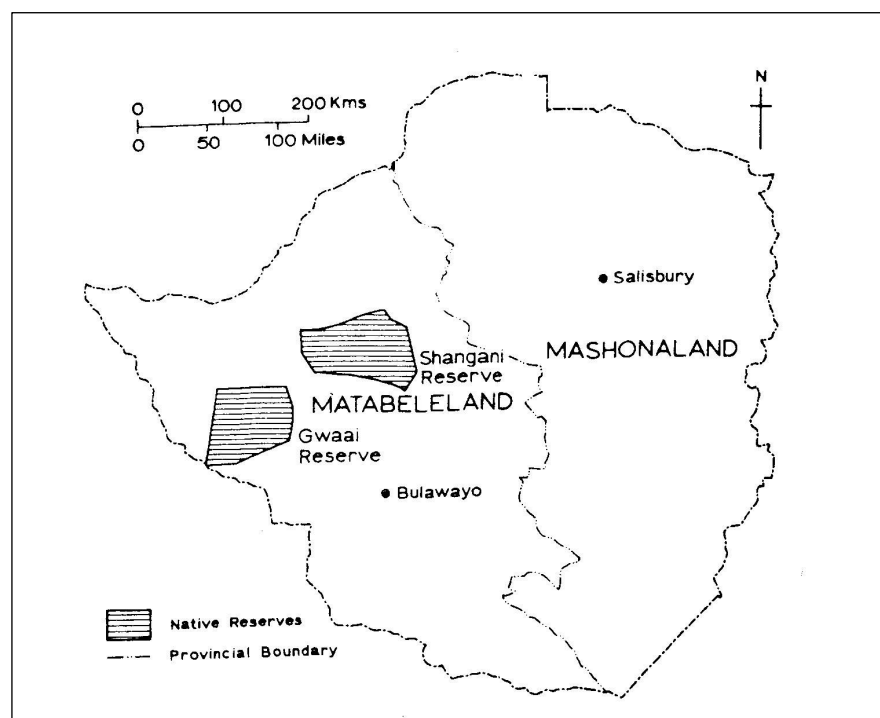


Figure 2.3 1894 Native Reserves. Source, Palmer (1977: 30)

In 1896/97, the Mashona and Matebele in separate incidents, rebelled against settler rule in protest against the new political and economic dispensation, particularly the establishment of reserves, the imposition of various taxes and rentals on land alienated by Europeans (Ranger, 1960; Tindell, 1967; Palmer, 1977). However, the Africans were defeated and had to concede to 'white administration and make the best of their conquered state' (Bowman, 1973: 6).

By 1910, there were a series of native reserves throughout Southern Rhodesia as shown in Figure 2.4. These reserves, like the Gwai and Shangani reserves were mostly located in areas of light sandy soils, with little rainfall and inadequate water supplies (Moyana, 1984). They were mainly located in the Natural Farming Regions IV and V (Figure, 2.2), of low agricultural potential.

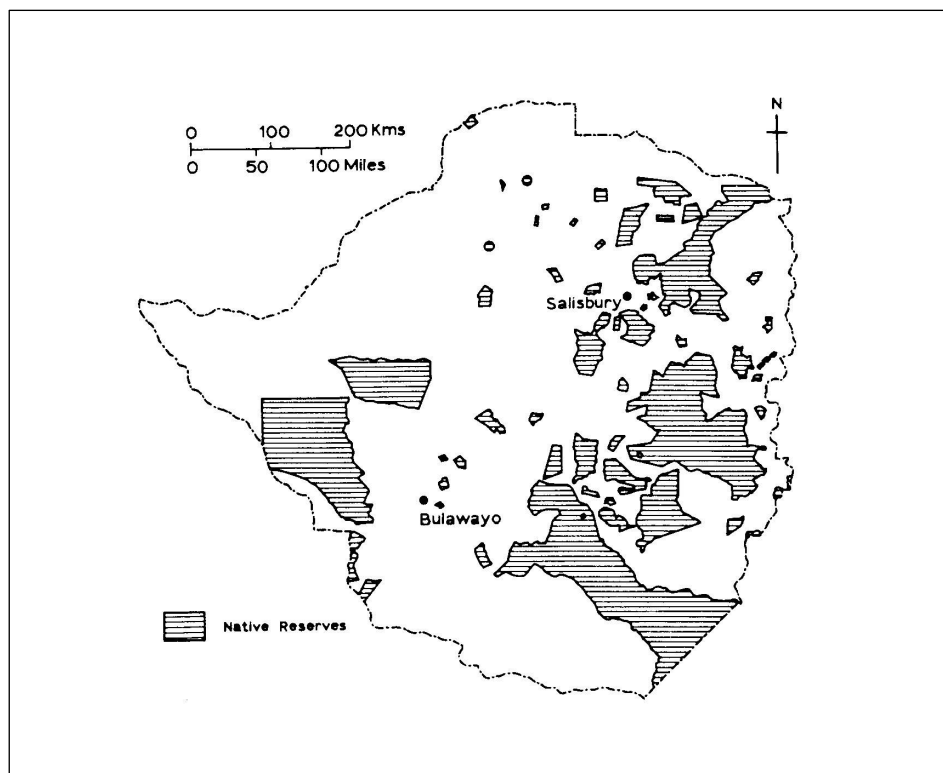


Figure 2.4 Native Reserves in 1910. Source, Palmer (1977: 69)

In 1920, the recommendations of the Reserve Commission, set up in 1914 to review the structure and question of land in Southern Rhodesia, were legislated by the Order-in-Council. The Commission had recommended a reduction in the number of reserves and their relocation away from the railway lines. Reserves located in areas of high

agro-ecological potential and close to railway lines were substituted, in favour of settler agriculture, with land in low-lying areas of reduced agro-ecological potential (Leys, 1959; Ranger, 1960; Tindell, 1967; Moyana, 1984). It can be noted here that the large-scale commercial farms in Kadoma District were located in areas of better agro-ecological potential and closer to lines of communication compared to the communal areas within the district. Ranger (1960), Tindell (1967), Palmer (1977) and Moyana (1984) suggested that the South African Land Act of 1913 had a strong influence on the Reserve Commission. Figures 2.5a and 2.5b summarise the apportionment of land following the implementation of the Commission's recommendations under the BSAC rule in 1920.

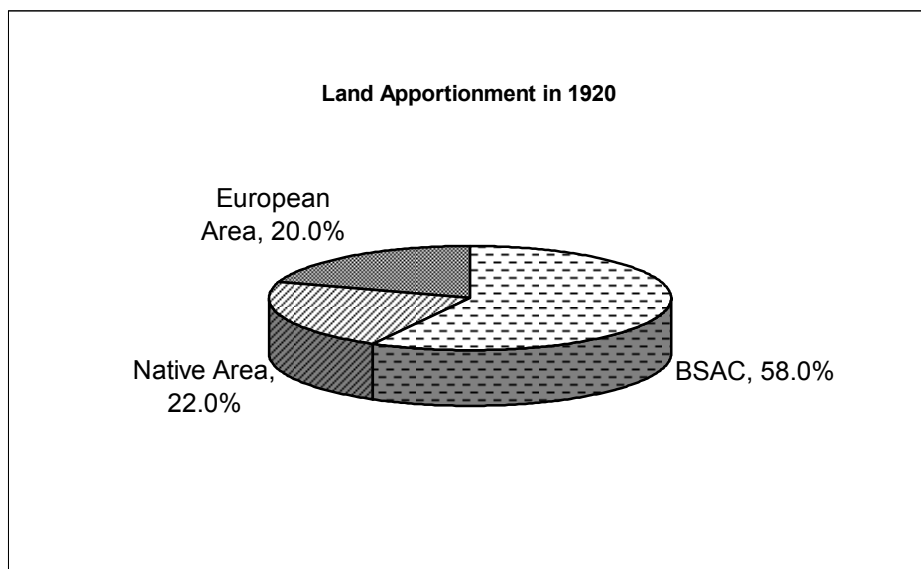


Figure 2.5a Land apportionment under the BSAC administration by 1920. Source, Kay (1970: 50)

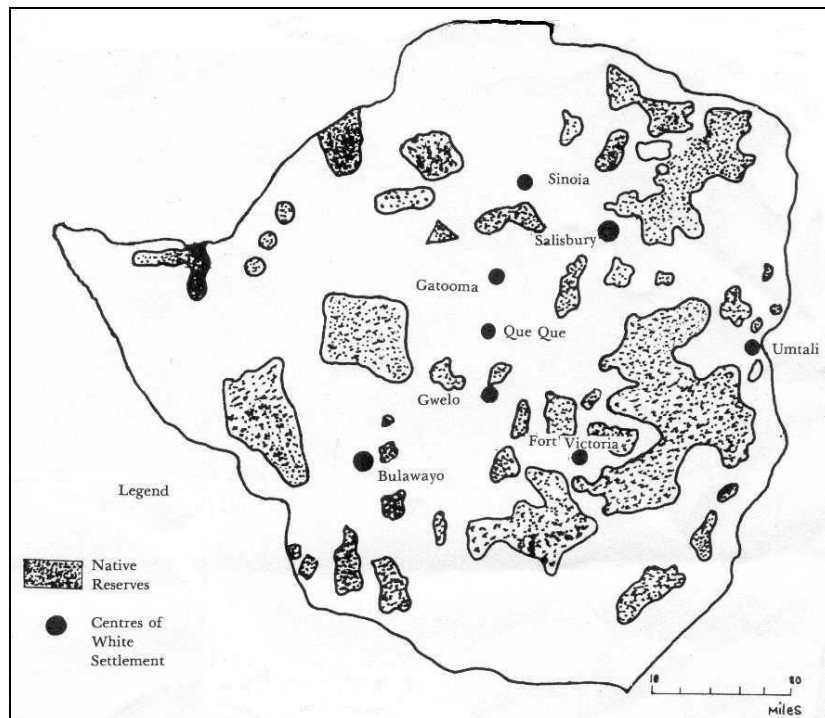


Figure 2.5b Native Reserves in 1920. Source, Moyana (1984:53)

In a 1922 referendum, the Southern Rhodesian electorate voted for responsible government, after the settlers had requested this from the British government. On the results of the referendum, Rhodesia became a British colony and Letters Patent granted responsible government to the settlers in October 1923 (Ranger, 1960; Bowman, 1973). This marked the end of the BSAC administration of Rhodesia. This era had resulted in changes from wholly communal tenure throughout Zimbabwe to the commercialisation of land and set the stage the stage for the emergence of freehold tenure in Zimbabwe.

2.5.6.4 1923 -1953: Land policy under responsible government

The BSAC had left a legacy of apportionment of land by race that shaped the policies of the first and subsequent responsible governments. The country's socio-economic system remained as it had been under the rule of the Company as the new government consolidated on the policies that were already there (Leys, 1959). The native reserves created in 1920 were enshrined in the 1923 Constitution adopted by the new government.

By 1925, Europeans had acquired 12.5 million hectares of land, including all land above 1000m and within 40 kilometres of the railways (Lemon, 2000). The areas acquired represented the land holding the greatest agricultural potential, as detailed in previous discussions regarding the physiography of the country. According to Leys (1959) and Ranger (1960), the settlers agitated further for a policy of land apportionment to separate the two races.

Hence, in 1925, a Commission chaired by Sir Morris-Carter, formerly Chief Justice of Uganda and present day Tanzania, was appointed to investigate the apportionment of the remaining unalienated land by race (Kay, 1970; Palmer, 1977; Moyana, 1984). The Commission concluded that land segregation was desired by the settlers and the Africans (Matowanyika, 1997) and recommended the division of all land outside the reserves, and the creation of Native Purchase Areas where African farmers could apply for limited individual property rights (Ranger, 1960). Such property rights would prevent them from competing with Europeans for land. These recommendations with some minor modifications were accepted by the government in 1927, legalised by the Land Apportionment Act of 1930 and came into effect in April 1931 (Leys, 1959; Ranger, 1960; Kay, 1970; Weinrich, 1975; Matowanyika, 1997).

The Act changed the spatial structure of the country through the addition of five land tenure categories. Figure 2.6a summarises the percentage of land allocated in each category and Figure 2.6b provides a map of the spatial changes in land distribution after the enactment of the 1930 Act. Sanyati communal area in Kadoma District was designated under this Act (Palmer, 1977).

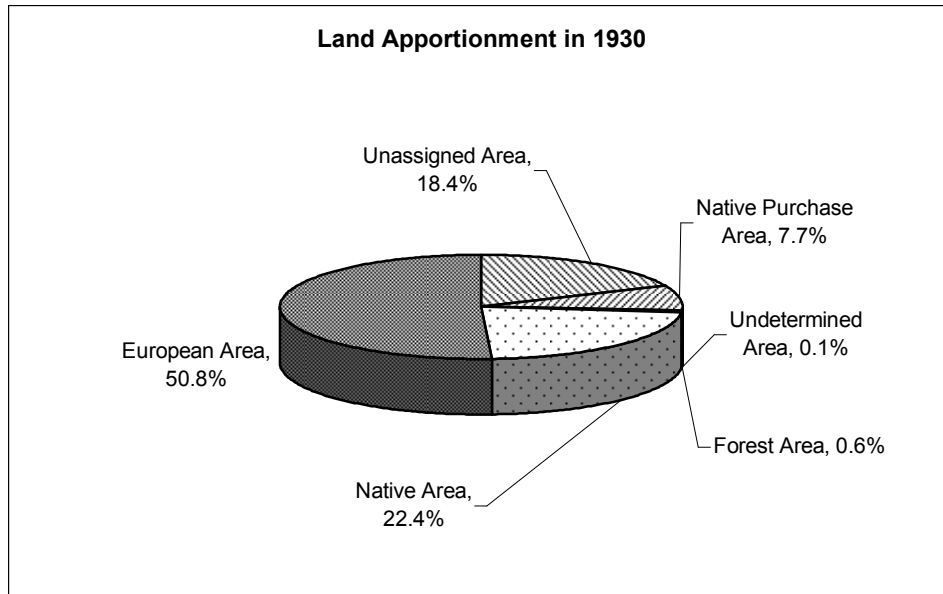


Figure 2.6a: Land apportionment in 1930. Adapted from Kay (1970:: 51) and Lemon (2000)

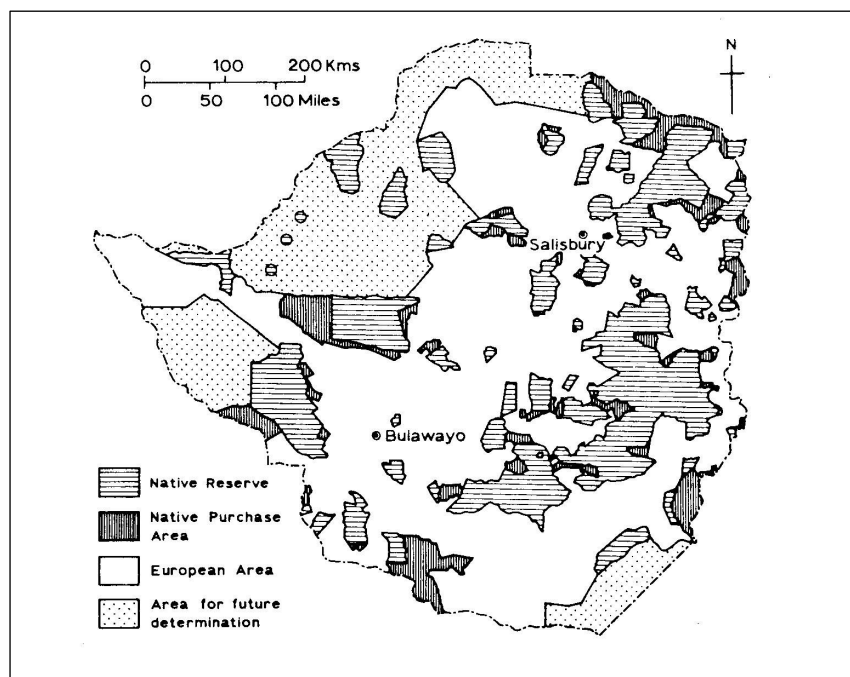


Figure 2.6b Land apportionment in 1930. Source, Palmer (1977, 184)

Significantly, the act entrenched a stark spatial disparity in land distribution with 51% of the country assigned for settlement to a numerically smaller group of Europeans and only 30% to Africans who were in the majority (Moyana, 1984). Under the terms of the Act, the rights of Africans to land ownership anywhere in the colony were

rescinded (Moyana, 1984:68), thus further protecting the political economy of the settlers in the country. As compensation for this loss, Africans could purchase land in Native Purchase Areas of which some 81 areas were created (Moyana, 1984) adjacent to Native Reserves in the middleveld and lowveld part of the country that was rocky and poorly watered (Leys, 1959). Land in the Purchase Areas could be bought from the Native Land Board. Although the Act promulgated complete segregation by race a number of Africans remained on European land as tenants and labourers.

According to Ranger (1960), population pressure in the reserves resulted in increased degradation, reduced productivity and shortages of land. The Land Apportionment Act of 1930 was further amended in 1941 in response to the above-mentioned problems and the emerging view that Africans were increasingly becoming discontented with their 'unfair economic treatment in the colony' (Moyana, 1984:74) and their forced removals to reserves. The amended Act allowed for African settlement on land set aside for Missions, but within certain parameters of the law and with recommendation from the Native Land Board. Figure 2.7 summarises the percentage distribution of land after the 1941 amendment.

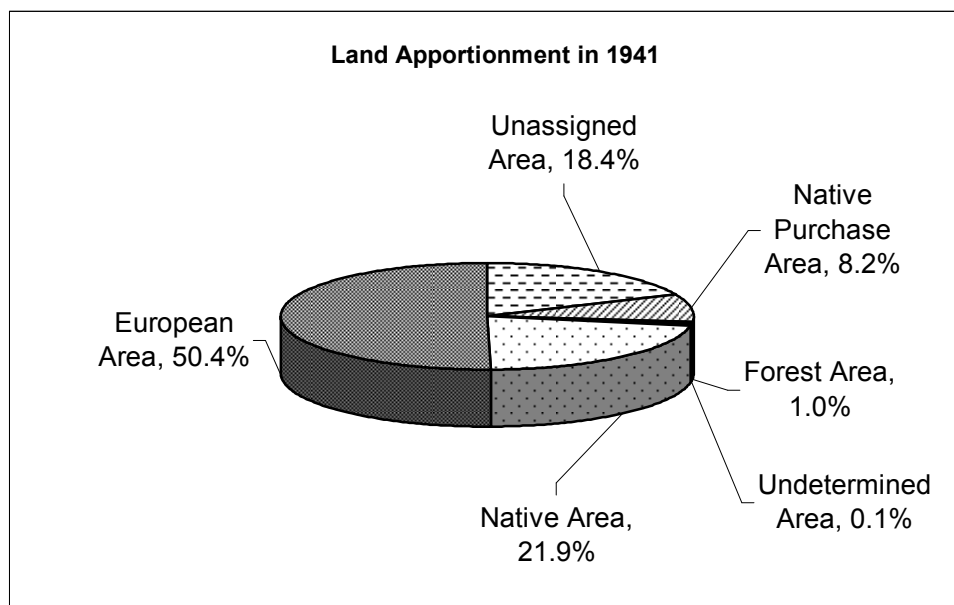


Figure 2.7 Land apportionment in 1941. Adapted from Moyana (1984:77)

The Land Apportionment Act of 1941 was further amended in 1944 and 1945 without differing significantly from the principles laid out in the 1930 Act, apart from making

the terms of the clauses clearer and more precise in the Act's protection of the European political economy. In 1950, an amendment of the Land Apportionment Act created the Special Native Areas, which were an extension of the Native Reserves from the Unassigned and European Areas in an effort to relieve population density in the Reserves and facilitate the removal of Africans from European Areas (Lemon, 2000).

The Native Land Husbandry Act was enacted in 1951, in response to the continued deterioration of the land in the Native Reserves and conclusions that 'African land use and management were backward and had to be improved' (Matowanyika, 1997:12). This Act was meant to control the use and allocation of land by Africans so as to ensure its efficient use for agriculture (Matowanyika, 1997) by forcing rural families to reduce their cattle herds and change their land tenure practices (Ranger, 1985). Matowanyika (1997) and Ranger (1960 and 1985) believed that this served as the catalyst for a nationalist resurgence that later gained momentum, leading to the liberation struggle.

Therefore, the period of self-government saw Europeans consolidating and securing their rule and political economy with the institutionalisation of segregation through the Land Apportionment Act of 1930 and the Native Land Husbandry Act of 1951. Bowman (1973) asserts that, whilst reduced livelihoods from land deterioration became a permanent feature in the Reserves during this period, Europeans were steadily consolidating prime fertile land, even though much of it remained unused. African discontent was occasionally manifested but did not take a sustained form and in 1953 was not a threat to settler rule (Weinrich, 1975; Ranger, 1985).

2.5.6.5 1953 – 1965: Land policy under Federation Government

In 1953, for political and economic reasons, Southern Rhodesia entered into a federation with Northern Rhodesia (Zambia) and Nyasaland (Malawi) (Leys, 1959; Ranger, 1960; Bowman, 1973). The Federation of Rhodesia and Nyasaland as it was known, lasted until 1963 (Tindall, 1968); after which Southern Rhodesia was known simply as Rhodesia.

Over this period, many of the same measures pertaining to land policy prior to Federation continued to be practised. By 1958, the Unassigned Area ceased to exist as most of it had been added to the Special Native Areas (Figure 2.8) to relieve pressure in the Native Areas. In 1961, the remaining European Area held by government and the small Undetermined Area was combined to form Unreserved Land (Kay, 1970; Lemon 2000). There was no restriction on ownership or occupation, thus any landowner of either race could apply for this land, which would then be transferred to the particular category of the purchaser (Lemon, 2000). This allowed for the transfer of 800 000 hectares of European-owned land to African farmers (Lemon, 2000).

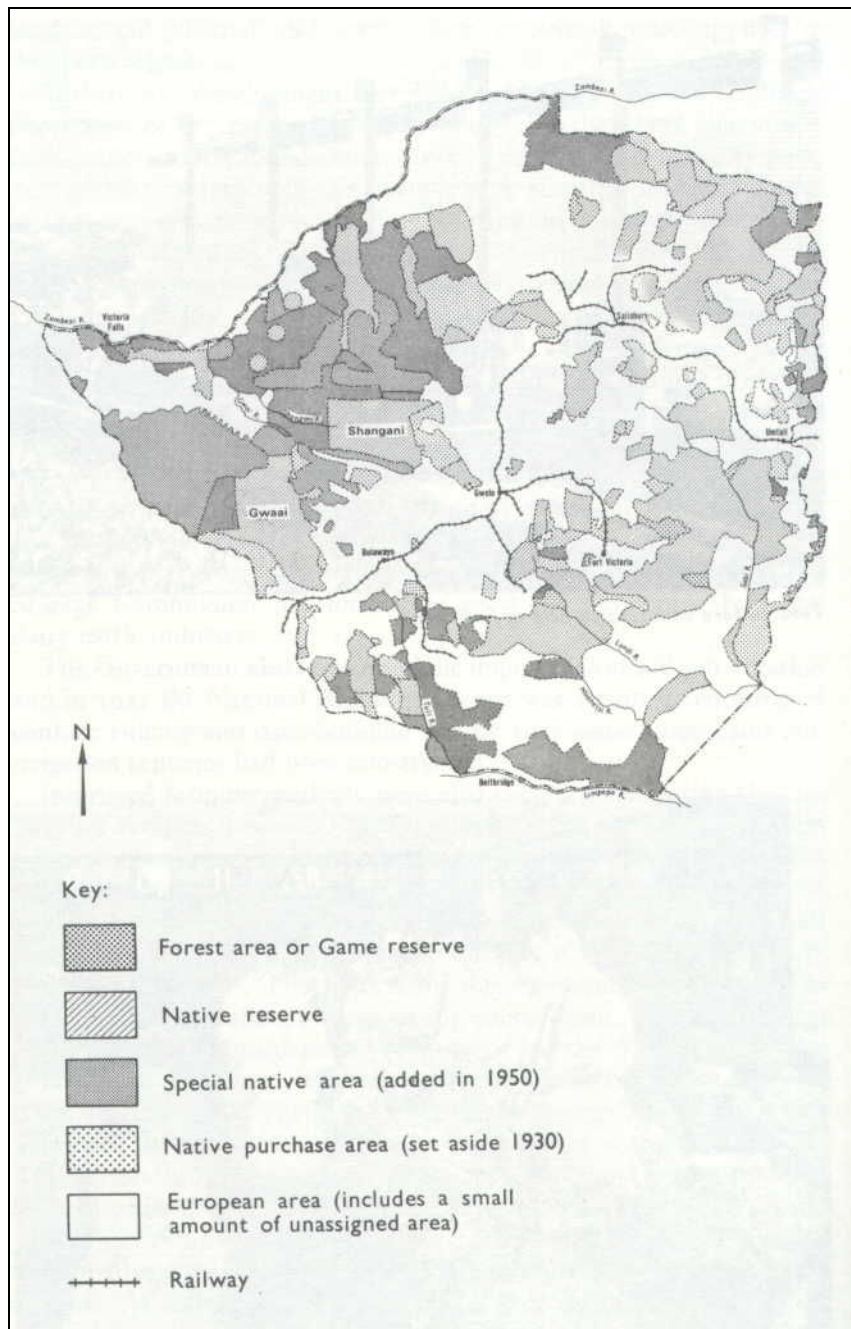


Figure 2.8 Land apportionment in 1958. Source, Tindell (1967, 218)

Parts of the Native Purchase area occupied communally were added to the Special Native Area and, in 1963, the Native Reserves and the Special Native Area were grouped together and renamed the Tribal Trust Lands. The Native Purchase Areas were redesignated as African Purchase Areas in the following year (Kay, 1970; Lemon, 2000). Figure 2.9 summarises the overall division of land by 1964.

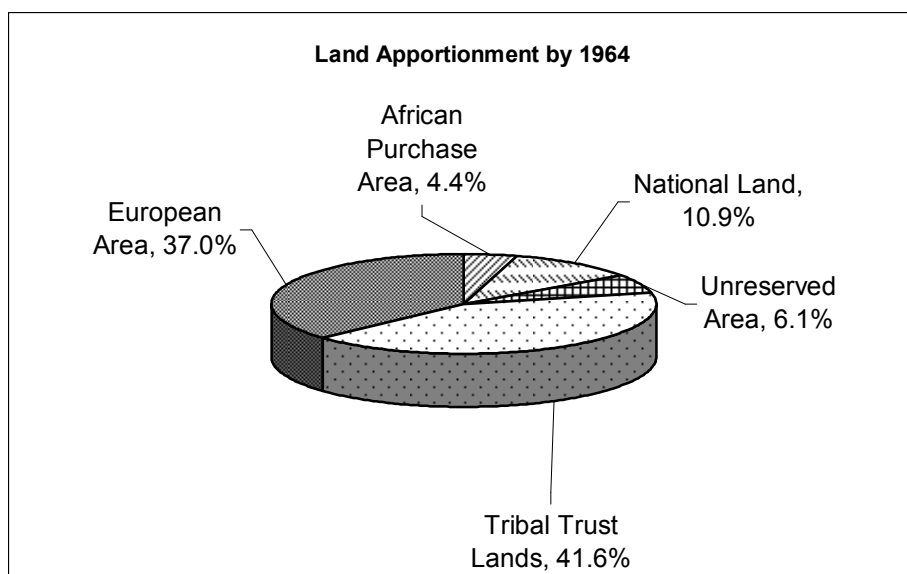


Figure 2.9 Land apportionment in Rhodesia by 1964. Adapted from Kay (1970: 53)

During the period of federation, there was increased political consciousness, growth and consolidation of nationalist political movements. The formation of these parties was largely in response to the pitiable political economy of blacks under white settler rule and ‘the realisation that (political and economic) reforms ... would only come through political power’ (Bull, 1967:118-119). By the 1970s, two parties, the Zimbabwe African People’s Union (ZAPU) and the Zimbabwe African National Union (ZANU), were the dominant political movements. In pursuing the liberation struggle, these two parties formed an alliance known as the Patriotic Front.

2.5.6.6 1965 – 1979: Land policy under the Unilateral Declaration of Independence (UDI)

Rhodesia proclaimed its UDI in 1965, following disagreements with Britain over the path to be followed in the move towards majority rule. After this, the bush war between the military wings of the Patriotic Front and the Smith regime escalated steadily between 1966 and 1979.

During the war, the Tribal Trust Lands Act was enacted in 1969. The Act aimed at stabilising land use practices, boosting agricultural production in the rural areas and enforcing conservation measures in cropped areas (Matowanyika, 1997). It gave chiefs the power to allocate land, a measure to restore African traditional rule that had

been revoked by the 1930 Act. The division of land according to the Act resulted in ‘parity’ of assigned European and African land with 46.6 % of the country’s land given to each group (Lemon, 2000). This ‘parity’ was described by Lemon (2000) as superficial due to the uneven share of the agro-ecological zones (Figure 2.10a and 2.10b) and the location of most African areas away from lines of communication.

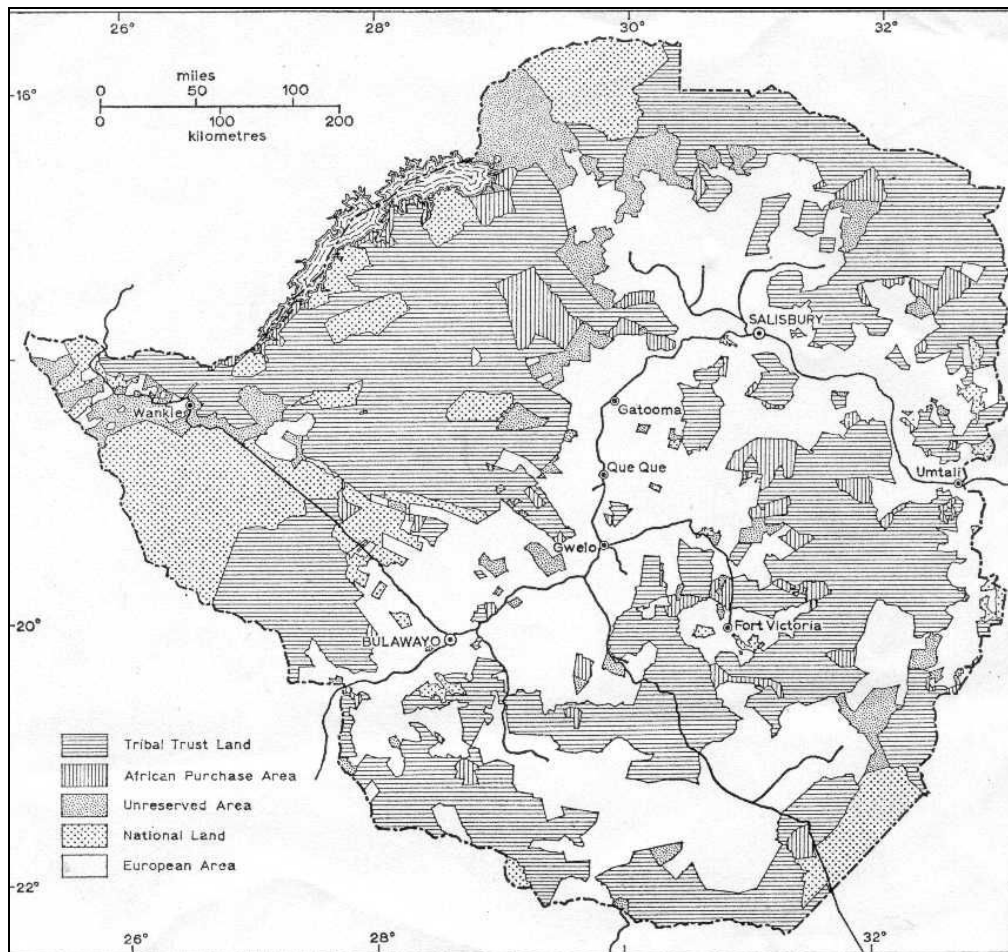


Figure 2.10a Land apportionment in 1969. Source, Lemon (2001)

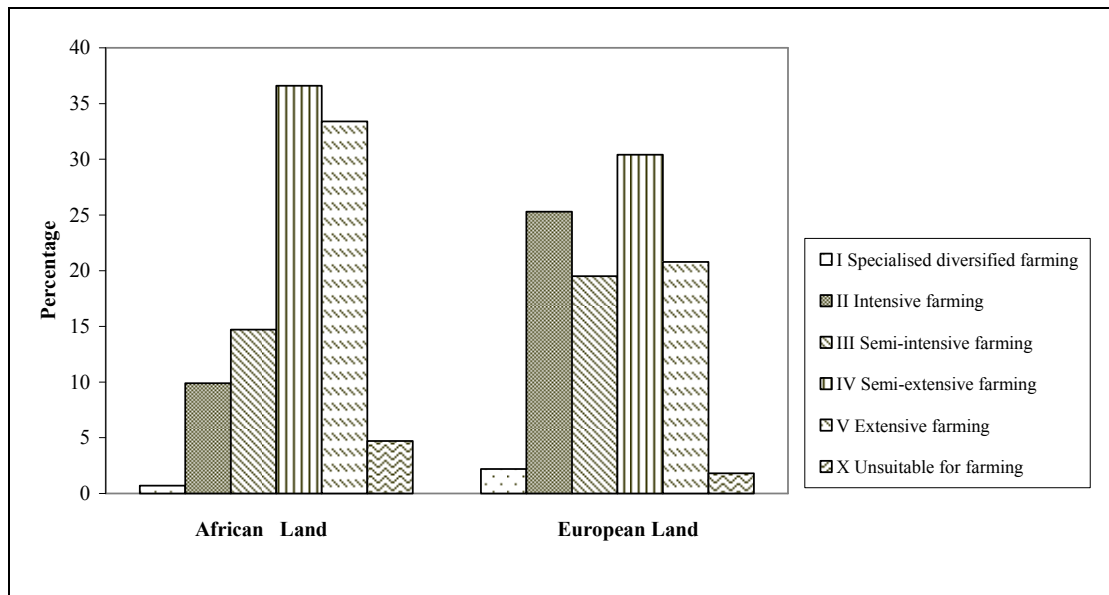


Figure 2.10b: The composition of African and European (including national land) areas in 1969.
Adapted from Kay, (1970: 53)

Increased attacks by the Patriotic Front, continued sanctions by the United Nations and pressure from Britain to grant majority rule pushed the Smith Regime into a compromise agreement with three African moderate leaders in 1978. Under this agreement, land outside the Tribal Trust Lands could be purchased by all races. Furthermore, the government made credit available to Black farmers and, in 1979, a plan was proposed for large scale resettlement and major and minor irrigation schemes to improve productivity in the African areas (Lemon, 2000). These measures did not end the war.

By 1979, the warring parties had come under increased pressure, Smith from Britain and America and the Patriotic Front from the frontline states of Mozambique, Zambia and Tanzania, for a ceasefire to be reached. Diplomatic manoeuvres by Britain and America resulted in Britain agreeing to contribute at least 75 million pounds (Palmer 1990:166) to be used to compensate commercial farmers. This attracted broad support and brought parties to the negotiating table at the Lancaster House Conference, however a change of government, in Britain, before the conference, resulted in the amount put forward for compensation being rescinded. Palmer (1990) noted that as a compromise, Britain, then undertook to pay half the costs of a resettlement programme.

Pressure from the Frontline States, forced the Patriotic Front to accept the terms of the Constitution, although it did not favour a radical state-led land redistribution programme on achieving power. The Lancaster House Constitution primarily secured for whites, amongst other rights, the ‘preclusion of expropriation of private property’ (Moyo, 1995:106), land was to be acquired on a willing buyer and willing seller basis, and compensation paid in foreign currency (Lebert, 2003). Furthermore, a reasonable notice of intention to acquire land had to be given and property owners had 30 days to contest such an acquisition. There was a 10-year restriction to prevent changes to the Constitution. Therefore the new government was bound to pursue a conservative, market-bound land reform programme for at least 10 years, as entrenched in the Lancaster House Constitution.

2.5.7 Land Redistribution and Resettlement Programme (LRRP) Phase 1

2.5.7.1 Introduction

Zimbabwe’s land reform experiences can be divided into three phases. The first phase runs from 1980 – 1996, the second phase from 1997 – June 2000 and the FTLRP phase from July 2000 to present. For the purposes of providing evidence of the impact of the changing macro-economic and political environment and legislation, this research describes the land experiences according to the following periods: 1980-1990, 1991-1999 and 2000-present.

2.5.7.2 1980 - 1990

At independence 6000 white commercial farmers retained 15.5 million hectares of land found in the prime Natural Farming Regions (Sachikonye, 2003; Moyo *et al.*, 2004; Goebel, 2005). On the other hand, there were one million black households remaining in the communal areas and subsisting on 16.4 million hectares of marginal land, mostly in areas of lower agro-ecological potential (Moyo, 1998). The postcolonial government, according to Herbst (1990) and McCandless (2000), held strong socialist ideals and aimed to achieve an equitable distribution of land, in order to achieve social justice. However, according to Bernstein (2003:213) and Goebel (2005:348), Zimbabwe, like South Africa acquired independence in an era of ‘post-developmentalism’ and ‘globalisation’. This era dominated by neo-liberal thinking

and favouring the capitalist mode of production and marketing, constrained the government's intentions for a rapid structural and social transformation of the land and agrarian pattern in Zimbabwe.

The terms of the Lancaster House Constitution, discussed in the previous section, prevented the expropriation of private property and advocated market-assisted land reform, followed this neo liberal framework and forestalled a radical land reform programme (Palmer, 1990; Moyo, 1995). Under the market-assisted approach, landowners led in the identification and supply of land. This supply-led approach, coupled with a stable economic environment, consequently resulted in the price of land increasing and according to Moyo (1995), resulted in the inability of government to purchase the farms on offer, thereby stalling radical redistribution in the 1980s.

Ranger (1985), Stoneman and Cliffe (1989) and Palmer, (1990) noted that the policy of 'national reconciliation' pursued by the government at independence prevented radical redistribution of land. Reconciliation was aimed to prevent an exodus of skilled white commercial farmers, who at independence were producing 90 per cent of the country's food requirement, and therefore were seen as invaluable to the country's food self-sufficiency. International sanctions against the country during UDI had forced Rhodesian farmers to produce for, and sell on the domestic market. Furthermore, peasant production at independence had decreased because almost one fifth of the rural population had migrated to escape the war; three quarters had been put in protected villages and a quarter of a million had left the country (Palmer, 1990).

Resettlement and land institutions

Although faced with the constraints detailed above the government, in order to rapidly redistribute land, targeted 8.3 million hectares of land to resettle 162 000 families under Phase One of its Land Redistribution and Resettlement Programme (LRRP) (Thomas, 2003). The following criteria for settler selection and resettlement were used under the LRRP and later these will be compared with those used under the FTLRP. In order to access land, applicants needed to be either:

- people displaced by the war or;
- landless people/families or;

- unemployed and poor, prepared to forgo all land rights in the communal areas or;
- destitute or;
- experienced communal farmers, prepared to forgo communal land rights and give up paid employment or;
- communal farmers with Master Farmer Certificates (Moyo, 1995; Masiwa, 2004). (These farmers had received training in farm management and operations from extension officers from the Department of Agriculture Research and Extension (AREX) and had qualified as farmers);

Moyo (2004b) and Waeterloos and Rutherford (2004) wrote that in the early 1980s beneficiaries were systematically resettled according to planned settlement schemes, under the 'Normal Intensive Resettlement Programme. On the other hand, in response to peasant occupations countrywide in the post-independence period, parts of the programme were implemented using the 'Accelerated Land Resettlement Programme'. According to Waeterloos and Rutherford (2004), this approach like the FTLRP, emphasised quantitative redistribution, rather than comprehensive land reform. It differed from the FTLRP in that resettlement took place on uncontested farms that had been abandoned by white farmers during the war (Moyo *et al.*, 2004).

Land acquired for resettlement between 1980 and 1985 was largely that which had been bought on the market or abandoned by commercial farmers during the war. This land, according to Masiwa (2004), was in marginal areas of the country and, as a result, 81 per cent of the resettlement schemes from this phase are located in the drier agro-ecological regions. Most resettlement areas in Kadoma District were located in the drier region compared to most commercial farms, which were located in region IIb, which is of better agro-ecological potential.

Palmer (1990) and Moyo (1995) commented that, of the 56 000 families resettled on 2.6 million hectares between 1980 and 1989, 70% were resettled by 1983. Redistribution slowed down considerably after 1983. Factors such as droughts between 1982 and 1984 forced the government to provide for drought relief rather than for redistribution. Furthermore, the government prioritised socio-economic needs

such as education, health and rural development to the detriment of redistribution. Even after parliament had amended the Land Acquisition Act in 1985 to facilitate acquisition, by allowing government to expropriate both underutilised and utilised land and pay farmers in local currency, there was limited redistribution and resettlement (Rukuni, 1994). According to Alexander (1994), most farms acquired after 1983 were given to the ruling elite, in contravention of the stipulated criteria discussed earlier and by 1986, 300 black elites owned large scale commercial farms.

Households were resettled according to four resettlement models as indicated in Table 2.2 of which the Model A settlement scheme was the most successful (Moyo, 1995). It became the framework for resettlement under the LRRP phase II and the FTLRP. Resettlement schemes in Kadoma District (Figure 3.1) were based mostly on the Model A scheme. Government regulated what would be produced and the amount and methods of production in resettlement schemes (Thomas, 2003). Permits were provided by government as tenure and could be revoked if beneficiaries were perceived to be unproductive (Kinsey, 1999). Furthermore, resettled households had to devote themselves exclusively to farming and could not seek employment in the urban areas.

Table 2.2 Resettlement schemes under the LRRP phase one

Resettlement model	Scheme	Structure	Infrastructure	Tenure
Model A	Villagised	Nucleated village Individual arable land Communal grazing	Schools, feeder roads, clinics, boreholes, extension services	Individual permit for residential holding cultivation or grazing land
Model B	Cooperative	Single farm under communal ownership	Use existing	Permit issued to cooperative
Model C	Outgrower	Individual plots around Agricultural Research and Development Authority (ARDA) estate	ARDA infrastructure and services	Permit
Models D and E	Ranching and game management	Rotational pasture	Varies	Undetermined

Source: Urban Foundation (1993) and Moyo (1995).

Jacobs and Chavunduka (2002) noted that the post-independence government continued with the colonial institutional structures for land administration. The key actors were central government, various line ministries, government departments and the ruling party ZANU-PF (Masiwa, 2004).

Identification of land was done by the Land Identification Committee, which was chaired by the ZANU-PF national chairman, thereby making it ZANU-PF driven (Masiwa, 2004). The responsibilities for implementation of the programme were given to several ministries and government departments, which are detailed below.

- The Ministry of Lands, Resettlement and Rural Development created in 1981, dealt with land acquisition (Poulton *et al.*, 2002). In 1990 this ministry was amalgamated with the Ministry of Agriculture and renamed the Ministry of Lands and Agriculture.
- The Department of Extension Services (AREX) dealt with land use planning.
- Settler selection was the responsibility of the Ministry of Local Government, which employed people to manage resettlement schemes on behalf of the government.
- The Ministry of Rural Resources was responsible for settler placement (Masiwa, 2004).

The fragmentation of institutions responsible for coordinating and drafting land policy resulted in policy implementation and coordination problems during this phase of resettlement (Moyo, 1995; Masiwa, 2004). This, coupled with factors detailed earlier, further contributed to the slow pace at which resettlement was undertaken. Therefore, it would be reasonable to conclude that land reform under FTLRP would need better coordination and structuring for its successful implementation.

The political economy

The first seven years of independence in Zimbabwe were dominated by political tension between the two main political parties, ZANU-PF and PF ZAPU. A unity agreement reached in 1987 resulted in PF ZAPU being merged into the structures of ZANU-PF, officially eliminating a strong opposition party in the country.

The post-independence government continued to implement economic policies started under UDI (Rukuni, 1994), despite the fact that they had inherited an internally and structurally weak economy (Kanyenze, 2004). Kanyenze (2004) indicated that the economy experienced economic growth in the first two years of independence. This growth was attributed to renewed access to credit and finance, favourable terms of trade as a result of the opening up of the economy and good weather conditions for agricultural production. The effect of this was that real agricultural output grew, aided by increased smallholder production (Drinkwater, 1989). This allowed the government to maintain food security, continue with its redistributive land reform, provide infrastructure for resettlement and expand social services. All of which was aimed at improving and sustaining rural livelihoods.

Access to credit through the Resettlement Loan Fund under the Agricultural Finance Act, resulted in about 60% of the settlers accessing mostly short term loans for the purchase of inputs such as fertilisers, seeds, agro-chemicals etc (Kanyenze, 2004), and helped to increase the production of these smallholder farmers.

Nevertheless, after a couple of consecutive years of drought (1982-1984), by 1984 the structural weaknesses in the economy had become pervasive and contributed to macro-economic instability. This period produced increased government current and capital accounts deficits, an increasing debt service ratio and increased inflation (Kanyenze, 2004). All this had the effect of putting pressure on the balance of payments, which in turn affected agro-based industries, which were, and are, heavily reliant on importing inputs. As a result agricultural production declined. The weakening economy affected resettled smallholders negatively as is evidenced by the fact that most defaulted on their loan repayments (Kanyenze, 2004).

As mentioned earlier in the literature, Zimbabwe attained independence in the post-developmental era where neo-liberal thinking dominated the developmental agenda. Therefore, following the economic decline of the mid-1980s the International Monetary Fund (IMF) and donor agencies pressured the government to fully liberalise its economy through a neo-liberal structural adjustment programme. Economic growth, which would in turn improve livelihoods, was expected from these reforms. Hence the second decade of independence saw government adopting this strategy,

which had an adverse effect on land redistribution and the macro-economic situation under FTLRP.

In the first decade of independence, factors such as drought, economic decline and the policy of reconciliation contributed to the slow pace of land reform. This is contrary to proclamations by the Zimbabwean government that this slow pace was solely a result of the failure of Britain to meet its financial obligations regarding resettlement. It also showed that successful smallholder production by resettled farmers in the first two years was dependent on the following variables: perceived security of tenure through the permit system, access to credit and collateral for the purchase of inputs; government support through provision of infrastructure and services and a stable economy and good weather conditions. When all or some of these factors were removed, smallholder agricultural production was negatively affected and resulted in reduced livelihoods for smallholders who relied solely on agricultural production.

2.5.7.3 1990 – 1997

This period was characterised by declining rural and urban livelihoods, a continued slowed pace of land redistribution, changes to the criteria applicable to beneficiaries for resettlement and changes in the political and economic landscape. All this in turn affected events that precipitated the FTLRP.

Resettlement

The objective of this phase was to ensure that aggregate agricultural production was not endangered through redistribution in accordance with neo-liberal thinking under structural adjustment. Therefore the criteria for beneficiaries of resettlement shifted from those of the 1980s to resettlement of capable farmers, which included graduates from training colleges or Master Farmers from the communal areas (Moyo, 1995). Quantitatively, this reduced the number of people that could benefit from redistribution and marginalised the rural poor, most of whom subsisted in the communal areas and whose numbers had increased significantly since 1980. Zimbabwe's population meanwhile had risen from seven million in 1980 (Wiggins, 2004) to 10.4 million in 1992 (Central Statistics Office, 2004), of which over 60% was rural.

Government amended the Land Acquisition Act again in 1992 to hasten and improve the facilitation of land redistribution, but the process continued to be slow throughout the 1990s. However, the Act provided the tool for embarking on the second phase of LRRP, which will be detailed later. According to Moyo (1995), land reform during this period could be termed state-led market-assisted reforms because land acquisition was state-led, but compensation to farmers was to be according to a liberal market approach (Waeterloos and Rutherford, 2004).

In 1993, President Mugabe created a Land Tenure Commission (LTC) under the chairmanship of Mandivamba Rukuni to examine the appropriateness of each of Zimbabwe's land tenure systems. The Commission recognised the highly complex and contested nature of the land reform programme and the adverse impact of the macro-economic environment on agricultural performance. They acknowledged that resettlement was necessary to relieve population pressure in the communal areas and promote sustainable rural management (Rukuni, 1994). In addition, their findings indicated that most settlers in resettlement schemes felt that the permit system was insecure and preferred title deeds. The Commission recommended long-term leases with an option to purchase for current and future beneficiaries of resettlement. Moreover they recommended the acceleration of land redistribution through the imposition of a land tax on underutilised land on large-scale commercial farms, which would cause the farmers to dispose of the land rather than pay the tax. The Commission's findings were accepted by the government, but were not fully implemented (Moyo, 1998), because land reform had been sidelined in favour of economic policies (Moyo and Yeros, 2004).

Political economy

The Economic Structural Adjustment Programme (ESAP) adopted by the government in the early 1990s, according to Moyo and Yeros (2004), required the government to reduce its public spending, devalue the currency, liberalise prices, lower interest rates and promote trade as well as deregulate capital accounts and labour relations. The result of this policy was increased trade deficits and inflation, deindustrialisation, the fall in GDP by 17% and, by 1995, a two thirds drop in real wages, accompanied by increased job losses in both the private and public sectors.

The effect of the ESAP on agriculture was the privatisation or commercialisation of agricultural boards and a reduction in extension services, subsidies and credit (Moyo and Yeros, 2004). Furthermore, these scholars said that the ESAP was accompanied by an erosion of farm incomes due to the rising costs of production. Peasant farmers were more adversely affected by the ESAP than large scale commercial farmers who were able to take advantage of ecotourism, horticulture and ostrich husbandry due to trade liberalisation and access to export markets.

Wiggins (2004), Kanyenze (2004) and Moyo and Yeros (2004) maintain that the political consequences of the poor economic environment of the 1990s resulted in land invasions by villagers from the communal areas in 1998, over 500 urban strikes between 1995 and 2000 in 16 different sectors of the economy and agitation for rights by civil society groups. Kanyenze (2004) considered 1997 as the political watershed within Zimbabwe. In that year, the National War Veterans Liberation Association demanded compensation, land and a place in the political landscape in the country. The government eventually capitulated to their demands and provided unbudgeted financial compensation to an estimated 50 000 war veterans in 1997. Kanyenze (2004) described this action as having exacerbated the declining macro-economic environment and regarded this as the turning point in Zimbabwean politics. An alliance between the war veterans and government was established and disenchantment by civil society led to the formation of the National Constitutional Assembly (NCA), which advocated a change in the Constitution. It is believed by Kanyenze that most members of the opposition Movement for Democratic Change (MDC), which was formed in 1999, came from the NCA.

According to Moyo (2000), rising popular demands for land and political pressure, particularly from the war veterans, led to the gazetting of 1 471 farms for compulsory acquisition by government in 1997. This subsequently resulted in the Zimbabwe dollar devaluing and compounded the economic decline within the country.

The significance of this period under ESAP is that it resulted in political problems in Zimbabwe to which land reform became a solution for government. ESAP resulted in a decline in household income particularly poorer households which resulted in rural

and urban 'squatting ... in all of Zimbabwe's land tenure regimes' (Moyo, 1998:8). Fewer people from the communal areas had benefited from redistribution during this period due to the changes in criteria for resettlement. Demand for land by war veterans and land occupations which occurred were a manifestation of the above.

2.5.8 Land Redistribution and Resettlement Programme (LRRP) - Phase II

The National Land Policy adopted by government in 1997 based on compulsory acquisition, but with compensation (Thomas, 2003), signalled the initiation of the second phase of the LRRP. Based on this policy the government published a notice of intention to compulsorily acquire 1 471 commercial farms in November 1997 (Masiwa, 2004). Financial constraints placed limitations on the ability of the government to compensate farmers and provide for resettlement. Therefore government convened in 1998 the Donor Conference in order to inform donors on land issues in Zimbabwe and source funds for land reform.

2.5.8.1 The Donor Conference – September 1998

In September 1998 at the Donor Conference, the government outlined the National Land Policy to the donors. The government sought 1.5 billion Zimbabwe dollars to support the programme and President Mugabe asked donors to compensate white farmers whose land had been gazetted for compulsory acquisition (Thomas, 2003). According to McCandless (2000) the President warned that anarchy would prevail in the country if Zimbabwe was not financially assisted in its land programme. All stakeholders acknowledged the urgency for land reform with a significant number of donors pledging technical and/financial support (Government of Zimbabwe, 1998). However, Britain and America criticised Zimbabwe's land policy as failing to recognise property rights and said that it needed to be redesigned as a pre condition to aid.

Despite this, it was agreed at the Conference to start the second phase of the LRRP with an inception phase covering one year in which one million hectares of commercial farmland was to be transferred for resettlement purposes (Thomas, 2003; Masiwa, 2004). The implementation process was aimed at being holistic and

involving government, all stakeholders and full participation of beneficiaries. Although government's intentions were commendable the second phase of the LRRP was implemented after little consultation with stakeholders and was relatively slow to redistribute land.

Resettlement

According to Masiwa (2004) beneficiaries for this phase of the redistribution programme were to include, the landless, overcrowded families in the communal areas, graduates from agricultural colleges and other people with experience. These criteria represented a change to those employed from 1990 to 1997 and a move back towards the criteria used in 1980. However of the intended 150 000 beneficiaries for resettlement only 4 697 were resettled by 2000 (Moyo, 2000; Waeterloos and Rutherford, 2004). Indicating that the inception phase had failed to achieve meaningful resettlement and therefore the land crisis persisted.

2.5.9 The draft Constitution and referendum of February 2000

Following the implementation of the second phase of LRRP, government in 1999, appointed a Constitutional Committee to draft a new Constitution. The main aim of the Constitution was to make it easier for government to acquire land for resettlement, with compensation only being paid on improvements made to the land rather than payment being dictated by the market. In the same year the NCA had drafted its own Constitution and on the political front a new party, the MDC, was formed.

A referendum held in February 2000, resulted in the national majority rejecting the government-sponsored draft Constitution. The rejection of this Constitution resulted in a series of farm occupations led by war veterans and 'landless' villagers countywide (Masiwa, 2004) who were said to be angered and frustrated by the results. Thomas (2003) added that this frustration had been compounded by the withdrawals of the majority of the 1 471 gazetted farms, which had been successfully contested in the courts by landowners, and the slow pace at which land was transferred during the inception of the LRRP II. Kanyenze (2004) suggested that farm occupations were politically motivated and a form of retribution to the white commercial farmers for campaigning against the draft Constitution and sponsoring the

MDC. Kadoma District shown in Figure 2.11 (Glover, 2001) had one of the highest number of farm occupations in 2000

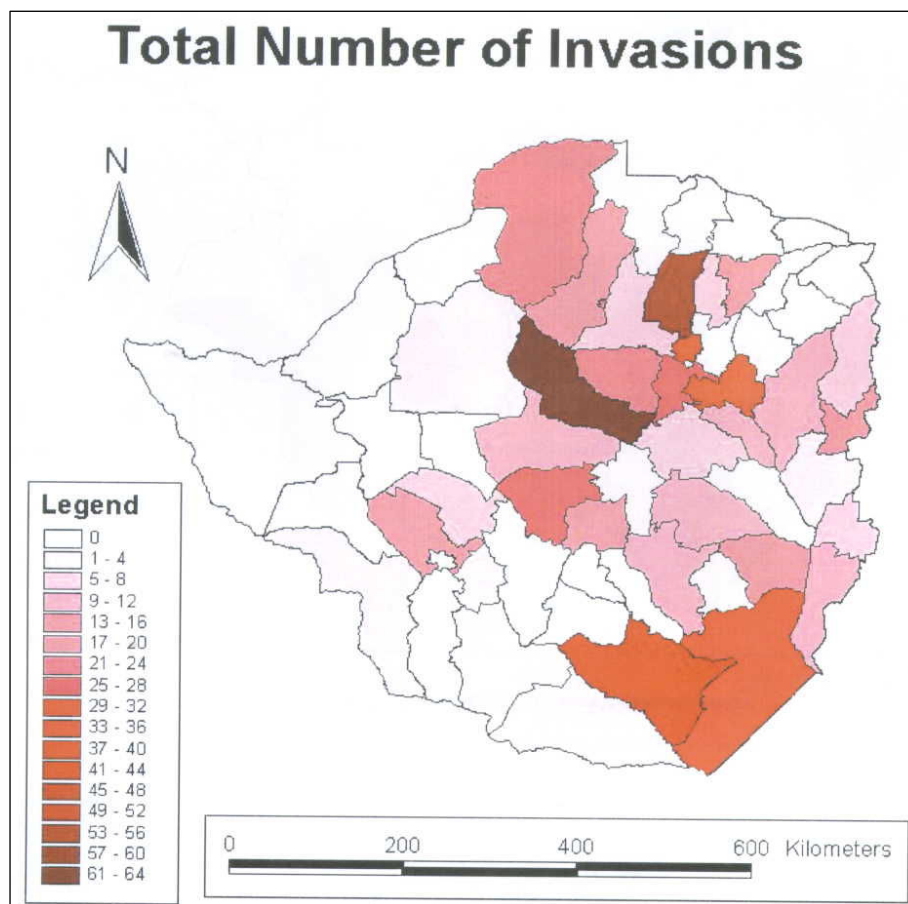


Figure 2.11: The total number of farm ‘occupations’ countrywide in 2000. Source: Glover (2001)

2.5.10 The Fast Track Land Reform experience

In the aftermath of the politically significant rejection of the draft Constitution in February 2000, the government amended the Constitution in April 2000 to allow for compulsory acquisition without the obligation to pay compensation (Masiwa, 2004). Thereafter, the FTLRP was officially launched on the 15th of July 2000 (Government of Zimbabwe, 2004).

The programme has been criticised and condemned internationally, regionally and locally for the land occupations, the lack of rule of law, disrespect for property rights, inadequate planning and financial support. In response to the FTLRP, the UNDP sent two mission teams to assess the situation and provide recommendations for a

sustainable programme. An alternative land reform programme termed the Zimbabwe Joint Resettlement Scheme (ZJRI) was also proposed by the CFU and the private sector.

The United Nation Technical Missions to Zimbabwe

The UNDP sent two missions to Zimbabwe, the first in October 2000, following the adoption of the FTLRP by government and the second in November 2001, after requests by both the Government of Zimbabwe and a Committee of Commonwealth Foreign Ministers in Abuja, Nigeria, in September 2001. The findings of the missions indicated that government lacked the institutional and financial capacity to ensure maintenance of agricultural productivity and food security without the support of stakeholders and donors. The missions provided recommendations that would ensure that the FTLRP was conducted in a sustainable, fair, transparent, legally enforceable manner. Chapter Seven provides an analysis of an interview held with an official from the UNDP, who had provided advice and support to the second UN mission, so as to contextualise the FTLRP and its effects on the country.

Zimbabwe Joint Resettlement Initiative (ZJRI) - September 2001

This initiative, proposed by the CFU jointly with the private sector, offered 561 farms of one million hectares for resettlement, in addition to financial, farming and infrastructural support (UNDP, 2002; Made, 2004; Masiiwa, 2004; Worsley-Worsick, 2005). The purpose was to complement the government's programme without much loss to production on commercial farms and aid in the resolution of the land crisis.

Government accepted this initiative in September 2001, a day before the Commonwealth meeting in Abuja, Nigeria, at which the land crisis in Zimbabwe was on the agenda with the country facing possible expulsion from the group. However, continued farm 'occupations' and lack of government political will to honour the agreement resulted in the ZJRI's failure to resolve the land crisis in the country (Made, 2004; Worsley-Worsick, 2005). The UNDP (2002) believed that the adoption and implementation of the ZJRI would have provided sufficient financial, technical and resource support for resettlement, and curbed the loss of production on many resettled farms, as is evidenced by Zimbabwe's shift from being a net exporter of food grains to a net importer (Kanyenze, 2004).

Resettlement

Under the FTLRP, resettlement was to take place on two settlement variants, put forward in the 1997 Land Policy, the A1 and A2 models. The structure of these models are summarised in Figures 2.12a and 2.12b.

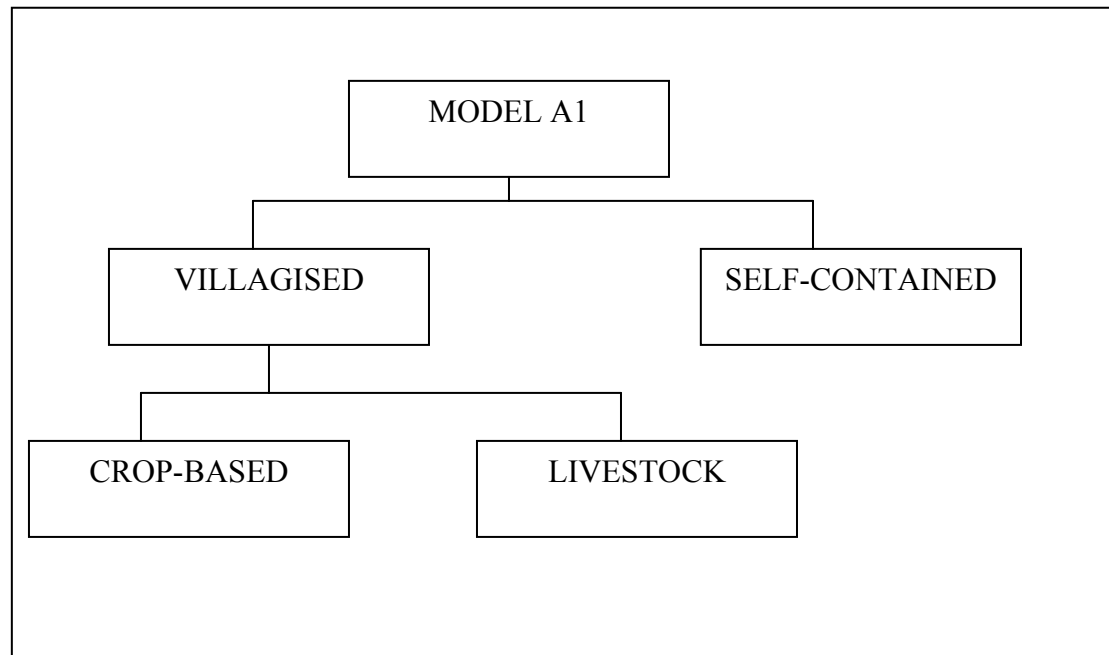


Figure 2.12a The structure of the A1 resettlement scheme

The A1 model mainly targeted landless people and was to facilitate in decongesting the communal areas. However, 20% of the land was reserved for the war veterans. Beneficiaries would be resettled in either villages or self-contained small farm units (Government of Zimbabwe, 2004). Lanteglos and CC Molina, the study areas, were designated as A1 villagised and self-contained settlement schemes respectively. It will be seen later whether the above-mentioned criteria were applied to beneficiaries in the study areas.

The A2 scheme is a commercial farming land use model aimed at increasing the number of black indigenous commercial farmers. All citizens of Zimbabwe can apply to be resettled according to this model, provided they have entrepreneurial skills, some form of agricultural experience, as well as financial resources (Government of Zimbabwe, 2004). Pamene, one of the study areas, was designated as an A2 small-

scale settlement scheme. This research will determine whether the above-mentioned criteria were applied in the study area.

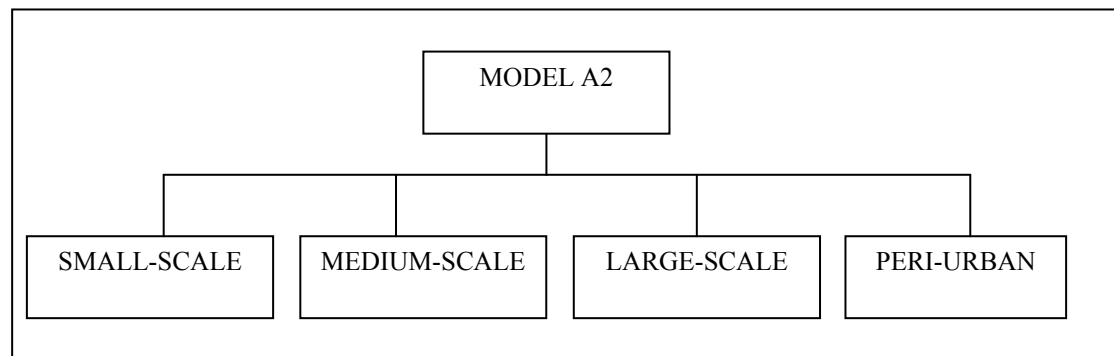


Figure 2.12b The structure of the A2 resettlement scheme

The tenure arrangements of these schemes remained ambiguous. However, Maunganidze (2004) indicated that 99 and 25 year leases were to be provided to beneficiaries under the A2 and A1 self-contained models respectively and that these beneficiaries would have the option to purchase within the lease period.

The political economy

Table 2.3 shows that since 1995, Zimbabwe experienced a sharp decline in the key economic indicators. Real GDP, the budget deficit, export and employment growth have progressively declined since 1997, whilst inflation increased progressively.

Table 2.3 Macro-economic indicators between 1995 and 2003

Percentage	1995	1996	1997	1998	1999	2000	2001	2002	2003
Real GDP	0.2	9.7	1.4	0.8	-4.1	-6.8	-9.5	-14.7	-14.0
Inflation	22.5	21.7	18.9	31.7	58.5	55.9	71.9	133.2	365
Budget deficit/GDP	-12.2	-7.7	-8.2	-5.5	-7.7	-24.1	-8.2	-13.8	>14.0
Export Growth	13.8	12.6	-2.9	-20.6	-0.1	-14.3	-28.5	-10.8	-5.8
Employment Growth	-1.9	2.8	5.6	-0.1	-2.3	-5.9	-0.6	-	-

Adopted from Kanyenze (2004:133).

Over the period 2000-2004, Zimbabwe experienced a sharp decline in foreign currency inflows, as a result of declining exports, lower levels of foreign direct investments and reduced aid and balance of payments support. This led to Zimbabwean industries failing to import adequate amounts of raw materials for the production of agricultural inputs. A shortage of agricultural inputs, including fertilisers, agro-chemicals, seeds and equipment, was therefore experienced. With the national economy already in decline, the FTLRP contributed further to shrinkages in the GDP. Kanyenze (2004) stated that whilst world inflation was projected to be 1.4 percent in 2004, Zimbabwe's inflation was in the region of 623% in January 2004. The implications of all this are an increased inability by government to provide infrastructure and services to the beneficiaries of the FTLRP and a reduction in the income of beneficiaries from agricultural production, which can be detrimental to their livelihoods.

Table 2.4 summarises the decline in the agricultural production of key commercial products since 1999. This decline has resulted in food shortages countrywide. Justice for Agriculture (2003) predicted that, by 2004, the government of Zimbabwe would import one million tonnes of maize to meet its domestic requirements. Kanyenze (2004) confirmed this prediction. This indicated that production has declined under the FTLRP and that new farmers were failing to meet the national demand for various commodities. Utete (2003) attributed this to the fact that most land given to the new farmers was being underutilised and that political elites had abused the FTLRP by

acquiring more than one farm, of which most were not being farmed productively. The same decline has been observed in beef and dairy production and was evidenced by shortages of these key commodities.

Table 2.4 An illustration of the decline in commercial production of four key products

Produce	1999	2000	2001	2002	2003
in tonnes					
Maize	648 000	810 000	384 000	185 400	80 000
Soybeans	150 000	169 000	65 000	35 000	30 000
Wheat	281 250	225 000	282 000	115 000	24 2000
Tobacco	191 510	232 250	197 200	159 360	60 520

Adapted from Justice for Agriculture, 2003.

This period has been characterised by political instability between ZANU-PF and the MDC. This has in turn had a detrimental effect on the economy by reducing investor confidence and curbing growth in the tourism sector which contributed significantly to foreign currency in flows prior to the FTLRP.

Land Administration

Having commented on the fragmentation of institutions responsible for coordinating land reform during the first phase of the LRRP, this section examines the coordination and structuring of the land administration process under the FTLRP. The aim of this section is to show changes and/or improvements to the land administration process.

Institutional structures in 2000

In 2000, four ministries were responsible for the coordination of the FTLRP. Those involved were:

- Ministry of Lands and Rural Development
- Ministry of Local Government
- Ministry of Natural Resources and
- Office of the Attorney General in the Ministry of Justice, Legal and Parliamentary Affairs (UNDP, 2000).

A task force of Ministers was established in 2000 whose responsibilities included the coordination of all agencies involved in the implementation phase of the FTLRP, with the aim of facilitating communication amongst ministries (UNDP, 2000).

Consequently land identification and settler selection and placement were decentralised. Land identification was done by the Rural District Council (RDC), whilst settler selection was first done at the ward level by a Ward Committee, consisting of Ward Councillor, the headman, village heads and the local representative of ZANU-PF (UNDP, 2000). A list of farm names and settlers recommended by the RDC and the Ward Committee respectively were submitted to the District Land Identification Committee (DLIC). The DLIC had authority to revise these lists if they did not comply with government requirements (UNDP, 2000). Lists were sent to the Provincial Land Identification Committee (PLIC), which collated them and sent them to the Ministry of Lands, Agriculture and Rural Resettlement for acquisition and settler placement authority.

This selection process, like that of the 1980s and 1990s, continued to be government and ZANU-PF driven. The DLIC and PLIC were under the Ministry of Local Government, Public Works and National Housing and were chaired by the District Administrator and Provincial Administrator respectively. These two committees varied in districts and provinces, but mostly comprised of 25-30 representatives, mostly ZANU-PF members, civil servants, security officials, chiefs and war veterans.

In contrast to the decentralised process described above the process of acquisition was centralised and mainly administered by the Department of Lands in the Ministry of Land, Agriculture and Resettlement. The Department of Extension and Services (AREX) in the Ministry Agriculture and planned, surveyed and pegged the acquired farms (UNDP, 2000; Samuriwo, 2004; Ndoro, 2004).

The Attorney General's department in the Ministry of Justice, Legal and Parliamentary Affairs confirmed the legal description of farms, issued and serviced eviction orders and was responsible for amending the Land Acquisition Act of 2000 that 'legalised' the FTLRP process (UNDP, 2000).

These land institutions were criticised by the UNDP Technical Mission (2000) and Utete (2003). Both commented that the government needed to strengthen its institutional capacities, which were understaffed, overworked and lacked the resources to implement activities for the FTLRP. Samuriwo (2004) the Director of Resettlement in the Ministry of Lands, Land Reform and Resettlement commented that:

the rapidity of FTLRP caused shortages of personnel to administer and implement it and resulted in clerks in the Ministry of Land, Agriculture and Rural Resettlement becoming land use planners overnight, although they possessed no knowledge or experience of planning. The shortage of staff was so critical that students from the University of Zimbabwe were hired to assist with the technical planning.

From this it is clear that the government continued to experience the same problems in its land administration as prior to the FTLRP. The implication of this is that the government's lack of physical and personnel resources and adequate coordination is likely to compromise its ability to implement the FTLRP effectively.

Institutional structures in 2004

Following the Utete Commission (2003) report government reorganised its land institutions in 2004 at national, provincial and district levels for the effective implementation of the FTLRP. According to the Government of Zimbabwe (2004) and Masiwa (2004), there were six major institutional actors involved in the FTLRP. The first institution, the Cabinet Committee on Resettlement and Rural Development (CCRDR) led the programme at the national level (Government of Zimbabwe, 2004). It was chaired by the Vice President (J. Msika) and comprised 12 cabinet ministers. The CCRDR was responsible for policy formulation and coordination of rural resettlement and development.

This Committee was assisted by the second institution, the Working Party, which comprised the Permanent Secretaries heading the Ministries in the CCRDR and was chaired by the Principal Director in the office of the Vice President. The Inter-ministerial Committee on Resettlement and Rural Development (IMCRDR) provided services to the CCRDR and Working Party by managing programme implementation

activities and was chaired by the Director in the Office of the Vice President (Government of Zimbabwe, 2004).

The third institution was the National Land Acquisition Committee (NALC), which identified land for compulsory acquisition and subsequent resettlement. The NLAC had structures at the provincial level (the PLIC) and at the district level (the DLIC)), which were chaired by Provincial Governors and Resident Ministers and the District Administrators (DA) respectively (Maunganidze, 2004; Bandura, 2004). There was a reduction in the number of people represented in 2000 to one representative from each sector previously mentioned.

The fourth institution that assisted the NLAC was a subcommittee called the Land Task Force of Ministers (LTFM). The role of the LTFM was to coordinate the activities of the FTLRP, speed up land delivery and settler placement, channel resources to the resettlement areas and ensure that the command centre and line ministries tackled the FTLRP in an integrated manner (Government of Zimbabwe, 2004). The Task Force was a continuation of that set up in 2000, but with a 'clearer' mandate and job description (Masiiwa, 2004).

The fifth institution was the National and Provincial Command Centre Committees, which were set up to assist the Lands Task Force of Ministers by gathering and disseminating information pertaining to FTLRP (Government of Zimbabwe, 2004). The same structure existed at the provincial and district levels, and was chaired by the Provincial and District Administrators respectively.

The sixth institution, the National Economic Consultative Forum, was established in 1998 between the government and the private sector and continued to participate in the FTLRP. This was done through formal meetings between its Task Force on Land and the Working Party of the CCRD.

In February 2004, President Mugabe created a new Lands Ministry, The Ministry of Special Affairs on Lands, Land Reform and Resettlement, because of the magnitude of the land redistribution and resettlement process.

Maunganidze (2004), the former Principal Director in the Ministry of Lands, Land Reform and Resettlement said that Inter-Ministerial Committees were set up for effective coordination and synchronisation of activities under the FTLRP amongst the various actors aforementioned. However, two of his subordinates refuted this, citing difficulties and lack of cooperation and urgency on the part of some civil servants in other ministries or departments. They also commented that the poor remuneration in the inflationary economic environment contributed to some of these attitudes; people no longer went beyond their call of duty and were focused on running their own private businesses during work hours. Despite the reorganisation of these land institutions, inefficiencies amongst civil servants involved in land administration, as suggested above, will likely lead to failed government support and delivery to beneficiaries of the FTLRP. In addition, it is also likely to slow the rate at which beneficiaries can be legally settled on acquired farms and delay resolving the land conflict in the country. Comments, made by key informants, who were interviewed in this research, on government land institutions and administration will be discussed later.

2.6 Conclusion

This chapter has provided an overview of the philosophical framework upon which the research is grounded and from which it will operate. The various debates concerning smallholder production and an overview of land appropriation, changing tenure and spatial structure since the occupation of the BSAC were included to contextualise the land question. An appraisal of land reform experiences since independence indicated that the declining macro-economic environment, failure of government to resettle the majority poor and the changing political landscape precipitated events that led to the FTLRP. The following chapter will provide geographical and historical literature on the study area where the research was conducted.

CHAPTER THREE: THE STUDY AREA

3.1 Introduction

This section provides an overview of the district's geography and its historical background. The chapter is concluded by a short review of the Muzvezve ICA, which locates the three study areas within their local geographical context.

3.2 Geographical background

Kadoma District, located in Mashonaland West Province (Figure 1.2), consisted of four agricultural sub-sectors before the FTLRP, as shown in Figure 3.1, which include;

- Communal areas,
- Resettlement areas,
- Small scale farms,
- Large scale farms apportioned into the Battlefields, Muzvezve, Sokis and Suri Suri Intensive Conservation Areas (ICA).

Furthermore, land was set aside for recreational purposes; such land includes Ngezi 1, Hartley Safari and Umfuli. A large urban area, Kadoma, services the district and a symbiotic relationship exists between it and its hinterland.

The district straddles Natural Farming Regions IIa, IIb, III and IV, with the study sites being in regions IIb and III (Figure 3.2). The district has a savannah type climate and vegetation; experiences erratic rainfall that averages 650 millimetres per annum and temperatures that range between 23.8° and 32.2° Celsius (Urban Development Corporation, 1991). Figure 3.3a indicates the total amount of rainfall received in the district since 1990, whilst Figure 3.3b shows the fluctuations in rainfall during the farming seasons from 1990/1991 to 2004/2005. These data show that farming based solely on rain-fed crop production is likely to be vulnerable to seasonal and mid-seasonal droughts.

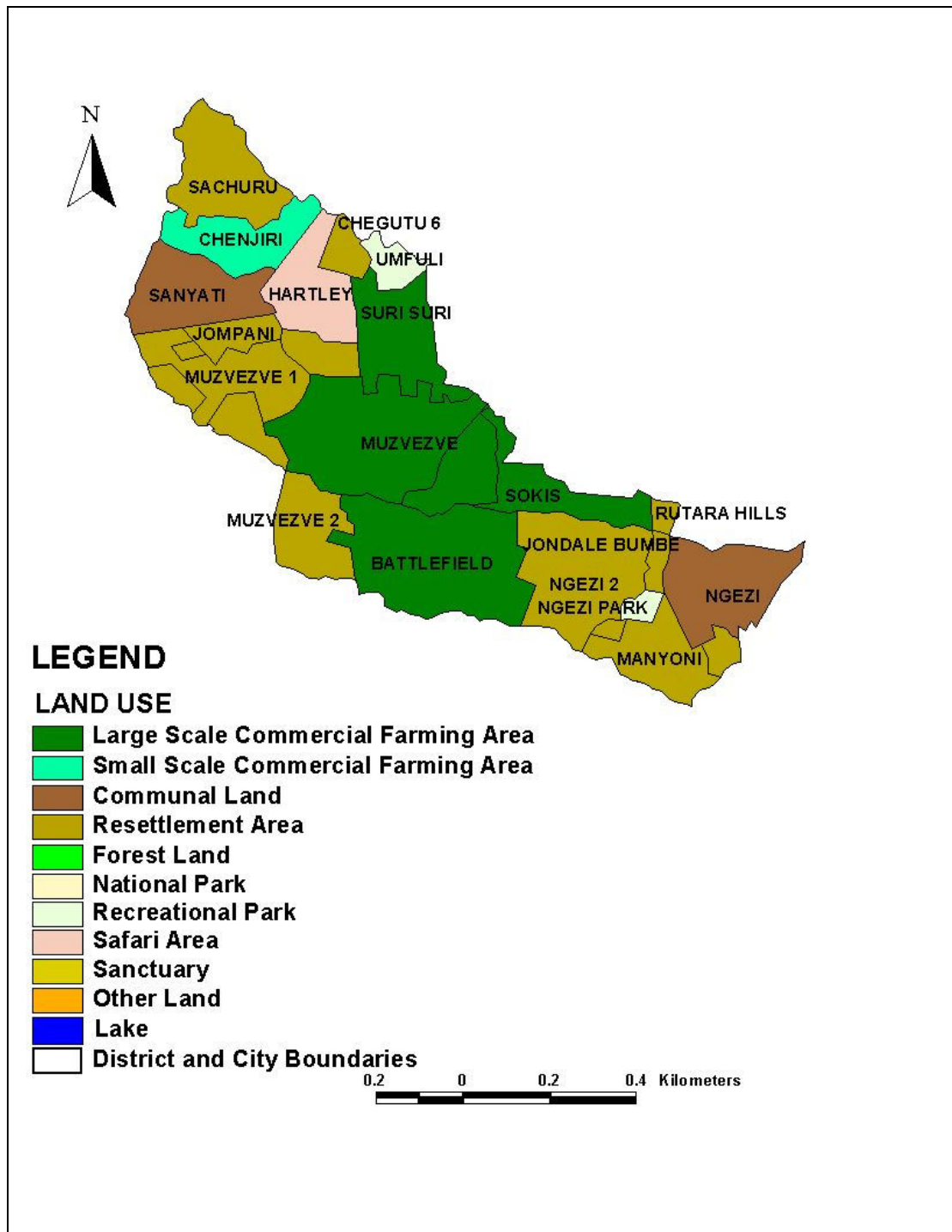


Figure 3.1 Land Tenure map of Kadoma District prior to FTLRP

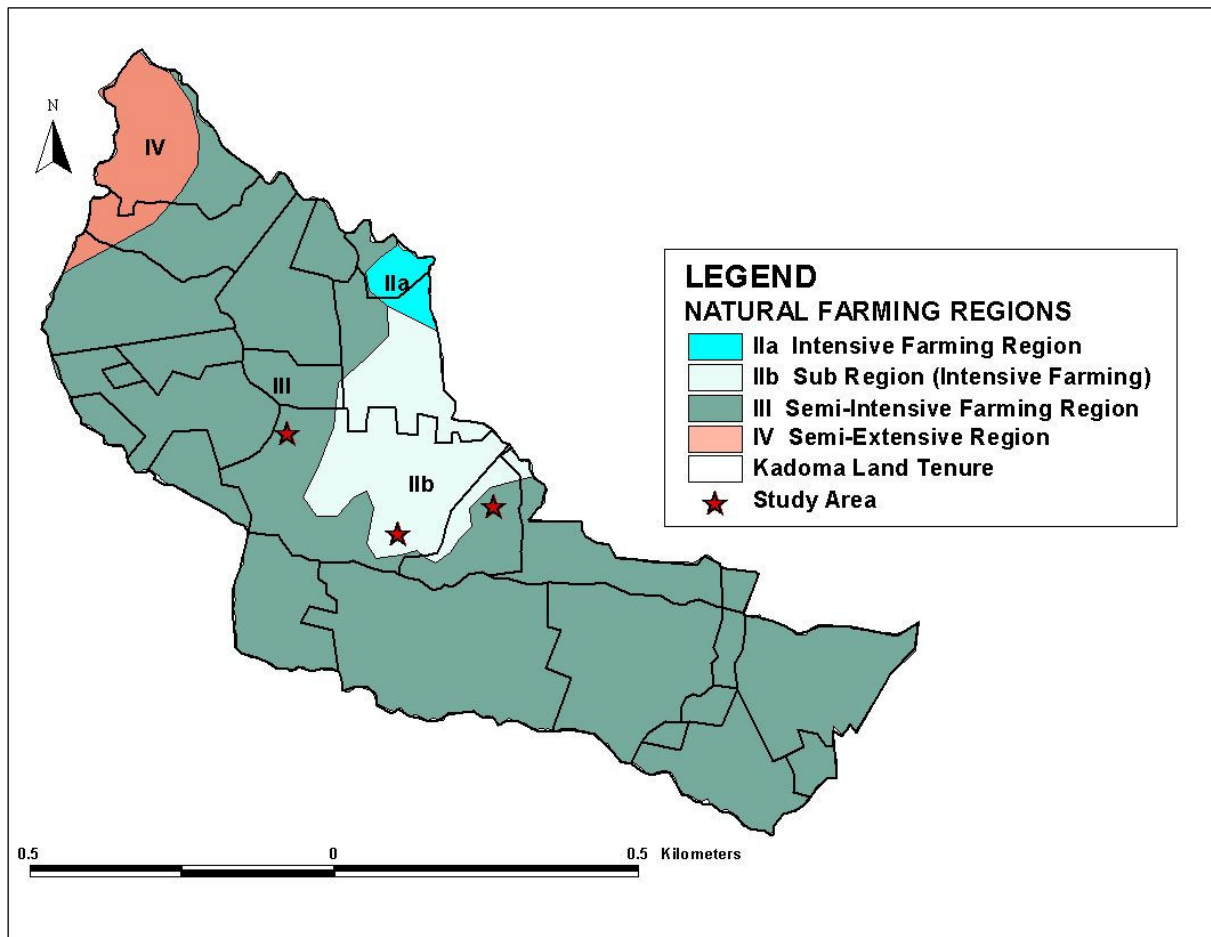


Figure 3.2 Natural Farming Regions of Kadoma District

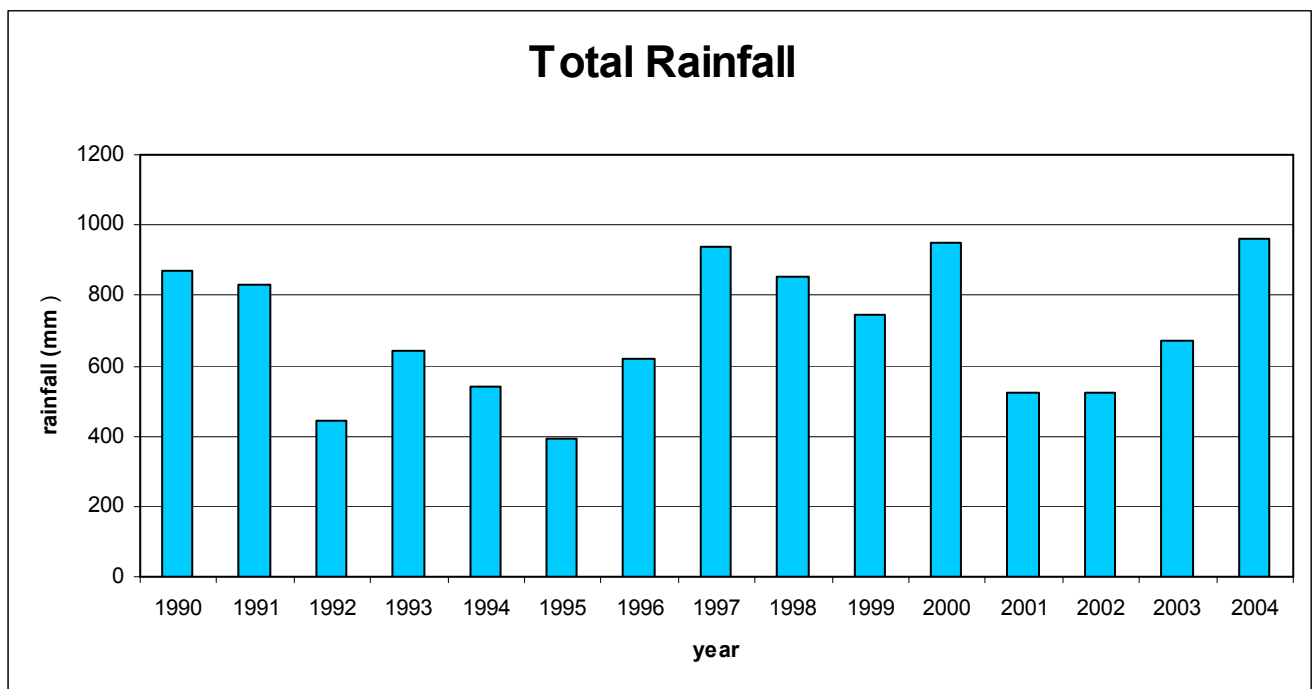


Figure 3.3A Total rainfall received in Kadoma District from 1990-2004

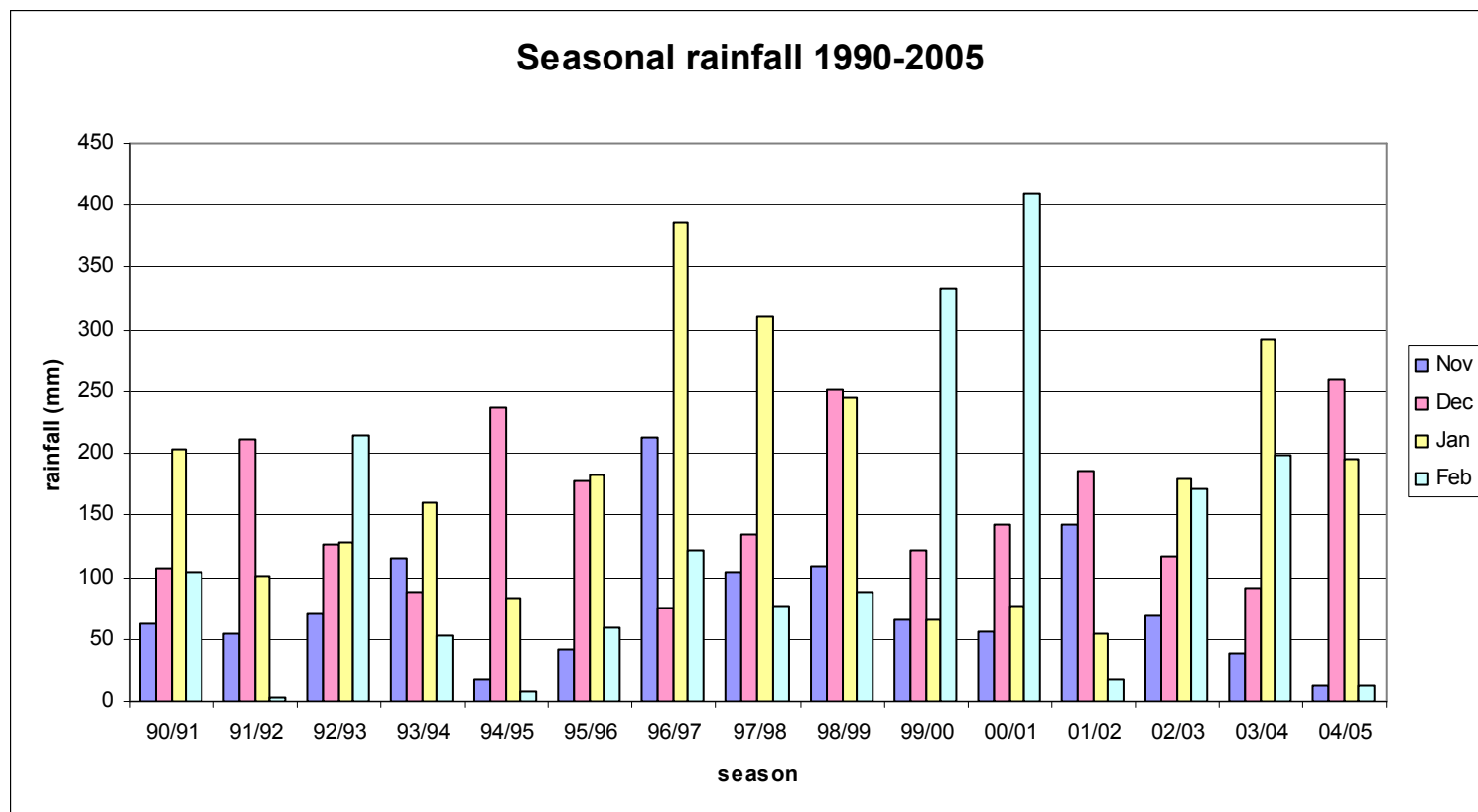


Figure 3.3B Rainfall patterns in the farming seasons

According to the Gatooma Regional Development Committee (1946:5) and Tunnall (1912), the district was endowed with rich agricultural land, as well as mineral wealth. The geological formations were predominantly volcanic, with high mineral content. The soils varied from red loams to fertile lighter soils derived from schist and ironstone, to granite and sandveld, as well as rich black soils in vlei areas. The study area showed similar soil formations. Gold and base metals such as copper, nickel, platinum are present and, to a lesser extent, chrome, magnesium and limestone (Urban Development Corporation, 1991). Environmental assessment studies conducted by Justice for Agriculture (2003) and the UNDP (2004) indicated increased exploitation of base metals throughout the country, particularly, in the Kadoma District since the FTLRP. This research will determine if this is the case on the natural environments at the three study areas. The Muzvezve and Munyati rivers and their tributaries provided and continue to provide most of the water for the district, with ground water supplies at depths of 25 and 50 feet (7.62 and 15.24 metres) (Gatooma Regional Development Committee 1946).

The main cash crops grown were cotton, tobacco, seed crops and maize. Crops such as soyabeans and groundnuts were grown on a commercial basis. Potatoes, tomatoes, wheat and vegetables were grown under irrigation in the dry winter months. Cattle, both dairy and beef, were reared, as well as sheep and pigs, mostly by commercial farmers.

3.3 Historical background

The district developed principally through mine prospecting by settlers when gold was discovered 1906 (Tunnall, 1912; Gatooma Regional Development Committee, 1946). The district was characterised by both small-scale and large scale mines (such as Patchway, Cam and Motor, Eiffel Flats, Brompton and Golden Valley). By 1923, agriculture had become increasingly important because of the closure of smaller mines, which resulted in miners turning to farming. Other reasons that encouraged the growth of farming were the establishment of the cotton research station, investment by local government in agro-based industries such as textiles, abattoirs and marketing boards in Kadoma town (Barnes *et al.*, 1974; Cawardine, 1988), and the ready markets for vegetable produce provided by the bigger mines such as Cam and Motor (Edwards, 2005). A symbiotic relationship existed and continued to exist between the city and the hinterland.

3.4 The Muzvezve ICA

The Muzvezve ICA was one of the administrative areas within the commercial farming zone of Kadoma. It had over 150 farm holdings and encompassed the Kadoma urban area and two old resettlement areas prior to the FTLRP. Chapter Eight will provide an overview of the changes in the landscape of the Muzvezve ICA under the FTLRP. The ICA is located in Natural Farming Regions IIb and III (Figure 3.5). The tributaries of the Muzvezve and Mazoe Rivers, shown in Figure 3.5 provide water for most farms in the ICA. Figure 3.6 shows the study areas and indicates, as noted in Chapter Two, that LSCFs were located close to lines of communications.

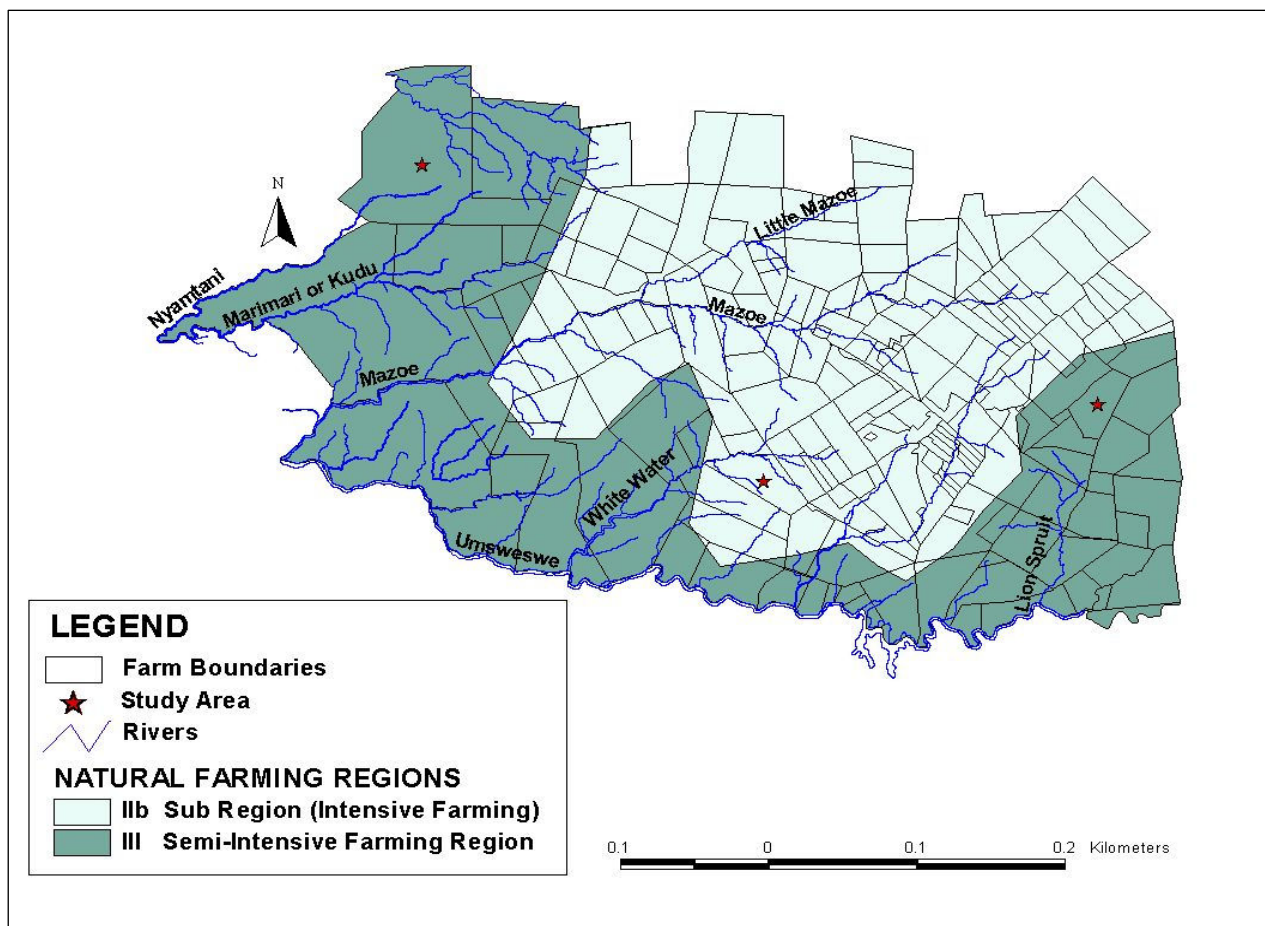


Figure 3.4 Natural Farming regions and main rivers of the Muzvezve ICA

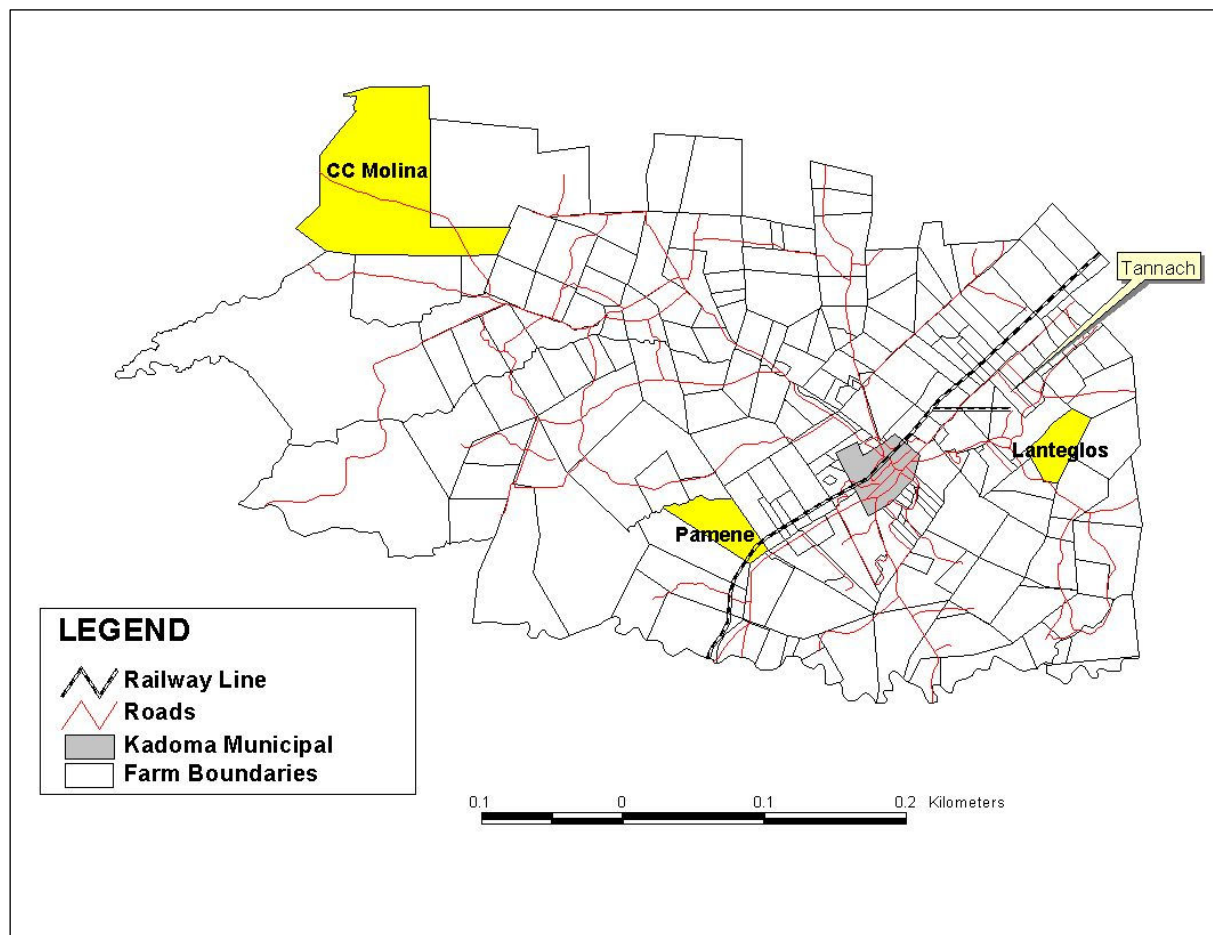


Figure 3.5 The Muzvezve ICA, showing the three study areas and Tannach farm surveyed in the pilot study

Chapters Five and Six will provide a detailed examination of the farming practices of the former commercial farmers, prior to the FTLRP and that of the resettled farmers in the three study areas respectively.

CHAPTER FOUR: METHODOLOGY

4.1 Introduction

This research takes a case study approach by studying three resettled communities in Kadoma District, Zimbabwe. A summary of the aim and objectives of the research is given below. In this chapter the research design, methods and analysis used to meet the specified objectives are examined. An outline of the constraints experienced in this research concludes the chapter.

4.2 Aims and objectives

The aim of the research is to provide an appraisal of the impact of the FTLRP on rural livelihoods and the natural environment by means of a case study of three communities resettled between 2000 and 2004 in Kadoma District. In order to achieve this aim, six objectives were established. These included: the provision an historical overview of land reform in Zimbabwe, which has been detailed in the literature review; appraising the livelihoods and land use practices of the beneficiaries of the FTLRP; assessing the natural environment of the study areas; conducting interviews with former commercial farmers; and critically appraising governments land institutions, land policy and the political economy of the country.

Table 4.1 shows the six objectives used in this research and a summary of the methods used to collect data and the associated techniques for analysing these data. It shows that primary data were collected through surveys, interviews and observations to meet objectives one, two, three, five and six. Secondary data were collected through the review of literature, documents and collection of maps in order to achieve objectives one, three, four, five and six. In this chapter the methods used and the techniques employed to collect and analyse data in order to achieve the specified objectives are described, later, according to primary and secondary data collection methods.

Table 4.1 Research Matrix

OBJECTIVE	METHOD	ANALYSIS
1. To provide an historical overview of land reform and the events that led to the FTLRP	Primary data: semi-structured interviews with key informants Secondary data sources	Qualitative and quantitative Content analysis Review of literature: books, journals, newspaper articles and government documents
2. To conduct a survey of land use practices and collect information on the demographic characteristics and life history of the new farmers	Primary data: household surveys, observations	Qualitative and quantitative Observation through transect walks
3. To conduct interviews with the former commercial farmers from the three study areas	Primary data: semi-structured interviews Secondary data sources	Qualitative Review of documents
4. To collect spatial data to facilitate in the production of maps and analysis of changes in the spatial environment since FTLRP	Secondary data: collection hard copies of maps of Zimbabwe and the Muzveze ICA Collection of electronic spatial data	Quantitative with descriptive analysis Geographic Information System (GIS) analysis
5. To assess the livelihoods of resettled farmers, their environment and sustainability thereof.	Primary data: household surveys Secondary data sources	Qualitative and quantitative Literature review
6. To provide a critical analysis of government land policy, land institutional structures and the political economy of the country in order to contextualise the case studies within a political ecology framework	Primary data: semi-structured interviews with key informants and government officials Secondary data sources	Qualitative and quantitative with descriptive statistics Content analysis Literature review

4.3 Research design

A multi-method approach was used to achieve the objectives of this research. This approach involved the use of a variety of data sources shown in Table 4.1 that generated qualitative and quantitative data. This multi-method approach offers ways to enrich data for analysis. The research used a mix of techniques to collect primary and secondary data at the national, district and local levels, which included semi-structured household questionnaires, semi-structured interview guides, observations and the collection of secondary data.

The highly politicised environment surrounding the FTLRP made it necessary to have contacts and a research team comprised of individuals who were already well known in the Kadoma area in order to facilitate access to persons, places and information. The research team included my father and a student well versed in Shona, which was used as the medium of communication in the household surveys. Contact was made with Mrs Ndoro, the head of AREX within the Ministry of Agriculture and Rural Development in Kadoma. She had been involved in the planning and subdivision of farms, settler placement and the provision of extension services at the outset of the FTLRP in Kadoma District. Mrs Ndoro was therefore able to provide information and contacts, as well as facilitating entry to resettled farms. After a general outline of the proposed research and requirements was provided, Mrs Ndoro offered advice on how to proceed with the research and provided names of study sites for the pilot survey.

4.4 Primary data collection and analysis

4.4.1 Data collected from the household surveys

A pilot survey was conducted in June 2004 and the actual survey was undertaken between October 2004 and January 2005. The study sites were revisited in March/April and June/July 2005 primarily for the collection of yields harvested by households in the 2004/2005 farming season. Information gathered from these surveys addressed objectives two and five outlined in Table 4.1.

4.4.1.1 The Pilot Survey

This survey was conducted in June 2004. Initially the head of AREX, provided the names of two resettled communities, Lanteglos and Tannach, where she had planned the subdivision of the farms, settled beneficiaries and provided extension services in 2000. Tannach and Lanteglos were settled under two variants of the FTLRP, of which the former is under the A2 Small Scale settlement scheme and located within Natural Farming Region IIb and the latter under the A1 Villagised model and located within Natural Farming Region III. The two farms are located in close proximity to Eiffel Flats Mine and were formerly owned by Mr Rob Edwards.

The pilot survey was conducted in order

1. to ascertain the feasibility of the research;
2. to check clarity and/or constraints of the questionnaire design;
3. to establish contacts within the study area.

The target for the survey had been 10 households from each resettled community. Ndoro said Lanteglos farm had two village sites with 30 households each that were governed by a Village Committee of Seven. Entry into the village required permission from the Zimbabwe Republic Police (ZRP) at Eiffel Flats and from both the chairperson and security officer (a former war veteran) of the Village Committee. A committee did not govern Tannach, which had fourteen households resettled on individual plots, hence entry was easier.

The absence of a list of names of beneficiaries and/or their plot numbers at Lanteglos constrained the random selection of respondents. Subsequently, a snowball sampling technique was used to select respondents. This was made easier by the centralisation of the village and by the fact that households knew who was present in the village on the day of the survey. The security officer, at Lanteglos, for purposes of introduction, accompanied the research team. At Tannach, AREX had provided a map of the farm's subdivisions with plot numbers and this allowed for a random selection of households for the survey.

A questionnaire was administered to respondents in order to elicit both qualitative and quantitative data. Shona and English were used interchangeably as mediums of

communication. Responses were recorded on a Dictaphone with each interview lasting approximately 30 minutes.

The design of the pilot questionnaire

The questionnaire was divided into five sections. The first section focused on demographic details, life history and beneficiaries' sources of income since resettlement. The second section asked questions pertaining to the size of the plot subdivisions, who had subdivided these plots, and whether contention existed over such divisions. This section also required farmers to substantiate how they had acquired their plots. The third section focused on the land use practices of the farmers since resettlement. Households were required to quantify their output for the 2002/2003 season, obstacles and challenges faced since resettlement, to indicate the type of equipment used for tillage and whether they hired labour. Questions pertaining to the type of tenure held for grazing land were also asked in this section. The fourth section focused on the environment and required information on sources of water for crop production and domestic purposes, as well as to quantify the amount of wood harvested for energy consumption. The final section of the questionnaire focused on the form of title held by beneficiaries and their views on this.

A total of 58 questions were administered in an interview style and, as previously noted, recorded on a Dictaphone. The length of the interview depended on the responsiveness and willingness of the interviewees to provide answers to the questions.

Constraints in the design of the pilot questionnaire

Interpretation of the questionnaires revealed various limitations of the design. In particular, certain questions were not easily translated from English into Shona. This made it necessary to enlist the help of the research assistant who was well versed in Shona and able to translate, record and answer queries to and from respondents for the main survey. Leading questions were observed in particular where *a priori* assumptions had been made. The wording of certain questions was ambiguous and at times confusing to the respondents and this illustrated the need for a lucidly written questionnaire in which questions are organised into categories according to a particular theme and which progress logically from one question to the next.

Furthermore the structure of the questionnaire needed to be outlined to respondents before the interview. Data collected from the questionnaire were not sufficient to elucidate changes in the livelihoods of households after resettlement, show changes in the natural environment and make conclusions as to the impact of the FTLRP on livelihoods. A more comprehensive questionnaire was therefore required.

Limitations of the recording method

Usage of a Dictaphone to record the surveys was not appropriate because of the difficulty experienced in transcribing responses. Information particularly from four households was unusable for discussion of the pilot survey due to the poor sound quality of the recording. The reasons for the poor recording were threefold:

1. Interviews were conducted outside, therefore noise from the surrounding environment interfered with the recording and contributed to the poor sound quality.
2. Cultural norms of households that hold strong traditional beliefs dictate that young and single women should not sit next to and in close proximity to married men. For this reason, I sat some distance away from households headed by men and therefore this distance made the recordings unclear and difficult to transcribe.
3. Respondents who were suspicious of the intentions of the research and the recording instrument purposely spoke in low tones in an effort to hinder the recording.

Most households attended church on Friday afternoons and political rallies held by the ruling party, ZANU-PF, on Saturday mornings, rendering these days inappropriate for surveys. ZANU-PF campaigning for the March 2005 parliamentary elections had also commenced earlier. Resettled constituents, particularly in villagised settlement schemes, most of whom had been part of the land occupation movements, were targets for politicisation. For these reasons, an attempt was made not to administer the main survey on those two days and care was taken in the construction of the final questionnaire, to avoid questions that could be construed as ‘political’.

4.4.1.2 The main survey

Before conducting the main survey, the politicised nature of the FTLRP and the forthcoming March 2005 general elections made it necessary to seek permission from the government. Therefore, the Principal Director and the Permanent Secretary in the Ministry of Lands, Land Reform and Resettlement, as well as the Director of AREX, were consulted in October 2004. On request, a copy of the questionnaire for the main survey and interview schedules (Appendices 1, 3 and 4) were given to the Permanent Secretary for perusal. Consequently questions marked with an asterisk in Appendices 3 and 4 had to be removed from the interview schedules. Permission and letters to gain access to resettled communities and interview government officials were granted with restrictions on access to confidential information and on condition that the results were to be lodged with the contributing departments and the University of Zimbabwe (Pazvakavambwa, 2004). The Zimbabwe Republic Police (ZRP), Central Intelligence Organisation (CIO) and the District Administrator (DA) in Kadoma were then informed about the research process. The DA further provided a letter of introduction, as it was feared that the letter from central government would not be sufficient for entry at the grassroots level, particularly in enclaves controlled by war veterans.

Design of the main questionnaire

The questionnaire was divided into six sections, with each section concentrating on a particular theme that needed to be considered in the appraisal of the impact of the FTLRP on livelihoods and the natural environment in the three selected communities.

In Section One, households were required to provide information on their life history, which included the ages of the head of household and their dependents, where they had previously resided and their occupations prior to resettlement. Heads of households had to rank their sources of income before and after resettlement from a list provided according to importance. In addition, information on their expenditure patterns since resettlement and the changes after resettlement was required. Questions on how households had acquired their plots and the institutions to which they had applied for resettlement concluded the section. The questions in section two were mostly similar to those asked in the same section of the pilot questionnaire. These questions required information from the householder on the size of the plots allocated

to them, the people responsible for subdividing their plot and to explicate if there had been conflict with their neighbours over the subdivision of the plots.

The third section focused on the land use practices and output of beneficiaries who had been farming prior to resettlement, the size of their landholdings, the form of tillage used and the obstacles or challenges to farming that they faced. This section also required households to quantify information concerning their crop yields in a 'good' season with adequate rainfall and those in a 'bad' season of either too little or too much rainfall. The fourth section looked at land use practices and output after resettlement and followed much the same format as the third section. It differed substantially from the piloted questionnaire because its respondents were required to state the crops grown and output from the 2001/2002 to the 2004/2005 seasons and rank the tabulated crops according to importance. Furthermore, questions on usage of natural resources for the purpose of consumption were included in this section. Sections Three and Four were constructed for purposes of providing a clearer picture of the land use and farming practices of households and for a comparative framework in order to appraise the impact of the FTLRP on the beneficiaries' livelihoods and whether these had changed or improved since resettlement. This section would also provide information from which inferences could be made about the sustainability of these households' land use and farming practices on their livelihoods.

Section Five focused on the natural environment and how beneficiaries used it. This section required respondents to describe their sources of water, what this water was used for, its cost and distance travelled to access it. Households had to indicate the form of water used for crop production (either rain-fed or irrigation). Furthermore, households were required to rank the quality of the water accessed for domestic purposes. Respondents were asked to rank, in order of importance, and state their preferred source of energy, according to the list provided in the questionnaire. They were also required to describe their usage of natural resources and the conservation measures that they applied to their farming practices. The last section dealt with tenure issues like those in the pilot questionnaire, but there were more questions. Households were required to determine their form of tenure from a list, provide information regarding where they had obtained their title from and information about likely inheritance in the event of the household head dying. The last question in this

section asked households if they felt they had received enough land. This was aimed at seeing whether the land question in Zimbabwe had been resolved or whether a future land question could exist amongst those who had benefited and those who had not.

The questionnaire included both closed and open questions that elicited quantitative and qualitative information in order to capture information that could deepen and widen understanding on livelihoods of the beneficiaries and their interaction with the natural environment. An example of the questionnaire is shown in Appendix 1.

Collection of data

For the purposes of providing a comprehensive commentary on the impact of the FTLRP on livelihoods and the natural environment, three resettled communities, at Lanteglos, CC Molina and Pamene farms, were selected as case studies. Criteria used for selections were that:

- farms had to be situated in the Muzveze ICA and it was necessary that one of the three farms be in a different natural region since the ICA mainly straddled regions IIb and III. This was done in order to contribute to debates on whether or not smallholder production changed and/or improved with the agro-ecological potential of the land, as debated by Deininger and Binswanger (1999), Sender and Johnson (2004) and Dyer (2004);
- resettlement was under both small scale farming models (peasant production and small-scale commercial) so as to contribute to debates over viability, efficiency and sustainable livelihoods of smallholder farming, over large-scale farming, as purported by pundits such as Lipton, (1996); Deininger, (1998); Binswanger and Deininger, (1999); Twyman *et al.*(2000); Moyo (2002, 2004b) and van der Brink (2003);
- the sample size was set at 90 households for reasonable statistical validity, allowing for 30 households from each study site to be surveyed;
- it was necessary that the research team have contacts who already existed or could be established in the study areas in order to allow for ease of entry.

Purposive sampling was chosen to include case studies from the two Natural Farming Region stratum in the Muzvezve ICA. Lanteglos and CC Molina farms resettled through the A1 decongestion model for peasant production are located in the Natural Farming Region III. Pamene settled under the A2 small-scale commercial settlement scheme is in region IIb.

The Lanteglos community was reselected for the main survey because the research team had already established a relationship with the chairperson of the village and some of the interviewed households during the pilot survey. As a result, entry into the study area was made easier and people in the community there were more accessible. Furthermore, since the head of AREX had said Lanteglos had two village sites, it was decided to interview 15 households from each of these village sites. However, the research team soon discovered that in fact only one village site consisting of 34 resettled households existed. From this, 22 heads of households were interviewed; two were absentee farmers and therefore not available when the survey was conducted. The ten interviewed in the pilot survey were not re-interviewed. Figure 4.1 locates the village and the arable plots of households that were visited during transect walks. The discrepancy in the number of plots and the total number of households resettled is the result of two factors. Firstly plot 14 had been subdivided into four 1.5 hectare plots whilst plot 25 had been subdivided into two three hectare plots. The second reason is that the AREX cartographer had not plotted four plots on the map provided for the research. This was noticed at a later stage when the map was being computed for analysis in the Geographic Information Systems (GIS) and by this stage the cartographer had taken his annual leave and therefore was not available.

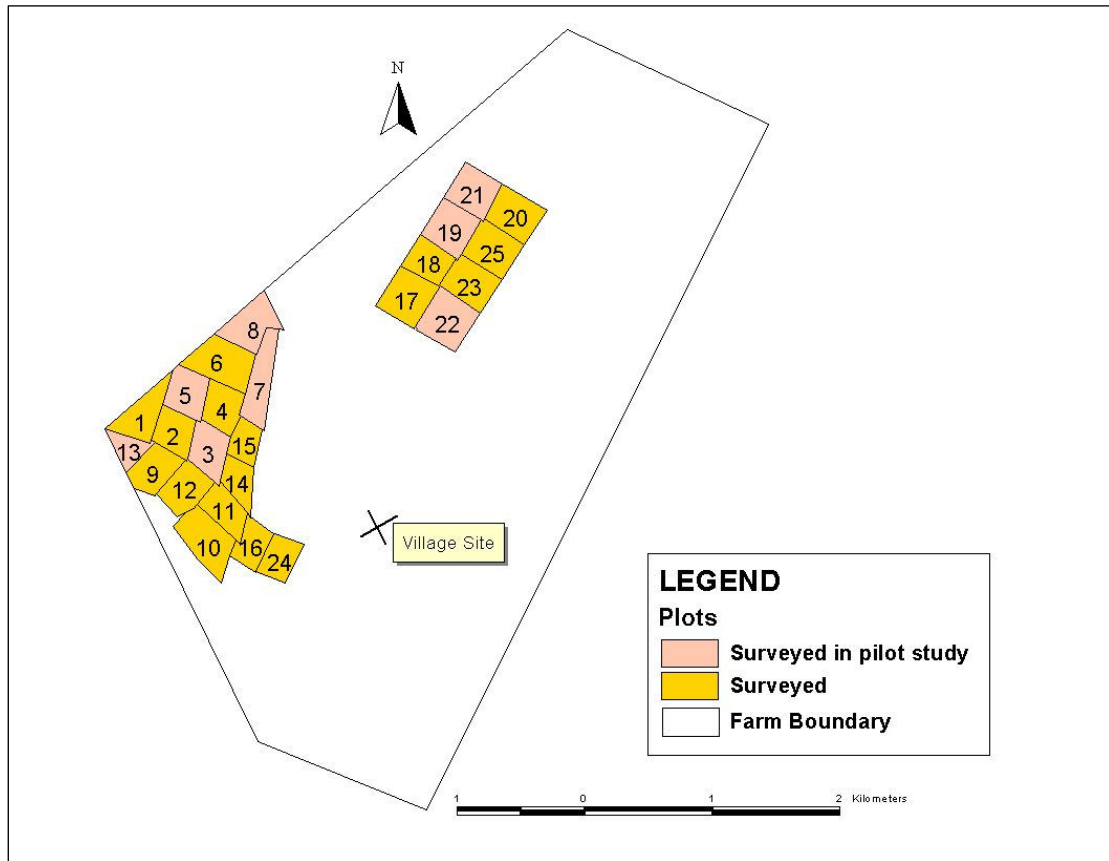


Figure 4.1 Map of arable plots of surveyed households at Lanteglos, which were visited during transect walks in November 2004

One of the research assistants had established contacts prior to the survey at CC Molina, which included the chairperson of the village, a ‘self proclaimed’ war veteran and a businessperson. Since 125 households had been resettled on the farm, the target of 30 households could be met, but only 27 households were interviewed. This was because heads of households were not available at three of the 30 plots visited for the survey. Figure 4.2 locates the self-contained plots of the surveyed households. It must be noted that the maps of these plot subdivisions at Lanteglos and CC Molina were only provided by AREX in March 2005 after the survey had been conducted.

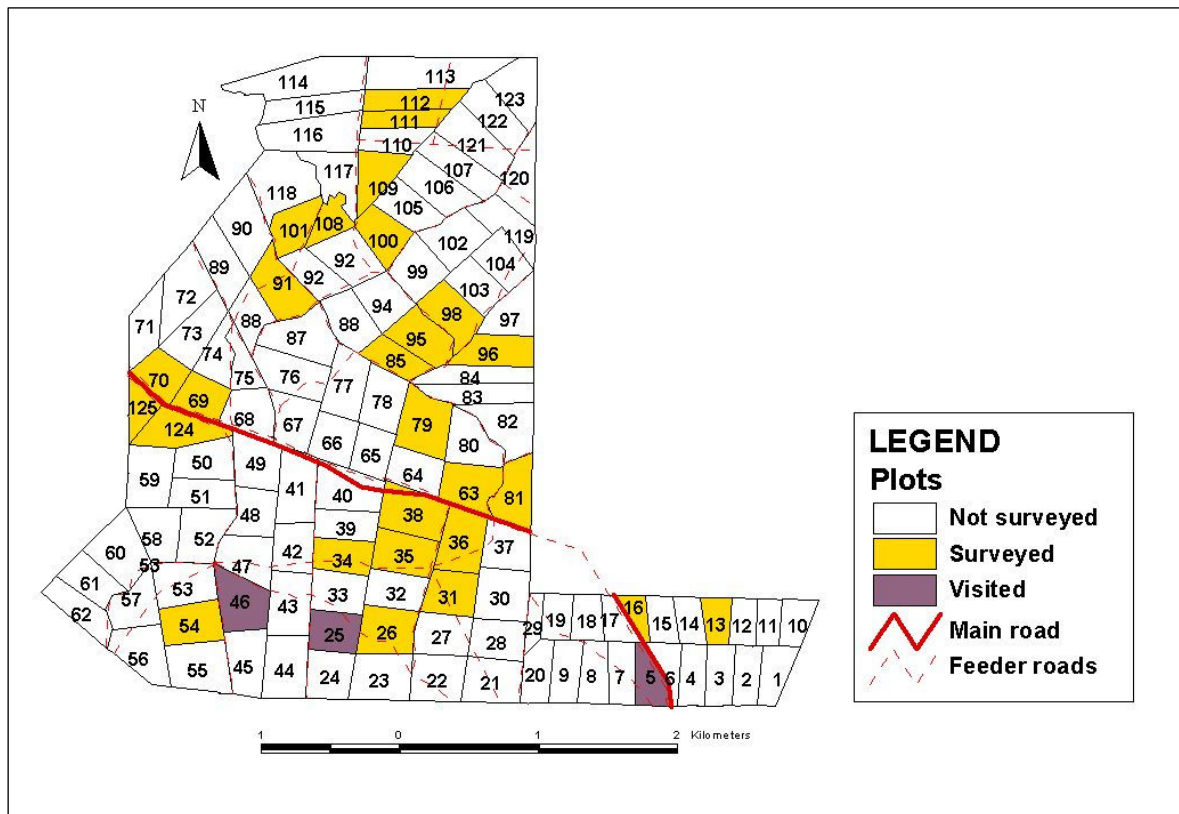


Figure 4.2 Map showing plots of households surveyed at CC Molina in December 2004

AREX had however provided maps with subdivided plots of farms resettled under the A2 small-scale settlement scheme, from which the case study for the survey was selected. Pamene was chosen over 10 other communities under the A2 small-scale model because it was supposed to have 56 households, which would allow for the target of 30 households for the survey to be met. Pamene also met the criteria as it fell in a different Natural Farming Region from the other two A1 farms. Stratified sampling and snowballing methods were employed to select households since AREX had planned and subdivided Pamene into six tiers, shown as rows on the map (Figure 4.3) with several plot subdivisions in each tier. Through snowballing five plots from each tier were sampled for the survey. The community at Pamene had appointed an administrative committee, the Committee of Seven, akin to that of Lanteglos and CC Molina; although as an A2 settlement scheme, this was not necessarily required. The chairperson accompanied the research team for purposes of introduction. Only twenty-three households were interviewed as seven plots visited had absentee or no property owners.



Figure 4.3 Map showing plots of households surveyed at Pamene in November/December 2004

Analysis of the data

Upon completion of the survey, a total of 72 questionnaires were collated from respondents on CC Molina, Pamene and Lanteglos farms. The completed questionnaires were grouped into 3 sets, with each set containing all the questionnaires from one particular farm. Data from the questionnaires were tabulated according to the various sections of the questionnaire, using Microsoft Excel. The tables produced captured important statistical and descriptive data as fields. Charts and tables required for the analysis and display of data were then produced using Microsoft Excel functions. In some cases inferences used in this thesis were drawn directly from the tabulated raw data.

4.4.2 Data collected from interviews with former commercial farmers

Data from interviewing the former commercial farmers were collected to address objective three. This objective was undertaken in order to provide a comparison of

land use practices of these households before resettlement and those of the beneficiaries since resettlement. Two of the former commercial farmers from Lanteglos and Pamene were interviewed in March/April 2005 and the one from CC Molina in July 2005. The highly politicised environment in which this research was carried out made it necessary to have a contact from the CFU, Mr Alexander, who could introduce the research team. The interview with the commercial farmer from CC Molina was made easier because he knew one of the research assistants.

A semi-structured interview guide (Appendix 2) was administered. Questions asked included details of the size of their farms, general land use practices at the farm and quantification of these, sources of water for crop production, how the property was acquired for resettlement; the level of infrastructural development at the farm prior to resettlement, and their opinion regarding the future of farming in Zimbabwe. Maps, photographs and some documentation pertaining to past farming activities were obtained from two of the ex-farmers. These documents contributed to the appraisal of the impact of the FTLRP and the implications for sustainable livelihoods for the beneficiaries. The former farmer from CC Molina could not provide any documentation as the war veterans who had ‘invaded’ his farm had destroyed most of his documentation.

Information gathered from the interviews was used in the description of the farming and land use practices of these former commercial farmers.

4.4.3 Data collected from key government officials and key informants

In order to achieve objectives one and six, primary data were collected by interviewing government officials and key informants using snowball sampling.

Five key informants who represented different organisations and had an interest in the land issues in Zimbabwe and eleven government officials at national and district level referred by the Permanent Secretary of the Ministry of Lands, Land Reform and Resettlement were interviewed. The five key informants included a Director of the African Institute of Agrarian Studies, a lecturer from the University of Zimbabwe, the Director of JAG, an official from the UNDP and a former Permanent Secretary in the

former Ministry of Lands, Resettlement and Rural Development. The government officials interviewed at the national level included, the Principal Director, Directors of Resettlement, Acquisition and Land Information Systems, Chief Evaluation Officer in the Ministry of Lands, Land Reform and Resettlement; the Director of AREX and Deputy Director of planning for AREX. At the district level the Assistant District Administrator, Lands Officer and the Head of AREX were interviewed. The names and positions held by these officials are provided in Appendix 5.

The interviews were based on a semi-structured interview guide (Appendix 3). The guide was divided into four sections. The first section enquired about the administration of government institutions that dealt with issues pertaining to land; their functions and the rationale behind the creation of a new Ministry of Lands, Land Reform and Resettlement and any associated changes in the coordination of the land reform and land administration process. The second section required information on the shifts in land policy since 1980, comments about the capabilities of beneficiaries under the two settlement schemes, their abilities to compete on the global market, issues of tenure and nationalisation of land. Questions related to developmental initiatives and the role that non governmental organisations (NGOs) could play in the resettlement process were asked in this section. The third section solicited information on the impact of the political and socio-economic environment of the FTLRP on the beneficiaries, the financial institutions and the country as a whole and to ascertain the future for a land market in Zimbabwe. The last section enquired about the state of the environment since the FTLRP and sustainability of land use.

Interviews with these key informants were recorded on a Dictaphone and generally lasted between 35 minutes and 1 hour 30 minutes. Transcribed data from these interviews was analysed using the method of content analysis detailed later. All interviewees consented to have their names quoted in this research.

Government officials, with the exception of those from AREX, were given the same interview guide as that given to the key informants. These officials refused to have their interviews recorded and the time taken for the interviews ranged from 25 minutes to an hour. Interviewees consented to have their names quoted in this thesis,

however, where information was considered sensitive or political they requested anonymity.

AREX officials were given a separate interview guide (Appendix 4), which was subdivided into four sections. Section one enquired mainly about the organisational structure of AREX and the impact of the creation of the Ministry of Lands, Land Reform and Resettlement, with particular reference to the coordination of the programme. Section two focused on the criteria and procedures followed in the subdivision of farms and the organisation of the A1 and A2 settlement schemes. The third section enquired about the form of tenure held and information on the level of output of beneficiaries. The last section required information on the impact of increased human and livestock densities on the natural environment of acquired farms since the FTLRP and the sustainability thereof.

Analysis

Content analysis was used to interpret information provided from the interviews with key informants. According to Busch *et al.* (2005), content analysis is used in several fields of inquiry to examine any piece of writing or occurrence of recorded communication. It is defined as a research technique that is used for making systematic, replicable and valid inferences of data through the process of compressing many words of text into fewer content categories, based on explicit rules of coding (Budd *et al.*, 1967; Krippendorff, 1980; Stemler, 2001). Content analysis enables researchers to sift through large volumes of data easily (GAO, 1996, in Stemler, 2001) and allows for the determining and description of the focus of individual, group, institutional or social attention (Stemler, 2001). Busch *et al.* (2005) state that the concept of content analysis can be subdivided into two categories, conceptual or relational analysis.

Conceptual analysis was used in this research. Conceptual analysis determines the existence and frequency of concepts, most often represented by words or phrases, whilst relational analysis examines the relationship amongst concepts (Busch *et al.*, 2005). Using conceptual analysis the frequency of words and phrases was noted whilst transcribing the recorded interviews. This was done by first coding specific words that were indicative of the research question into content categories for each

interviewee. The nature and area of focus of each interviewee required a different list of concepts for coding, however it was noticed that several concepts recurred in all five lists, such as the words ‘political’, ‘development’, ‘sustainability’ and ‘productivity’. The frequency of words and phrases used were recorded and the inferences made in this research were based on this. It should be noted that some relational analysis was included. This was done by considering whether certain words that were spoken were used in a positive or a negative light, in this case words such as ‘FTLRP’ and ‘government’.

Content analysis was not used in the interpretation of information provided from interviews with government officials. However, relevant information gathered from these officials was used in making inferences in this research and for providing the context for the FTLRP.

4.5 Secondary data collection

Secondary data collected through a review of literature, government policy documents, media articles and maps was obtained to address objectives one, three, five and six. Landsat imagery, electronic spatial data and hard copies of maps were obtained for the production of maps in order to achieve objective four.

A detailed outline of spatial information needed for the project was given to the AREX cartographer, who had been referred to the research team by the head of AREX. The cartographer supplied information on the land tenure pattern in the district and the commercial farm administration zones. He suggested narrowing the study to one of the four ICAs: Battlefields, Muzvezve, Sokis and Suri Suri in the district and outlined the advantages and disadvantages of undertaking research in each these ICAs. Furthermore, the research team was referred to the senior cartographer at the Department of the Surveyor General for assistance with the provision of spatial data and delimitation of the chosen study area. This process took place in June 2004.

Political and financial considerations resulted in the Muzvezve ICA being chosen over the Battlefields, Suri Suri and Sokis ICAs. Its proximity to Kadoma City, which

was the home base; good transport and communication networks made farms in the area more accessible at low costs.

Hard copy and electronic spatial data, which included environmental, population and topographical covers of Zimbabwe, were purchased from the Department of the Surveyor General in Harare, Zimbabwe. Appendix 6 provides a list of the maps and spatial data collected. These data sets allowed for the generation and production of maps to provide for the geographical context and location of places in Zimbabwe and the study areas.

Shape files of landsat map images were purchased from the Forestry Commission in Harare in June 2005. This was done in order to enable a time series analysis to be undertaken of the changes in land cover at the three farms. This addressed objective four and provided for the appraisal of the impact of the FTLTP on the natural environment of the study areas. These shape files corresponded to the years, 1972/76, 1992 and 2002. This gave three sets of shape files containing three landsat map images providing land cover data for a particular year (1972/76, 1992, 2002): a Lanteglos set, a CC Molina set and a Pamene set. The dates and the type of landsat scenes that were used are summarised in Appendix 6.

Analysis of data

Geographic information was collected and added into a GIS digital database for analysis and development of maps using Arc View 3.2© software. Geographic information was collected, added to and analysed in the Geographic Information Systems (GIS) database throughout 2004 and 2005.

GIS is a database that is used to handle geographic information. It uses geo-references as a primary way of storing and accessing information. GIS can be used in cartography and allows for the integration of data captured from different scales and different sources by placing them in a common spatial framework (Jones, 1997). By performing various operations in Arc View, data stored in tables can be modified and manipulated in order to obtain useful spatial information, usually in the form of maps.

The Muzvezve ICA boundary was determined by following the outlines provided on the 1:50:000 maps previously mentioned and delineating the boundary on the hard copies of the 1:250 000 maps of KweKwe SE-35-12 and Chegutu SE-36-9. Once this cadastral boundary for the Muzvezve ICA was delineated, the copy was then given to the Forestry Commission to digitise the cadastral boundaries of the ICA.

The map cover of the ICA was obtained from the Forestry Commission in March 2005 and then overlaid onto the 1: 250 000 digital maps of Kwekwe and Chegutu, which were geo referenced for use with Arc View 3.2. This was done in order to verify the accuracy of the digitised data, in the process; several errors were observed and corrected. The errors included cadastral boundaries that had incorrect place names, some that had not been labelled and three farm boundaries that had been inaccurately digitised. The cadastral boundaries of the three farms were corrected by using the GIS functions for appending and splitting polygons. The correct farm boundaries and place names were obtained from the cadastral boundaries of the ICA on the 1:250 000 maps of Kwekwe and Chegutu, which had been imported into Arc View.

By using the clipping function, the following map covers/shape files were created from the land tenure, Natural Farming Region and communication covers of Zimbabwe:

- Muzvezve land tenure (Figure 8.1);
- Muzvezve Natural Farming Regions (Figure 3.4);
- Muzvezve rail (Figure 3.5);
- Muzvezve roads (Figure, 3.5).

The same procedure was used to make similar shape files for Kadoma District (see Figures 3.1 and 3.2)

Since the attribute table of the ICA, obtained from the Forestry Commission, only had two sets of fields, i.e. the polygon number and place names, additional data were collected and added to the dataset. This data included the land tenure pattern before and after FTLRP. The data pertaining to land tenure were acquired by creating a list of all the farms in the ICA from the outlined boundaries of the 1:250 000 maps of

Kwekwe and Chegutu, and computed in an Excel spreadsheet. The head of AREX verified the accuracy of the list in November 2004 and classified the farms according to their tenure before and after the FTLRP as of November 2004. The following categories (shown in Figure 8.2) were obtained:

- Commercial farms owned by whites;
- Commercial farms owned by blacks;
- Commercial farms owned by churches;
- Commercial farms used for research;
- Old Resettlement;
- A1 Villagised;
- A1 Self Contained;
- A2 peri urban, small, medium and large-scale;
- Municipal;
- State land;
- Mine.

Two other government officials to whom the research team was referred to by the Assistant DA of Kadoma were consulted for further verification of the land tenure classification of the farms. The first was an official from the DA's department and the second was the District's Lands Officer. The former official was the longest serving member at the DA's office in Kadoma at the time that this research was done. He was amongst the first people to be involved in the allocation of land under the FTLRP and was a member of the DLIC in 2004. He kept a schedule of farms acquired and resettled under the FTLRP in the district and had knowledge of the tenure of the farms prior to the FTLRP. The District Lands Officer was consulted for further comparison. This was done because lists provided by the head of AREX and the official from the DA's office had some inconsistencies in the tenure arrangement of certain farms after the FTLRP. Consultation of these officials took place in November and early December 2004.

As previously mentioned, this information was tabulated into a Microsoft Excel spreadsheet and then converted into a dBASE IV file in Excel. This file was then

imported into Arc View 3.2 and a spatial join to the attribute table of the cadastral boundaries of the ICA performed.

Maps representing areas where respondents had resided prior to resettlement were created for each study area. Data with names of places in which respondents had previously resided was obtained from the questionnaires. In order to represent these data as a spatially referenced point features in Arc View, x and y coordinates representing longitude and latitude units were acquired for each respondent's location from the National Geospatial-Intelligence Agency (National Geospatial-Intelligence Services, 2004) and added to the Microsoft Excel worksheets. A separate worksheet containing the above-mentioned information was created for each study area. These worksheets were converted to dBASE IV file format in Excel and imported as an event theme, based on which Arc View created spatially referenced point features. These features were converted into shape files and then overlaid on the map cover of Zimbabwe's land tenure map. The area covered by the point features (representing the number of respondents) on the land tenure map was selected separately for each study site and converted into a shape file that showed the land tenure area from which the respondents came. Figure 6.1 provides an example of this.

Maps showing the subdivisions of the farms for each study area (Figures 4.1, 4.2, 4.3) were obtained from AREX between June 2004 and March 2005. These were scanned, imported and geo-referenced in Arc View and aligned to the landsat cover of the appropriate farm. After alignment, the farm boundary and subdivided plots for each scanned map were digitised onscreen and converted to shape files representing each study area. Spatial meaning was added to the shape files by encoding plot numbers and the status of the subdivided plot in terms of whether it was surveyed or not as shown in Figures 4.1, 4.2 and 4.3. Furthermore these shape files were overlaid onto the landsat covers to illustrate and allow for analysis of changes in land cover on surveyed plots and the farm as a whole in 2002. This analysis is found in Chapter Eight.

In order to provide detailed information on changes in the natural environment at Lanteglos, CC Molina and Pamene shape files of landsat covers for the three areas mentioned above were obtained from the Forestry Commission. These shape files

corresponded to the years, 1972/76, 1992 and 2002. This gave three sets of shape files, a Lanteglos set, a CC Molina set and a Pamene set. Each set containing three landsat map images with each image providing land cover data for a particular year (1972/76, 1992, 2002).

- The three sets of shape files of landsat covers for each study area were imported into Arc View 3.2. For each set, two unions were created – a union of 1972/76 and 1992; and a union of 1992 and 2002.
- From the above unions, changes in land cover at every point in the study area were computed, thereby giving a listing of transitions between different types of land cover in the periods 1972/76 to 1992 and 1992 to 2002 in the entire study area. Figure 8.3 provides an example of these transitions.
- This listing was then analysed using Microsoft Excel. Tables were then generated to give the following information:
 1. Changes in type of land cover as a function of time.
 2. Percentage contributions of different types of land cover at different times.
 3. Percentage increment of different types of land cover as a function of time.
 4. Ranking of the above changes.

The slight discrepancy between the areas quoted for Lanteglos, CC Molina and Pamene arises from discrepancies in the figures for area as quoted by AREX and as calculated from data supplied by the Forestry Commission.

4.6 Constraints experienced in the research

The research process was constrained by the highly political environment surrounding the FTLRP. The household questionnaire and the two interview schedules had to be given to the Permanent Secretary in the Ministry of Lands, Land Reform and Resettlement for perusal before they were administered. This restricted the depth of questions that could be asked to households and government officials. It needs to be noted that an effort had been made in the construction of these research instruments

not to ask questions that could be perceived as political or subversive of the government.

Pazvakavambwa (2004) requested that two questions marked with asterisks in the interview guide for AREX officials be removed in Appendix 4. These questions pertained to the land use and output of A1 and A2 farmers and the effects of their perceived lack of security of tenure. Information pertaining to agricultural output and tenure since the FTLRP has become politically sensitive. This is because the FTLRP has been criticised by the international community, popular media, the UNDP, for the decline in agricultural output and the subsequent grain and cereal shortages. On the other hand, the government had maintained, in 2004, that agricultural output had increased due to resettlement under the FTLRP.

Furthermore, two questions in the interview guide administered to key informants and government officials, had to be taken out. One question pertained to the role of NGOs in providing the government with technical assistance and support for resettlement, as was successfully done in Columbia and Brazil (Deininger, 1999). This question was considered politically sensitive, taking into account that at the time of the research there were widespread debates over the role of NGOs in Zimbabwe. The government, through parliament had drafted a law aimed at tightening and barring foreign funding for NGOs that advocated political and human rights programmes (Chinaka, 2005). Moreover, state security agents and the government felt that revolutions in East European countries like the Ukraine had been orchestrated by foreign funded NGOs and thus in a politically tense and poor macroeconomic environment, like Zimbabwe, these activities had to be curbed. The other question enquired about the debates over the pros and cons of nationalisation of acquired land for resettlement purposes. Again this was considered political, particularly since the policy was a definite shift away from the neo-liberal thinking that advocated land markets, as discussed in Chapter Two, and the government had faced intense condemnation from local, regional and international opponents for its intention to nationalise all land in Zimbabwe in 2004.

Pazvakavambwa (2004) commented that the questions on tenure in the last section of the household questionnaire were ‘unnecessary’, particularly the question that would

solicit from households information as to whether they had received enough land under the FTLRP. Pazvakavambwa felt that the 'land had been given back to the people and that households resettled under the A1 models were to be given permits whilst those under the A2, 99 year leases in January 2005' therefore the questions on tenure since FTLRP were irrelevant to the research. However, he did not ask that this section be omitted from the questionnaire, as with the questions, in the interview schedules. His statement involved a contradiction since why should the question of nationalisation of land need to be omitted from the interview guide in Appendix 3 if it was the government's intention to provide some form of title to households?

The research process involved the collection of both numerical and descriptive data from June 2004 to July 2005. July 2005 was used as the ending time frame for analysing and exploring events in Zimbabwe that have impacted on the FTLRP and its beneficiaries. This has its limitations as the process is ongoing and, at the time the research was written, new events were unfolding such as the nationalisation of all acquired land by the government of Zimbabwe in their August 2005 constitutional amendment.

Difficulties were encountered in verifying the data pertaining to levels of production, particularly for beneficiaries at CC Molina and Lanteglos, prior to the 2004/2005 season. Data for the level of production at Pamene was verified from records kept by AREX in Kadoma but no records had been made for production levels of households under the A1 settlement scheme. Furthermore, officials from the GMB in Kadoma, who were thought to have such records, said they had received a directive from central government not to release information on the quantity of maize delivered by beneficiaries at the depot for national security reasons. At the time of the research in 2004, there had been contention as to whether the government of Zimbabwe had produced enough food to feed the populace since the FTLRP, with government asserting that it had. Therefore politics contributed to the failure to access information, so the productivity figures for CC Molina and Lanteglos are based solely on what households reported, as there was no corroborating evidence prior to the 2004/2005 season.

Therefore, in order to have tangible data for the 2004/2005 harvest, two surveys were undertaken in March/April and June/July 2005. It had been envisioned that all households would be revisited and data of productivity captured in March/April 2005. Unfortunately the political climate caused by campaigns for the parliamentary elections of March 2005 made the study areas inaccessible until after the elections. This limited the time available to visit all 72 households in the study areas, therefore a sample of five households from CC Molina, seven from Lanteglos and 10 from Pamene were obtained.

In order to increase the sample size, given the fact that some households who had grown cotton had not harvested in March/April 2005, it became necessary to conduct a third field visit to the study areas. The poor macro-economic environment further constrained access to the study areas in June/July 2005 and therefore the number of people who could be interviewed. Firstly there was an acute shortage of petrol in Kadoma as there was elsewhere in Zimbabwe. This shortage grounded most private and public transport. Petrol on the black market was exorbitant and furthermore reports of it being mixed with paraffin made the research assistant whose transport was being used reluctant to buy this commodity, thereby limiting the quantity of people who could be re-interviewed. Secondly, the nationwide evictions under 'Operation Murambatsvina' (Restore Order) had affected settlers at Pamene and CC Molina whose houses were built close to the main roads as these were demolished. This meant that people were less approachable, hostile, more suspicious and less concerned about the research process itself than before. After having re-interviewed a total of four households from Pamene and Lanteglos, it was decided not to pursue the research further for security reasons.

Financial constraints placed a limit on the resources that could be used for the research. Initially Spot imagery with higher resolution was needed for the time series analysis. However, these data were very costly and therefore landsat imagery, with a lower resolution, which could be easily purchased in Zimbabwe from the Forestry Commission, was obtained to meet the above-mentioned objective. Constraints were noted in that the most recent landsat images available to government and some private organisations in Zimbabwe were for 2002 and this limited the scope for making

generalisations pertaining to changes in the natural environment since FTLRP on the settled farms in the thesis.

4.7 Conclusion

The methodology used in this research can be seen as an amalgamation of various methods. This approach provided a means of achieving the objectives set out previously, and, whilst being challenging, provided for a thorough analysis of the situation in the study areas. The next chapter provides a description, obtained through interviews, of the land use and farming practices of the former commercial farmers.

CHAPTER FIVE: INTERVIEWS WITH FORMER COMMERCIAL FARMERS

5.1 Introduction

This section presents a description of the natural environment and the land use practices at the former commercial farms of CC Molina, Lanteglos and Pamene. The purpose of this chapter is to provide information about livelihoods, farming practices, productivity and use of natural resources before the FTLRP, so as to allow comparisons to be made as they apply to the situation after FTLRP in Kadoma District.

5.2 History of land use practices at Lanteglos Farm

5.2.1 Introduction

This section gives a description of the history of land use practices at Lanteglos farm. It is divided into three periods; 1920-1945, 1945-1975, 1975-2000. These periods correspond to changes of ownership and land use practices at the farm. The section is based on a review of a land use plan written by the Department of Conservation and Extension (1957); transect walks at the farm and an interview with the former commercial farm owner Rob Edwards and his son Graham.

5.2.2 General description of farm

Lanteglos borders Cam and Motor Mine and is found 13 kilometres from the city of Kadoma. It falls into the Natural Farming Region III and covers an area of 915.384 hectares (see Figures, 3.4 and 3.5).

According to the Department of Conservation and Extension (1957), the topography of the farm reveals a steep range of hills that covers nearly the entire southern half of the farm and then gives way to a large open vle. A small area of arable land in the south west of the farm consists predominantly of deep to semi-deep red clay soils derived from diorites and greenstones. The area around the homestead and compound has sandy soils, ranging from pure sand to sandy clay loam mostly derived from

granite. The farm is endowed with Mufuti and Musasa woodland on the high-lying ground, and Mopani woodland on the low-lying ground as well as a vast area of grassland.

5.2.3 1920 – 1944

Land use practices

Edwards (2005) and the Department of Conservation and Extension (1957) stated that G.C. Woodforde, a former mine manager of Cam and Motor Mine, acquired the farm in 1920. Mixed farming was practised, which included market gardening and cattle rearing. Dairy and pedigree Shorthorn cattle were reared and vegetables were primarily grown. Tobacco was also grown, but only for a few years.

Markets

According to Edwards (2005) and the Department of Conservation and Extension (1957) the main market for vegetable produce was Cam and Motor Mine. Vegetables were also supplied to other mines in the District such as Patchway, Pixton and Empress. Beef and dairy produce were supplied to Cam and Motor Mine and Kadoma town. Edwards commented that during the period of UDI when Zimbabwe was under sanctions, vegetable gardening was very profitable.

5.2.4 1945 – 1967

Land use practices

Woodforde's son-in-law, J. C Edwards, took over the running of the farm in 1945. The two main land uses were market gardening and dairying. Edwards had a herd of 50 Grade Friesland dairy cattle, of which 23 were cows capable of producing between 50 and 60 gallons of milk per day (Department of Conservation and Extension, 1957). This enterprise was stopped in the early 1970s when the quality of the milk produced became poor (Edwards, 2005).

5.2.5 1967 – 2001

Land use practices

Rob Edwards, who took over from his father, stopped market gardening after independence. It had become unprofitable because most mines had withdrawn their contracts due to the closure of the mine hostels and kitchens that resulted from new government policies (Edwards, 2005).

Like his predecessors, Rob Edwards continued to practise mixed farming at Lanteglos. He had a herd of 36 beef cattle and substituted market gardening with wheat and soya bean cropping. Wheat was grown under irrigation and soya bean as dry land cropping. Edwards commented that, in his opinion, the arable land at Lanteglos was too small an area for viable crop production. He therefore bought two farms, Tannach and Weston to increase his crop production.

Edwards (2005) stated that on average eight tonnes of wheat and 2.5 tonnes of soya beans per hectare were harvested. A mean of 200 – 230 tonnes of wheat were yielded per annum. He attributed his high yields to the use of root enhancers and liquid fertilisers and went on to emphasise that farming at Lanteglos would not be viable without the addition of fertilisers. The research findings showed that few new farmers at Lanteglos used fertilisers as intensely as Edwards did.

Infrastructure and mechanisation

Edwards inherited the farm with existing infrastructure and made improvements to it. The farm had two homesteads, a compound, dairy buildings, produce store and six tobacco barns (Department of Conservation and Extension, 1957). The entire farm was ring fenced with a few small internal paddock fences erected next to the main homestead. The farm had a well-graded access road and a number of feeder roads that were designed to facilitate the operation of a large-scale farm unit.

Farming operations were highly mechanised. Tractors and reapers were used for land preparation. Harvesting was done mostly through the use of a combine harvester. Edwards commented that through mechanisation he was able to reap 20 hectares of cereal per day and this allowed him to obtain 'premium grades of wheat and top yields'. He had a large shed next to his fields for fast and easy storage of his produce.

He owned a removable centre-pivot irrigation system used primarily to irrigate his wheat, particularly in the dry winter period. The research findings showed that beneficiaries of the FTLRP were reliant on rain-fed crop production and therefore did not grow crops during the dry winter season. There were four working bore holes on the farm prior to resettlement. Three were located on the south west side of the farm near the fields and one was located close to the homestead. There was one reservoir on the farm and two large water purifying tanks.

Markets

Edwards sold his produce to the GMB, Agricura and National Foods in Kadoma. He noted that he often retained seeds from his harvest and kept some produce for his workers' monthly rations.

Employment

Edwards said he had employed 15 permanent labourers and additional labour during peak periods at Lanteglos. These permanent workers were housed at the farm compound. He said that he had very little staff turnover during his tenure at the farm prior to its acquisition in 2000. This is shown by the fact that the average years resided at Lanteglos by six of the surveyed ex-farm workers was 16.2 years.

Conservation

According to Edwards almost three quarters of the farm had been classified by the Department of Extension and Conservation as Class IV land that required careful management if brought under crop production. Because of this, he had not cultivated this land opting to buy other farms with arable land instead, thus preventing deterioration of these soils and therefore conserving the environment. The FTLRP has resulted in most of this land being brought under crop production by households who were allocated plots on this land type. Edwards explained that sustainable production and conservation of soils at Lanteglos could only take place with the injection of large amounts of fertilisers and the use of irrigation. The survey results indicated that few of the new farmers had used fertilisers in their production.

Acquisition of farm

Edwards and several respondents in the survey, in particular the ex-farm workers, said Lanteglos was acquired for resettlement after it had initially been seized by ‘land invaders’. Edwards’ son, Graham (2005) who managed the farm together with his father, said that they were given two weeks in 2000 to vacate Lanteglos after being served with a Section 8 (Eviction) Order by the Acquiring Authority. This was in contravention of the 90 days stipulated by the amended Land Acquisition Act of 2000.

5.3 History of land use practices at CC Molina

5.3.1 Introduction

The description of land use practices at CC Molina is based on an interview with T. Lubbe, the former commercial farm owner; observations made from transect walks and the geological map of the farm (Surveyor-General, 1969).

Lubbe owned 13 farms in the Muzvezve Intensive Conservation Area. He stated that he, together with his brother, bought CC Molina in 1974, unlike Edwards and Read who had inherited Lanteglos and Pamene respectively. Hence, the discussion will cover a single period of ownership from 1974 – 2001.

5.3.2 General description of the farm

CC Molina is situated 25 kilometres from Kadoma and is found along the Sanyati road. It lies in close proximity to Sanyati Communal area, Muzvezve I and II resettlement areas (Figure 3.1), Patchway, and Golden Valley mines. It falls in the Natural Farming Region III, as does Lanteglos. It covers an area of 6965 hectares and therefore is more extensive than Lanteglos or Pamene farms. Lubbe (2005) stated that the farm largely comprised of semi-deep red clay soils and was endowed with Mopani woodland. The farm has several fault lines that run through it, indicating the presence of ground water supplies.

Land use practices

The land use practices at CC Molina involved ranching and dry land cropping, with the latter being more important.

Lubbe cited that he had a herd of 3000 beef cattle at CC Molina. He reared 1750 on 40 hectares of land. The total hectarage used for rearing livestock was approximately 80 hectares. Lubbe said he bought weaners in May at cattle sales, mainly in Harare, and grazed them on the stover at the farm. When they weighed over 300 kilograms, he put them in the cattle pens and fed them for 90 days.

Lubbe specified that he had always achieved a 98.8% rating on the Cold Storage Commission's point rating system, which looked at volume and consistency of cattle bred by farmers countrywide. This consistent rating for over 20 years made him one of the top beef producers in the country prior to resettlement.

He grew maize, sorghum and cotton on 160 hectares in the southwest of the farm adjacent to the farm manager's homestead. All cropping was under dry land conditions. Lubbe stated that he harvested an average of six tonnes of maize per hectare in seasons with adequate rainfall. He was unable to give statistics on cotton and sorghum as his records were destroyed during the farm seizures of 2000. Lubbe commented that he applied large amount of fertilisers to his crops. This contributed to increased yields on all crops grown at CC Molina and corresponds to the comments made by Read and Edwards.

Lubbe emphasised that mixed farming was the only sustainable kind of farming at CC Molina, due to the marginal rainfall and frequent occurrences of mid-season droughts in the district. He recounted times when he had planted his crop twice, failed to reap anything and had had to resort to cattle sales to counter losses. Evidence from the survey showed that dry land cropping was the main land use practised by the new farmers as they did not have sufficient livestock for the purposes of mixed farming (Table 6.16).

Although most parts of CC Molina had 'fertile' red clay soils, Lubbe stated that these soils could be a limitation in that they could be very difficult to work as they dried up quickly. In order to manage them, he used a reaper or a chisel plough to dig deep and break the soils to allow water to infiltrate. Another limitation to cropping in the area was the encroachment of the Chinese Lantern weed, particularly when soils were not

prepared or cultivated properly. This weed has the effect of depressing germination and growth of crops, particularly maize and cotton, thus reducing yields.

Infrastructure

Prior to resettlement, there were three dams, several reservoirs and six working boreholes (of which one was by the homestead), dip tanks and adequately maintained gravel feeder roads.

Operations at the farm were highly mechanised like those at Lanteglos and Pamene. Planters, 350-horse power tractors, a reaper and a combine harvester were used in the farming operations. Lubbe stated that mechanisation enabled him to prepare 150 hectares in a day, as he could harrow/disk, fertilise, spray, and plant.

Employment

Because Lubbe owned 13 farms, he did not have a specific group of workers residing and working at CC Molina. He operated from Milverton farm where he had 150 permanent workers whom he dispatched to his other farms. Cotton was the only crop reaped manually and seasonal labour was employed for this purpose.

Acquisition of farm

According to Lubbe and a number of respondents of household surveys, government acquired CC Molina after 'self-proclaimed' war veterans seized it in 2000. Lubbe stated that the Acquiring Authority served neither Section 5 preliminary notices for acquisition of the farm nor Section 8 Orders for CC Molina and his other 12 farms to him. He later resolved to give CC Molina and the farm adjacent to it, Berkley Chase, to government through the DLIC without contesting in the courts.

5.4 History of and land use practices at Pamene Farm

5.4.1 Introduction

This description of the history of practices at Pamene is based on an interview with Alfred J. Read, the former owner of Pamene; letters of objection written to the Ministry of Agriculture, Land and Resettlement and observations from transect walks

at the farm. It is divided into two periods, 1946-1965 and 1965-2002, representing periods of different ownership and changes in land use patterns. A.J Read and his sons owned Pamene farm, which has an area of 915.99 hectares and two other farms, Spes Bona and Victory (RF8), adjacent to Pamene.

5.4.2 General description of farm

Pamene is located about 10 kilometres from Kadoma along the Harare/Bulawayo highway. It is less than one kilometre from the outer boundaries of Kadoma Municipal area and falls in the margins of the Natural Farming Region IIb.

The topography of the farm reveals a small area of arable land, which is 80 hectares in size (Read, 2005) consisting of red clay soils as shown in Plate 5.1. The remainder of the farm is largely Mopani veld and soils (Plate 5.2).



Plate 5.1 Aerial view of uncultivated arable area at Pamene farm before FTLRP



Plate 5.2 Aerial photograph of the Mopani veld and soils at Pamene before FTLRP

The White Water River and its tributaries run through the farm. This river serves as a boundary between Pamene and White Water/ Protea farm. A weir was constructed on it for irrigation purposes and several dams are sited on the farm.

5.4.3 1946 – 1965

Land use practices

According to Read (2005), his father acquired the farm in 1946 as virgin land with no infrastructure. Land was cleared for cultivation on which different crops such as Virginia tobacco, Turkish tobacco, maize and cotton were grown, albeit with little success. The practice of dry land cropping resulted in crops being vulnerable to the vagaries of weather. Considerable losses were incurred in the 1950s and 1960s due to drought conditions in Kadoma District.

5.4.4 1965 – 2002

Read took over the running of the farm in 1965 when his father died (Read, 2005) whilst working part-time at the Cotton Research Centre in Kadoma. He then later

turned to farming full-time. By 2001, he was running the farm jointly with his two sons and all three of their families derived their livelihoods from farming Pamene.

Land use practices

Farming at Pamene prior to resettlement was intensive and highly mechanised. Land use practices included irrigated cropping, horticulture, game farming, cattle and ostrich rearing. Plates 5.3 and 5.4 show these farming operations.

Read, together with his neighbour, De Lange, established an irrigation scheme on their farms in 1971, after the construction of Claw Dam. This was aimed at countering the effects of losses in crop production incurred in the 1950s and 1960s. Together they drew water from Claw Dam with two 125-horse power electric motors through a 12 inch underground asbestos pipeline. The pipeline ran for nine kilometres onto Read's farm.

Read (2005) said that the cost of drawing and pumping water from Claw Dam was considerable and thus necessitated the growing of high value food crops and crops that could be exported. Therefore, crops such as maize, wheat, soya beans, sugar beans, potatoes, cabbage, Rhodes grass and paprika were grown. Paprika was sold to the European market, whilst the rest were mostly sold to the local market.

A herd of 500 beef cattle was reared on the farm, together with ostrich. The remainder of the farm was used for game farming. Species such as waterbuck, tsetsebe, kudu, eland, giraffe, wildebeest and impala were found on the farm. This enterprise generated foreign currency through hunting concessions given to foreigners, mostly from America and Europe.



Plate 5.3 Beef cattle grazing inside a paddock before FTLRP



Plate 5.4 Paprika grown at the farm for export to the European Union (maize is in the background) before the FTLRP

Farm infrastructure

There were three homesteads located adjacent to the arable fields, which Read and his sons occupied prior to resettlement. There was a farm compound on the westerly side of the farm, which housed 35 permanent labourers. Several sheds for storage and processing of produce were close to the homestead and compound.

There were 12 working bore holes on the property with an intensive irrigation system that included centre pivots for overhead irrigation (Plate 5.5), ground and underground irrigation pipes and two horse-power electric motors prior to resettlement. There were several sheds at the farm for storage of produce. The farm had well-developed gravel access and feeder roads.



Plate 5.5 Centre pivot irrigation system at Pamene farm before FTLRP

Conservation methods

According to Read (2005), a variety of conservation methods were introduced on the farm in order to protect the environment and natural resources. Animal hoof action, a method of high density and short duration grazing with controlled resting periods was practised. On the Mopani veld, he used the strip grazing method. Read said he rotated his crops using the arable land available on Spes Bona and Victory (RF8) farms.

Employment

Read said he employed 35 permanent workers who were housed on the farm with their families and a further 150 casual labourers.

Acquisition of farm

Pamene farm was not occupied during the farm seizures of 2000. A section 5 notice of acquisition was served to Read on the 13th of July 2001 (Read, 2005). Read (2005) opposed the notice of acquisition, resulting in its referral to the Administration Court. Although the Administration Court had not made a judgement on the case and a Section 8 Order had not been served to Read, the government, through AREX, had allocated plots to settlers on the 21st of December 2001 (Read, 2005). A settler whose plot encompassed their homesteads evicted Read, his sons and their families from their property. This was done two weeks after they had planted 60 hectares of soya bean. A respondent who had been given a plot where this crop had been planted had indicated that this was his crop, which he had grown in the 2001/2002 season.

5.5 Conclusion

This chapter demonstrated that not all soils at these farms were fertile and that crop production could not be solely practised on whole farms, hence these farmers had bought other farms so as to increase their cultivable areas. It also indicated that farming was highly mechanised, a considerable number of people were employed, agricultural produce was sold on both the local and export markets and various conservation methods were practised for sustainable land management. The following chapter will provide a description of the land use and farming practices of the beneficiaries and comparisons will be with those of the former farmers described in this chapter.

CHAPTER SIX: HOUSEHOLD SURVEYS

6.1 Introduction

This chapter provides a description of the land use practices and livelihoods of beneficiaries of the FTLRP at the three study areas, Lanteglos, CC Molina and Pamene before and after resettlement. It explores the challenges and obstacles faced by the households since resettlement. The eventual aim of this chapter is to appraise the long-term sustainability of farming and the land use practices of these beneficiaries.

6.2 Lanteglos: A1 villagised resettlement scheme

6.2.1 Introduction

A total of 22 households were interviewed in which 139 people lived, giving an average of six persons per household. Men headed the majority of the households, whilst women, of whom four were widows of war veterans, headed nine households. The demographic history indicated that young households were resettled, as is evidenced by the low mean age of the respondents and a high youth dependency.

Just over half the beneficiaries were rural, whilst eight were urban from Kadoma city. Figures 6.1a and 6.1b give an indication of the areas where households had resided prior to resettlement. Lanteglos, of the three study areas, was the only one to have some of the farm workers who had previously worked at the farm, resettled there. The mean duration of residence of the ex-farm workers and the other households at Lanteglos was 22.16 and 3.13 years respectively.

The homesteads of the beneficiaries were nucleated next to the previous commercial farmer's homestead, in an area formerly used as paddocks shown in Figure 6.2. Five of the ex-farm workers continued to reside in the former farm compound, whilst one resided next to the homestead. Transect walks and maps (Figure 4.1 and 6.2) revealed that the fields for cultivation on the southwest side of the farm were planned in blocks with the main access road subdividing one set from the other. However, the fields on

the north-west side of the farm were planned in a linear pattern with a feeder road passing through them. Each beneficiary, with the exception of the ex-farm workers, was allocated a six hectare field for cultivation. The six ex-farm workers were given two six hectare fields, one of which was subdivided amongst four households and the other between two. Their fields of 1.5 and three hectares respectively were smaller in comparison to those of the other beneficiaries.

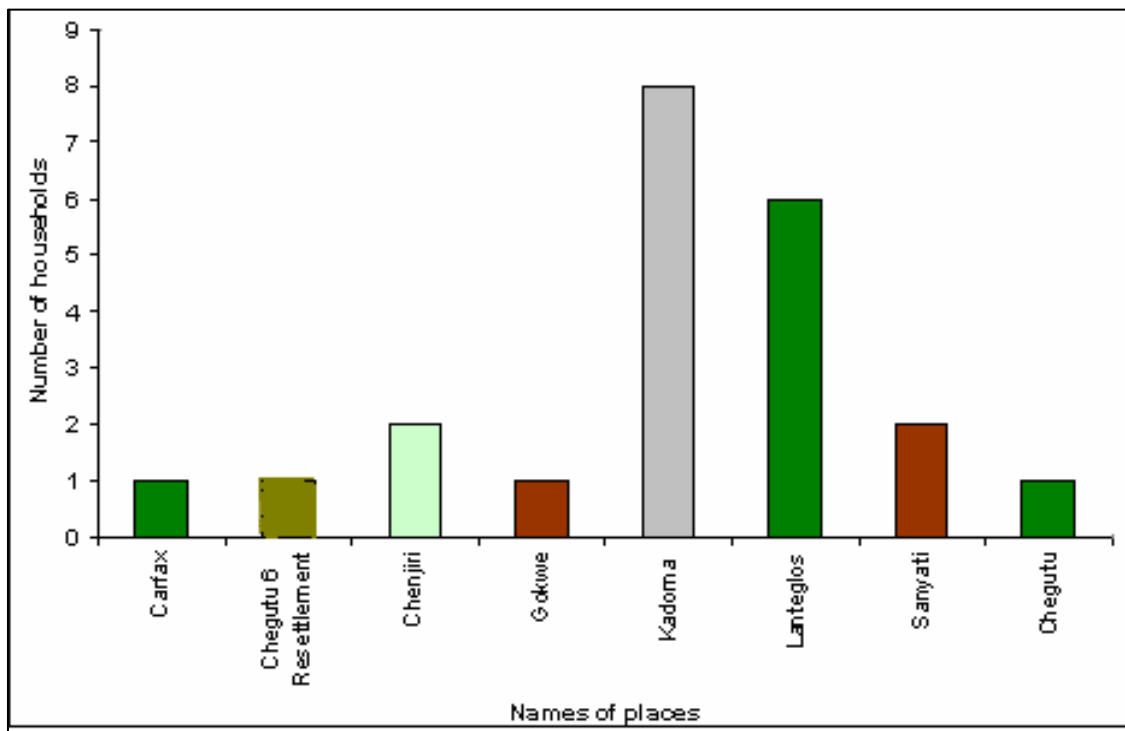


Figure 6.1a Places where resettled households at Lanteglos previously resided prior to resettlement

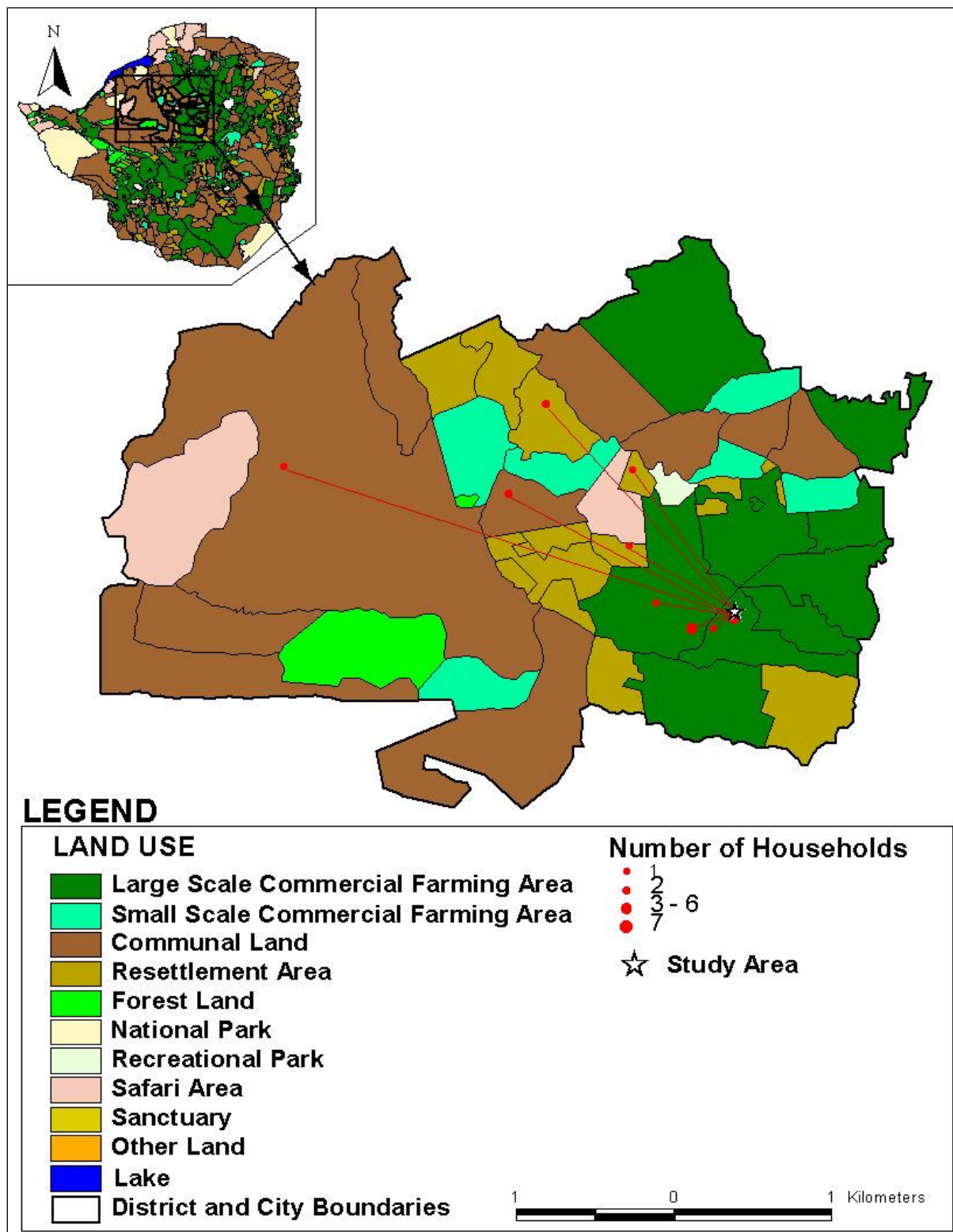


Figure 5.1b Map showing the places where households at Lanteglos previously resided prior to resettlement, according to the type of land tenure there

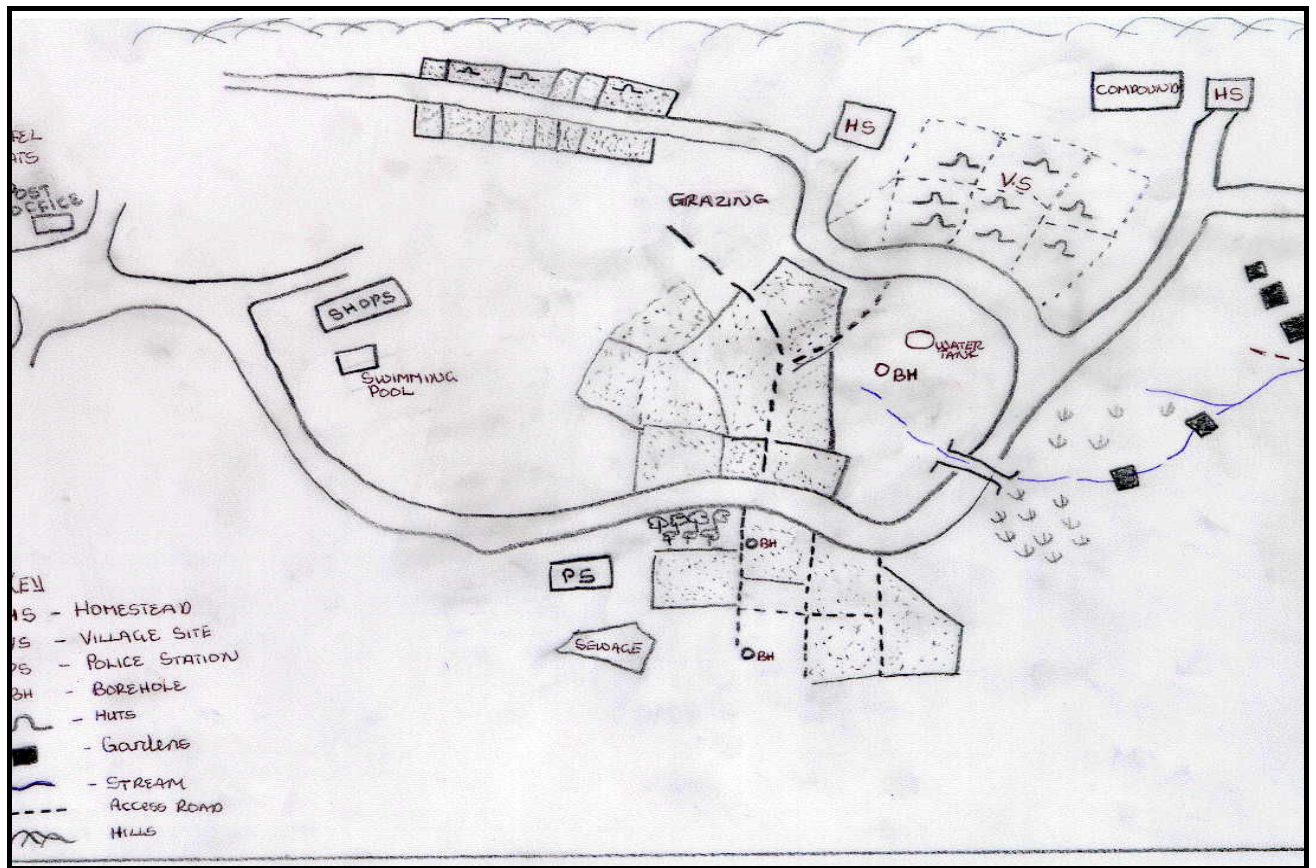


Figure 6.2 Sketch map of Lanteglos farm after resettlement

6.2.2 Livelihoods and land use practices prior to resettlement

This section presents a discussion of the livelihoods of households prior to resettlement, their sources of income, motivation for resettlement and lastly the land use practices of the 12 households who had been farming before resettlement.

6.2.2.1 Livelihoods

Table 6.1 indicates that just over half the resettled households had been in some form of employment, whilst six had been full-time subsistence farmers, three self-employed and two had worked part-time whilst farming.

Table 6.1 Occupation of heads of households at Lanteglos prior to resettlement

Occupation Before Resettlement	Number of households
Subsistence farmer	6
Ex-farm worker (field hand)	4
Ex-farm worker (domestic)	3
Bus driver & subsistence farmer	1
Bus driver	1
City Council worker & peri-urban farmer	1
City Council worker	1
Garage attendant	1
Sales representative	1
Businessman	1
Cross-border trader	1
War veteran	1
Number of households = 22	

The survey revealed that low income earning households and full-time subsistence farmers had relied mostly on diverse sources of income prior to resettlement as a livelihood strategy. Table 6.2 summarises these sources and the rating ascribed to them by the respondents. The totals for each source of income in Table 6.2 and later in 6.5 will not be equivalent to the total number of respondents surveyed. This is

because the respondents had to rank according to importance the source of income from which they derived their livelihood before and after resettlement. This will be the same for these particular tables for CC Molina and Pamene.

Table 6.2 Sources of household income according to importance prior to resettlement

Source of Income	Very Important	Important	Not Important
Crops sales	8	-	-
Full-time employment	5	3	5
Trading/business	5	3	1
Livestock sales	3	5	2
Vegetable sales	2	1	5
Remittances	1	3	-
Gold panning	1	-	2
Part-time employment	1	-	1
Pension	-	1	1

Number of Households = 22

Most households at Lanteglos had applied to the DLIC for resettlement, whilst two had initially ‘occupied’ several farms before they were resettled by the DLIC. Two households applied through the ZANU-PF District structures, which then forwarded their names to the DLIC for resettlement. The two households from Sanyati communal area had applied through their local councillors. The reasons for resettlement have been categorised into rural and urban households for comparative purposes.

Rural households

Respondents from Sanyati communal area gave poor soils and congestion as their motivation for applying for new land. One respondent from Chenjiri Native Purchase Area had applied for a bigger plot to farm on whilst, the other said she had applied in order that she could give the land to her children when they grew up, although she still held her property in the Purchase Area. Both these households had been involved in the land occupation movements. The household from Chegutu Six Resettlement had wanted an alternative piece of land to farm on. The respondent from Gokwe communal area was looking after the farm for her son who worked as a presidential

guard in Harare. This respondent said her son had applied for a place to retire and live.

The six ex-farm workers from Lanteglos had applied for resettlement because they did not have an alternative place to reside, since they were mostly migrant workers from Malawi. The former commercial farm worker from Chegutu applied for personal ownership of land, as was the case of the two respondents who had been leasing land at Carfax farm.

Urban households

Reasons cited by respondents from the urban area varied. Three respondents stated that resettlement was a form of capital accumulation and income diversification; whilst two said they had wanted a residential place where they did not have to pay exorbitant rent and rates. Two female respondents said their deceased spouses had been war veterans and this had entitled them to land under the FTLRP; one respondent said he had been given land as a reward for services rendered, as a body guard, to a war veteran during the land invasions of 2000 in the District.

6.2.2.2 Land use practices

For the purposes of providing a description of land use practises prior to resettlement, the four households headed by ex-farm workers were excluded, due to the fact that they had been farming for someone else. Thus, this section will entail a discussion of the land use practises of the seven households that had farmed on a subsistence level and of the peri-urban farmer.

Of these eight households, only two had formal training from AREX and had qualified as Master Farmers, whilst the rest had gained experience from assisting their parents in the communal areas. The average number of years of farming experience was 17 years.

Cultivation

Crop production and animal husbandry were the main land uses practiced by the households. All respondents had practiced dry land agriculture, of which maize and

cotton had been the key cash crops. Groundnuts, sugar beans, sorghum, round nuts, runner beans and sweet potato were grown on a small-scale and primarily for consumption.

In seasons of adequate rainfall, households had produced an average of four tonnes of maize and 8.87 bales of cotton, which was often enough for consumption and sale. However, during periods of low rainfall or drought, the amount produced had been significantly lower, with an average of 0.65 tonnes of maize and 3.5 bales of cotton. Just over half of the households had not produced enough food crops for consumption during this period.

The majority of the households were content with their arable land, except for the households from Sanyati and Chegutu Six Resettlement Area.

Animal Husbandry

Chickens, goats and cattle were the most commonly reared livestock. Other livestock kept are summarised in Table 6.3. Cattle were largely used as draft power and the donkey for transportation and the other stock for consumption or sale during periods of low income.

Table 6.3 The total number of livestock owned by households prior to resettlement

Livestock	Total
Chickens	273
Goats	149
Cattle	85
Pigeons	60
Turkey	6
Guinea Fowl	5
Donkeys	1
Ducks	1
Sheep	1

With the exception of the peri-urban farmer, all other households had access to grazing. With the exception of the two households from Sanyati, most had been content with the grazing land.

Gardening

All eight had grown vegetable varieties such as onions, tomatoes, leafy vegetables and cabbage during the rainy season. One household had grown these vegetables in both summer and winter seasons.

Equipment

Households had used cattle and a plough for tillage. One household had used an ox-drawn cultivator, whilst four, at times, had hired tractors and plough disks. All households used hoes for gardening and weeding. Most households had private ownership of their equipment, particularly the hoes, cattle and plough, however three households hired tractors and plough disks.

6.2.2.3 Markets and Tenure

Following seasons of adequate rainfall, households had sold maize to the GMB and cotton to Cottco, grains, beans, nuts and livestock products such as meat and milk had been sold to individuals in their local community or to vendors in the urban area in the case of the peri urban farmer. There were no complaints regarding the failure to secure markets; but a number of households had been dissatisfied with the low producer prices offered by GMB and Cottco.

The tenure held by the households varied as; two from Chakari and Kadoma said that they had leased land; two from Chenjiri African Purchase area had had freehold tenure; three from Sanyati and Gokwe had had communal ownership and one from Chegutu 6 Resettlement Area had had a permit of occupation.

6.2.2.4 Obstacles, Challenges and Conflict

All eight households stated that they had been vulnerable to drought since they had all relied on rain-fed agriculture. Lack of finances and stock theft were the other major obstacles cited by households. Table 6.4 summarises obstacles encountered by households prior to resettlement.

Table 6.4 Obstacles experienced by households prior to resettlement

Obstacle	All the time	Most of the time	Sometimes	Never
Lack of finances	3	3	2	-
Stock theft	3	1	2	2
Pests and wild animals	3	-	3	2
Lack technology/machinery	2	2	1	3
Poor soils	2	-	2	4
Drought	2	1	5	-
Distance from field to homestead	1	-	-	7
Lack of labour	-	1	2	5
Floods	-	-	-	8

Number of Households = 8

6.2.2.5 Conclusion

The evidence suggests that perhaps three of the eight households needed to be resettled on the grounds of the poor arable and grazing land, small subdivided landholdings and leasing of land, however they were not desperately landless and in need of resettlement. It is noteworthy that the respondent from Chegutu Six Resettlement Area had produced on 'poor soils' five tonnes and 15 bales of maize and cotton respectively, a figure almost equivalent to that after resettlement on better quality soils. Based on these facts one begins to question the real motive behind resettlement. Five of these eight households, after resettlement, still held their property in the communal area, resettlement area, in town and the purchase area: an indication that they again were not desperately landless.

6.2.3 Livelihoods and land use practices after resettlement

6.2.3.1 Introduction

Households continued to rely on diverse sources of income after resettlement, which have been summarised in Table 6.5. Not all households sold the crops they produced, although this was the most important source of income. In comparison to Table 6.2

the importance of wages from full-time and part-time employment, trading, vegetable and livestock sales and remittances had declined since resettlement. Even though three households said they had been panning for gold at the farm, informal conversations between one of the research assistants and the security officer of the village revealed that the majority of the men had at some stage embarked on and were still panning for gold at the farm. Some, like the security officer, had even panned on their arable land and this has implications for sustainable land management. Furthermore, Table 6.5 indicates that working for other people in the village had become an alternative source of income for some households

Table 6.5 Sources of household income according to importance after resettlement

Source of Income	Very Important	Important	Not Important
Crop Sales	7	8	1
Full-time Employment	4	3	2
Trading	2	3	1
Vegetable Sales	1	4	2
Livestock Sales	1	6	-
Gold Panning	1	-	2
Part-time Employment	1	-	-
Working in fields for other households	-	4	-
Remittances	-	-	1

Number of Households = 22

Many households said that their expenditure pattern had changed since resettlement as they spent their income on purchasing inputs and educating their children. There were 50 children between five and nineteen years, potentially of school going age, which could explain why most households cited education as an expenditure. Education is very significant and important to Zimbabweans and most parents encourage their children to attend school in the hope that this will improve their livelihood in order for them to obtain non-farm sources of income.

The majority of households who spoke positively of changes in their expenditure pattern referred to their ability to buy inputs, luxury goods and educate their children

since resettlement. All six ex-farm workers spoke negatively of the changes in their expenditure pattern. Since resettlement they found themselves spending their income on purchasing groceries such as mealie meal and educating their children, which had previously been provided and paid for, by the former commercial farmer. These workers felt they were significantly worse off since resettlement as four could no longer afford to educate their children and one complained that the income earned through farming was significantly less than the wage he had earned working for the former farmer. Therefore, some of these households worked as labourers in the village to augment their incomes.

The most noticeable changes in the expenditure pattern of these households that had resided in urban areas prior to resettlement were savings incurred by not having to pay rent, water, electricity tariffs and, for some, in buying mealie meal. All this enabled them to invest in farming and building infrastructure.

6.2.3.2 Land use practices

A total of 108 hectares of land for cultivation was allocated to the respondents. Of which 16 households had fields of six hectares, four of 1.5 hectares and two of three hectares each. A total of 30.5 hectares of cleared land was allocated to five respondents, whilst 77.5 hectares of virgin land was allocated to the other 17 respondents. Of this virgin land, only 48.04 hectares had been cleared by November 2004, of which 44.4 hectares was under cultivation. The total land area under cultivation in December 2004 was 70.63 hectares (65.4%), giving an average of 3.2 hectares per household under cultivation.

Cultivation

Maize and cotton were the main cash crops grown. A variety of small grains such as millet, (finger millet (rapoko) and sorghum), nuts (round nuts, groundnuts), beans (soya beans, sugar beans and runner beans), pumpkin, sweet potato, sweet sugarcane (ipwa) and sunflowers were grown. Table 6.6 gives an indication of the yields of maize and cotton harvested per household since resettlement. The yearly increase results from the expansion of the cropped area and the increased number of people cultivating. Furthermore, the 2003/2004 season had better rainfall and thus more was

produced, compared to the previous seasons and the 2004/2005 season, when production had been affected by drought conditions.

Table 6.6 The quantity of maize and cotton harvested by households from 2000 – 2004

Farming Season	Number of households	Maize (tonnes per household)	Cotton (bales per household)
2000 – 2001	9	1.91	2.5
2001 – 2002	16	1.94	2.13
2002 – 2003	18	2.33	3.06
2003 – 2004	20	3.79	5.2
2004 – 2005	22	**2.07	***6.25

**** Mean of 10 households**

***** Mean of 4 households**

Just over a third of the sampled population were revisited in March/April and June/July 2005 to ascertain the amount of maize or cotton harvested for the 2004/2005 season. In the 2004/2005 season, the 10 households that were revisited had cultivated 40.7 hectares. Their maize and cotton output was 0.5 tonnes and 0.6 bales per hectare respectively. The relatively low yields of maize, in the 2004/2005 season indicated in Table 6.6 were due to crop failures because of the poor rainfall distribution in February and March 2005 (Figure 3.4), which prevented maize from tassling. Plates 6.1a and 6.1b illustrate the stunted growth of the maize of two households, which is a reflection of what most households had experienced. The head of AREX blamed the poor yields on the inability and failure of these farmers to prepare their land and plant on time, a requisite for rain-fed agriculture. As a result, these farmers had missed the first rains in October and the rains in January, which would have helped their maize crop to tassle. This may hold true because one of the ex-farm worker (with the 1.5 hectare field) who had harvested the highest output of four tonnes of maize was said by the sampled villagers to have planted in October 2004, the month in which the first rainfall of the season was experienced. Most households stated that failure to acquire equipment such as tractors from the government through the District Development Fund (DDF), and shortages of inputs had contributed to the delay in their land preparation. However, two households cited cultural reasons for their delay, as they had been awaiting a witch doctor to cleanse

the area of the spirit of an ex-farm worker who had committed suicide in the surrounding hills.



Plate 6.1a Crop failure of maize crop in one of the fields of a beneficiary in April 2005



Plate 6.1b A comparatively worse of yield of maize on one of the resettled farmers' plots

The primary form of tillage was cattle and plough. Fourteen households hired equipment for tillage; of these, four hired tractors and plough at an average cost of Z\$275 000 per hectare, excluding fuel, ten hired cattle and plough at Z\$180 000.

Cattle and plough were hired from people within the village and the tractor and plough from one household in the village; the DDF, were said to be cheaper, but often provided this resource late and from a black commercial farmer in the Eiffel Flats area. Most households did not hire labour to cultivate and weed, citing that it was expensive. Gardening and weeding were mainly done using hoes, of which all households had ownership.

Generally, most households said they were content with the quality of arable land with three rating it as excellent, four as satisfactory and 15 as good. Three of the ex-farm workers sharing plot 14 cited that although they were satisfied with the soils, they recognised that during periods of continuous rainfall these soils were prone to water logging owing to poor drainage of clay soils. The ex-farm worker and the household at plots 25 and 20 respectively, cited that although they were given virgin land, the soil quality was not good for crop production unless large amounts of fertiliser were added in order to prevent the depletion of its natural structure. They concurred with Edwards' (2005) assertion that soils at Lanteglos needed an immense injection of fertiliser for the procurement of high yields, as well as nutrient replacement. Nevertheless, these farmers, amongst others were not applying fertilisers because they said it was very expensive to purchase.

Most farmers were allocated plots in soils that fell in zones III and IV, whose soil structure required careful management and the injection of fertilisers for longer-term sustainability of the cropped area. Failure to do this would lead to the depletion of the soil quality and structure and, subsequently reduced productivity. Clearly failure by most farmers to apply fertilisers and continuous farming on the same piece of land annually is likely to lead to unsustainable crop production.

Animal Husbandry

Livestock rearing was the second most important land use practice. Seventeen households reared livestock, which included mostly cattle, goats and chickens. These were reared for subsistence purposes, primarily for draught power and consumption, although there were cases in which households sold livestock to supplement their household income. Since most resettled villagers (with the exception of the ex-farm workers) were from the Mashona tribe, cattle and goats play an important role in their

social and cultural lives as they were also kept for purposes of marriage and ritual ceremonies.

Table 6.7 summarises the type of livestock kept and the total quantity kept by the sampled households. Chickens were reared by all households as they were easy to rear and transport from previous areas of residence. A comparison of Table 6.7 and Table 6.3 indicates that fewer livestock were reared and the total quantity of cattle and goats was less after resettlement. Two reasons given for these patterns were firstly, that rural households had left most of their stock where they had previously resided, due to the uncertainty of their tenure at Lanteglos, and secondly, households that had resided in urban areas had not reared livestock such as cattle or goats but only chickens.

Table 6.7 The number of households rearing livestock and the total quantity reared

Livestock	Number of Households	Total Quantity
Chickens	17	325
Cattle	8	67
Goats	7	62
Pigeons	1	40
Sheep	1	1

Most households, including those that did not rear goats, cattle and sheep, cited that they were content with the quality of the grazing land at Lanteglos. According to the Department of Conservation and Extension (1957), the grazing commons at Lanteglos required careful management with rotational grazing in order to restore plant root reserves of the perennial grasses. There was no indication that the villagers were practising crop rotation.

Gardening

Half of the households grew vegetables and cited that this land use was not an important source of income for their livelihoods. Vegetables were primarily grown for consumption and these were similar to those grown prior to resettlement. It was noticed on transect walks that most vegetable gardens were located approximately two metres from the stream and some at the homesteads. Plate 6.2 below shows the

garden of one household, which was about one metre away from the intermittent stream.



Plate 6.2 A household's vegetable garden approximately one metre from the stream

6.2.3.3 Natural resources

Households used their natural resources to construct houses and stock pens; to source firewood and water and for food consumption.

Lanteglos was endowed with a variety of wild fruits such as matamba (African Orange), matowe, shuma, tsvansva, nhunguru, mauyu, gangacha, matufu, tsambati, tsubvu, howa (wild mushrooms) and hacha. Most households collected these fruits frequently throughout the year when in season. Five households hunted wild pigs and dassies. According to some heads of households and the security officer, a week prior to the survey being conducted, women in the village had been beaten up by the police for slaughtering a waterbuck that had roamed into the village. As a result, most households were reluctant to admit that they hunted wild animals for fear of reprisals from the police. According to the households, with the exception of wild pigs, dassies and rodents, a number of animals, such as all forms of antelopes, were not permitted to be hunted without a permit.

There was an average of three pole and dagha huts, a granary (duri) and a kraal on most homesteads. Mopani and Mutondo trees were used as poles for these dwellings because they are resistant to termites; grass was used for thatching the roofs and dagha from anthills to plaster the walls. Three households constructed one of their houses in a rectangular shape and had used cement, bricks, which were made from clay obtained from their fields, door frames, window panes and glass. The houses of the ex-farm workers in the compound differed significantly from those of the villagers as they had been constructed with bricks and/ or corrugated iron sheets and asbestos roofing prior to resettlement by the former farmer.

All households relied on firewood as their primary source of energy. De-husked maize cobs were used as alternative sources of energy, primarily in the harvesting season. One household had a solar panel for its television and radio sets, again bringing into question how desperately poor and in need of resettlement this household has been. All households stated that they required electricity as an alternative source of energy, citing that it would help to conserve the natural resources on the farm. Although government rhetoric has promised rural electrification in the resettlement areas, the provision of this source of energy might prove difficult, due to the high cost of installing all electricity cables and the transformer on the farm as these had been removed by the previous commercial farmer, who stated that they had belonged to him.

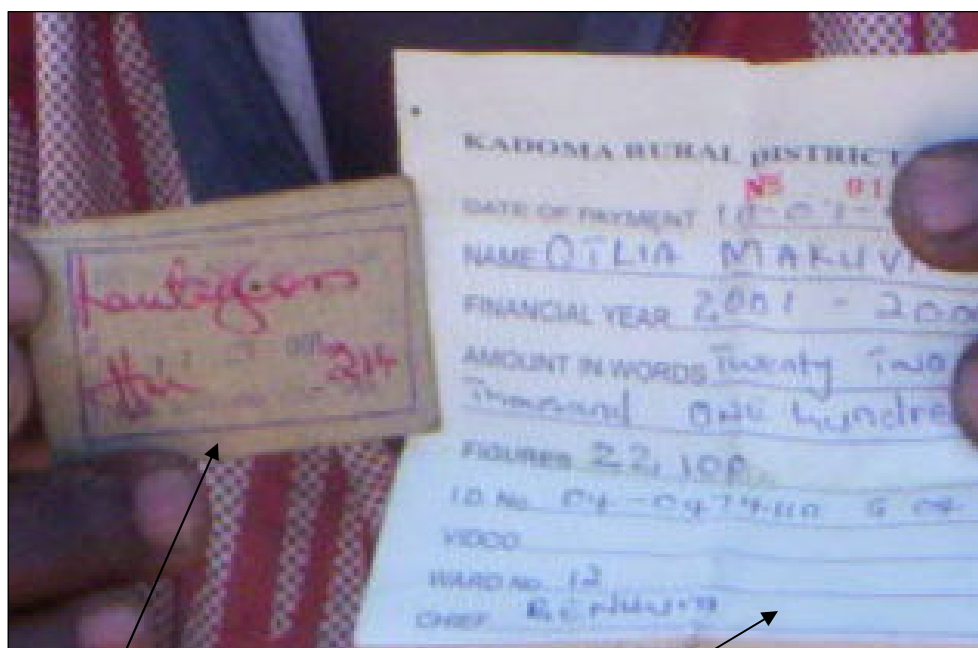
The primary source of water for domestic purposes was from one borehole on the farm, which was an average of about 750 metres from the homesteads (Figure 6.2) and no payment was required for extraction. Although there had been four boreholes in use prior to resettlement, these were no longer working as the villagers cited that the previous commercial farmer's workers had removed the bush pumps and filled the boreholes with rocks. Half of the households rated the quality of the water for the purposes of cleaning, washing themselves and their laundry as being unsatisfactory. Most said the water was hard and made it difficult for them to wash their laundry without the use of washing powder (which was very expensive compared to the cost of buying a bar of washing soap). Water for livestock was sourced from a stream that ran past the farm (Figure 6.2), the borehole and from the sewage works near the farm. On average 1.5 kilometres was travelled to sources for water for the livestock.

6.2.3.4 Markets

Most households sold their cash crops after a season of good rainfall to the GMB and Cottco in Kadoma. Smaller grains, beans, nuts and vegetables were sold to the community at Eiffel Flats or bartered for labour. Again livestock was sold amongst the villagers and to people within the surrounding area, particularly from Eiffel Flats. Householders said that the markets were readily accessible, but the only hindrance was the capital to hire transport to take their goods to these markets.

6.2.3.5 Tenure

Households held a variety of papers to show ownership of their plots. Cards (jeke) shown in Plate 6.3, were held by 18 households, three had receipts of payment to the Rural District Council and one had a letter of confirmation from the DA citing that they had been allocated a farm at Lanteglos. There were varied responses to the question of tenure security as 14 households said they felt insecure with their form of tenure, six felt more secure and two felt that it was the same as what they had held prior to resettlement (one household was from the communal area and the other was that of an ex-farm worker).



JEKE (CARD)

**RECEIPT RURAL DISTRICT
COUNCIL**

Plate 6.3 An example of papers held by households as their form of tenure

6.2.3.6 Obstacles, challenges and conflict

According to the survey, most households cited that their primary obstacles were damage to crops by wild animals, such as wild pigs, baboons, monkeys and birds (hanga), lack of technology and equipment and lack of capital. Other obstacles cited are summarised in Table 6.8.

Five households said they experienced conflict over encroachment on their fields because certain households had shifted tree branches or cut down the trees used to mark boundaries by AREX. Most households cited that encroachment had resulted in a substantial reduction of their allocated land and had referred the matter to the village committee of seven, and later to the DLIC and AREX to resolve and, as of December 2004, the matter had not been resolved.

Table 6.8 Obstacles/Challenges/ faced by households since resettlement

Obstacles	All the time	Most of the time	Sometimes	Never
Pests and wild animals	14	3	3	2
Lack of technology/ machinery	12	1	2	7
Lack of capital	9	1	10	2
Lack of labour	3	3	3	13
Stock theft	3	-	6	13
Lack of transport	3	-	-	19
Distance of field from homestead	2	-	1	19
Drought	1	-	16	5
Poor soils	-	-	5	17
Floods	-	-	3	19

Number of Households = 22

6.3 CC Molina: A1 self-contained resettlement scheme

6.3.1 Introduction

At CC Molina, a total of 27 households were interviewed, which contained 206 people. The average number of persons per household was therefore 7.6. This average is greater than that at Pamene and Lanteglos. A bias towards the resettlement of male-headed households was observed at CC Molina, where women headed just four households; this situation is comparable to that at Pamene and Lanteglos. Relatively young households were resettled, as is evidenced by the low mean age of respondents and a high youth dependency. The majority of the sampled population was in the 15-19 year age group. The mean age of the respondents was 32 years. The youngest respondent was 1 year old, and the eldest was 65 years old. The survey showed that 56.1% of the population was dependent on 43.9% of the population that is of a working age. This ratio is almost equivalent to that of Lanteglos, but higher than that of Pamene.

In contrast to Pamene and Lanteglos, fewer urban households were resettled at CC Molina as most were from the communal areas. Figure 6.3a and 6.3b below give an

indication of the places where households had resided prior to resettlement at CC Molina. The mean duration of residence of households at CC Molina was 3.3 years, greater than that at Pamene and almost the same as that at Lanteglos. This discrepancy in mean duration exists because Lanteglos and CC Molina were occupied in 2000 through land occupations by ‘war veterans’, whilst Pamene had been acquired ‘legally’ with settler emplacement beginning in December 2001.

CC Molina was planned under the A1 self-contained variant and subdivided into 125 blocks with arable, grazing and residential land for individual households in each plot (Figure 4.2). The plots varied in size with the mean size being 54.2 hectares. This mean size is greater than that available to resettled households at Pamene and Lanteglos. CC Molina had comparatively larger plots and more people resettled as the farm was 6965 hectares in size (Ndoro, 2004; Lubbe, 2005), that is almost five to seven times bigger than Pamene and Lanteglos.

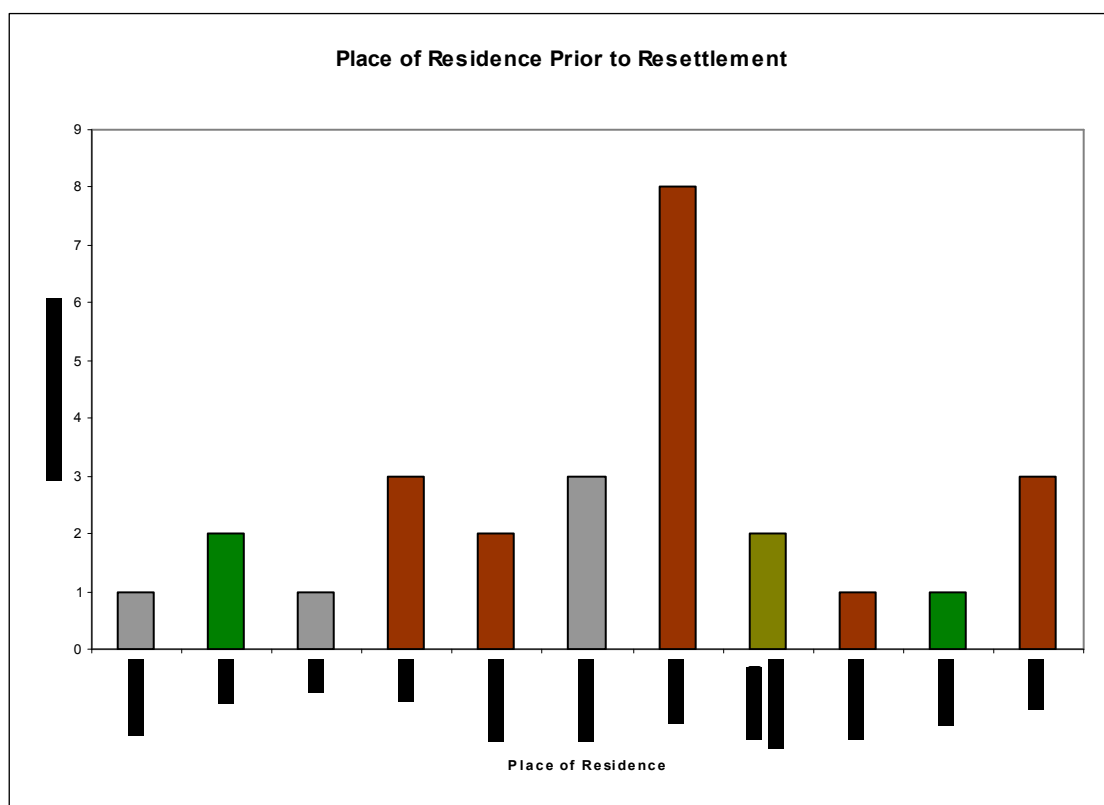


Figure 6.3a The places of residence where households resettled at CC Molina resided prior to resettlement

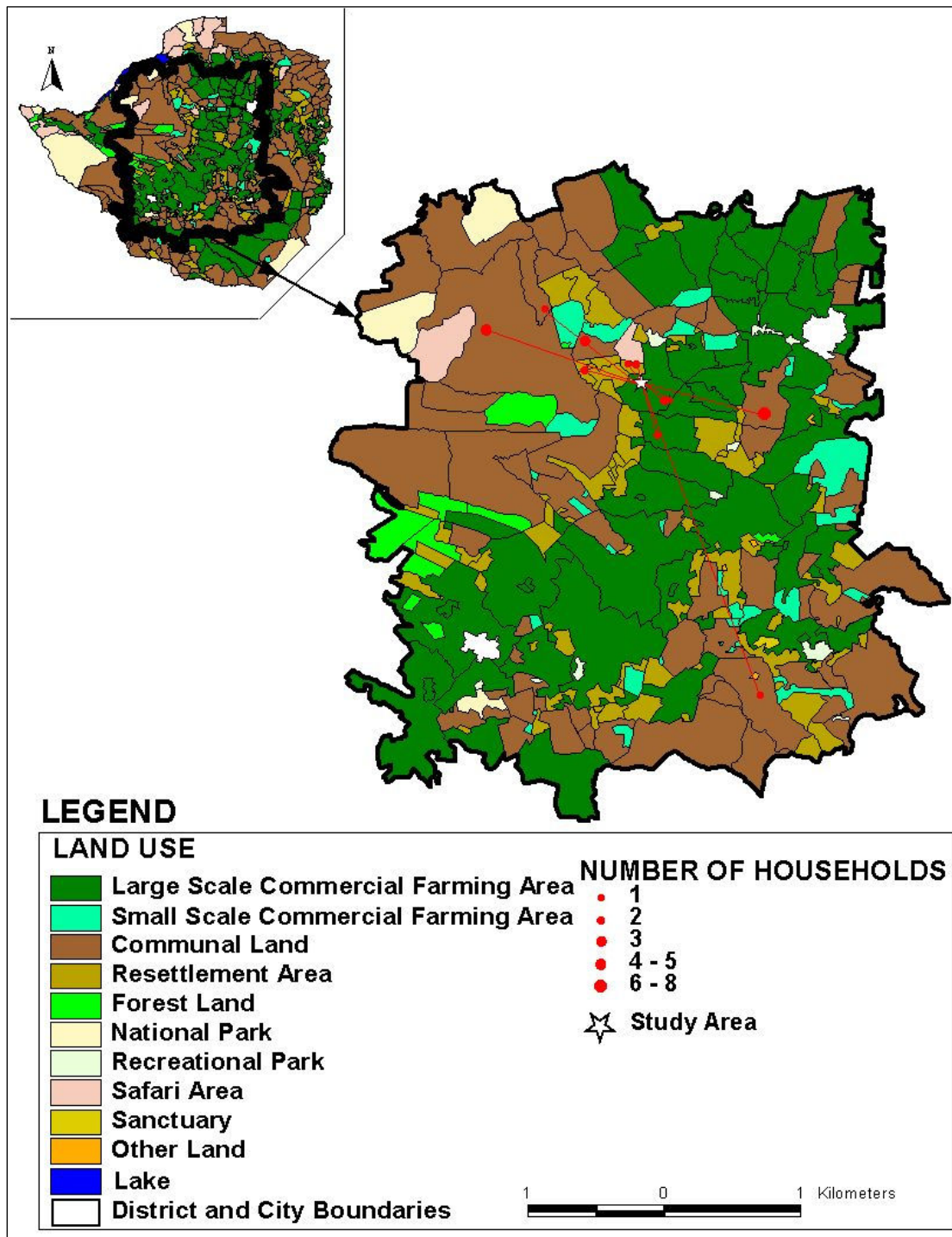


Figure 6.3b Map showing the areas where households at CC Molina resided prior to resettlement, according to the land tenure there

6.3.2 Livelihoods and land use practices prior to resettlement

This section contains a discussion of the livelihoods of the households prior to resettlement, their sources of income, their motivation for resettlement and lastly the land use practices of the 20 households who were farming before resettlement.

6.3.2.1 Livelihoods

Table 6.9 summarises the occupations of households and indicates that the majority of respondents had relied on farming as a livelihood prior to resettlement. Thirteen households had farmed full-time on either a subsistence or commercial basis, whilst seven had been part-time subsistence farmers with some form of employment or trading.

Table 6.9 The occupations of households prior to resettlement

Occupation Before Resettlement	Number of Households
Subsistence farmer	9
Small scale farmer	4
Subsistence farmer and teacher	3
Subsistence farmer and general worker	2
General worker	2
Anaesthetist and small scale miner	1
Builder	1
Cross border trader and subsistence farmer	1
Nurse aid and war veteran	1
Rural District Councillor and subsistence farmer	1
Soldier	1
Vegetable trader	1
Number of Households =27	

Most households had diversified sources of incomes, as observed amongst those resettled at Pamene and Lanteglos, summarised in Table 6.10. Households that had been farming mostly on a subsistence level and those with low incomes had

diversified sources of income. Evidence from studies of rural livelihoods by Ellis and Briggs (2001) indicates that poor households diversify to reduce shocks.

Table 6.10 Household sources of income prior to resettlement

Source of Income	Very Important	Important	Not Important
Livestock sales	11	4	3
Trading	9	7	4
Crop sales	9	6	5
Vegetable sales	4	6	7
Full-time employment	2	2	7
Gold panning	2	-	2
Part-time employment	1	1	1
Pension	-	-	2
Remittances	-	-	2

Number of Households = 27

Seven households acquired their plots through the 2000 land occupations and had not formally registered with the DLIC. Most had applied for resettlement to various institutions, as summarised in Table 6.11. The reasons for application for resettlement have been categorised according to whether they were rural or urban households.

Table 6.11 The institutions to which households applied for resettlement

How plots were acquired at CC Molina	Number of households
Farm seizures	7
DLIC	7
Rural District Councillor	6
Farm seizure and later DLIC	4
Swapping	2
Chief	1

Number of Households = 27

Rural households

Of the eight respondents from Mhondoro communal area, five had wanted a bigger portion of land than that they held already, whilst one respondent applied to have his own plot of land as he had been sharing with his in-laws. Another respondent mentioned as motivation, capital accumulation and improvement of social status through farming, whilst another respondent cited congestion in Mhondoro as having prompted him to apply.

Respondents from Gokwe and Sanyati communal areas reported the need for areas with better soils to farm on as the red clay soils that exist on most parts of CC Molina are associated with fertility. One respondent cited as motivation the desire to possess his own plot as he only had a small piece of land subdivided for him by his parents.

Two respondents, one from Gokwe North communal area and the other from Muzvezve I Resettlement Area, had swapped land with households initially resettled at CC Molina. The other respondent from Muzvezve I Resettlement Area noted the need for better farming land, however, prior to resettlement the same respondent had described the arable and grazing land as excellent and plentiful. This illustrates that some of the individuals who applied for or seized land were not necessarily short of land or landless, but were in fact opportunists. The two respondents from Carfax, who had previously leased land applied for personal ownership. The respondent from Rocklands applied for land as an alternative source of capital accumulation.

Urban Households

Two respondents, who had previously been employed as general workers said that their poor salaries compelled them to apply for land as an alternative source of income. Furthermore resettlement would offer a permanent place of residence as they had been renting lodgings in Kadoma. The soldier applied for land in order to have personal ownership of a property upon retirement, as he resided at the Battlefields army barracks. The above indicates that not all the individuals who applied for land required farming land, in fact some required land for residential purposes.

The households headed by the builder, nurse aid and vegetable trader had applied for resettlement as an alternative that they perceived would provide them with sustainable

livelihoods. These heads of households indicated that they were ex-combatants and therefore were entitled to land under the FTLRP. For this reason, they had applied for resettlement through the War Veterans Association. The anaesthetist said that he had applied for resettlement in order to provide a stable and permanent source of income for his family. This household held property in Kadoma, ran a nursery school, a small-scale mine, traded goods at a flea market and received remittances from children working outside the country. This household, like those households that applied in order to accumulate capital, is not desperately poor or in need of land and clearly should not have qualified for resettlement under the A1 variant.

6.3.2.2 Land use practices

This section will focus on the land use practices, productivity and obstacles faced by the 20 households that had been farming prior to resettlement. This will facilitate an assessment as to whether or not these farmers have changed their livelihoods, land use practices and productivity levels since resettlement.

There were nine heads of households deemed to be skilled farmers who had received Master Farmer training by AREX Extension Officers. The remaining heads of households had gained skills through assisting parents and family in the communal areas. The average size of field farmed prior to resettlement had been 5.6 hectares.

Cultivation

Maize, cotton, groundnuts and sunflowers had been the key cash crops grown by the households. Food crops grown were primarily groundnuts, runner beans, sweet potato and sugar beans. Households had also grown other crops such as sorghum, finger millet, rice and sugar cane.

Respondents said that they had relied on rain-fed cropping, which had been prone to climatic variability. In seasons of adequate rainfall, households produced an average of 5.45 tonnes of maize and 18.57 bales of cotton and an average of 1.36 tonnes of maize and 5.82 bales of cotton in a 'bad' season. Households described a 'bad' season as which had a poor rainfall distribution, drought conditions and, in the case of three farmers from Mhondoro, too much rainfall, which resulted in the flooding of their

crops. One household head from Mhondoro said that he had taken advantage of the rainfall in those particular seasons and had grown rice instead of maize.

Just over half the households had been content with the arable land. Three households described the land as having been excellent and ten described it as having been satisfactory. However, seven households from Mhondoro, Gokwe and Sanyati described it as having been poor and unsuitable for cultivation.

Animal husbandry

With the exception of one household that had leased land at Carfax, all other households had reared some form of livestock. Ownership had been tilted towards stock such as chickens, cattle and goats. Other stock kept had been donkeys, sheep and cattle. In comparison to those at Lanteglos and Pamene, Table 6.12 indicates that these households reared a greater number of livestock prior to resettlement. Households said they had kept donkeys and cattle for transportation and tillage respectively. Other livestock and the produce from such livestock had been used primarily for consumption, sale or bartering for labour.

Table 6.12 The total number of livestock owned by households prior to resettlement

Livestock	Number of Households	Total
Chickens	19	706
Cattle	19	268
Goats	16	204
Donkeys	9	44
Sheep	2	56
Turkeys	2	28

All 19 households had had access to communal grazing, with six stating that the grazing land had been excellent; eight said it had been satisfactory and five (two from Mhondoro and three from Gokwe) cited that it had been poor.

Gardening

With the exception of three households, the rest had grown the same type of vegetable varieties by those at Lanteglos and Pamene, primarily for consumption.

Equipment

All households owned hoes, which, they said, had been used primarily for weeding and cultivating their gardens. Traditional cattle-drawn ploughs were owned and used by 19 households for tillage. Of these 19, five had also used and owned tractors and plough disks, whilst one household had hired them. Cattle-drawn ploughs were used as a substitute when the tractors had broken down or when households had not been able to purchase fuel. Just over half the households had hired casual labour in combination with family labour for cultivation, weeding and reaping. Only six households had relied solely on family labour.

6.3.2.3 Markets and Tenure

Following a good season of adequate rainfall households said they had often sold an average of three tonnes of maize to the GMB and all their cotton to Cottco. One household had sold to Cargill, a company that supplied and distributed cotton. Households had sold smaller grains, maize, livestock and its products to people within the community or bartered such goods for labour.

The majority of the households had had communal tenure, two households from Muzvezve I Resettlement Area had held permits and two from Carfax had leased land from a black commercial farmer.

6.3.2.4 Obstacles, Challenges, Conflict

Poor soils, lack of finances and stock theft, as summarised in Table 6.13, were listed as the most significant challenges faced by households prior to resettlement. These challenges were similar to those stated by households resettled at Pamene. Households, primarily from Mhondoro, who cited flooding as an obstacle to farming had referred particularly to the submergence of their crops in times of heavy rainfall. This occurred as a result of poor drainage and poor field location. Elephants were said by three households from Gokwe as having been largely responsible for damage to their crops, whilst other animals, such as those mentioned by households resettled at Lanteglos and Pamene, contributed to the damage, particularly during the planting and growth of crops. Seven households reported that lack of transport had been a

major challenge, particularly when they had wanted to take their harvest to the markets. Some households noted the lack of inputs and failure to secure vaccines for their livestock as hindrances to farming.

Table 6.13 Obstacles to farming experienced by households prior to resettlement

Obstacles	All the time	Most of the time	Sometimes	Never
Lack of finances	11	-	5	4
Poor soils	-	1	7	12
Stock theft	9	-	4	7
Pests and wild animals	3	1	7	9
Lack technology/machinery	4	-	3	13
Distance from fields to homestead	2	-	1	17
Drought	-	4	14	2
Floods	-	1	7	12
Lack of labour	-	-	3	17

Number of Households = 20

6.3.3 Livelihoods and land use practices after resettlement

6.3.3.1 Livelihoods

Households, as indicated in Table 6.14, continued to rely on a variety of sources of income for their livelihoods after resettlement. The primary source of income for households was the sale of their produce with just under half relying on livestock and trading as their secondary sources of income. In comparison to Table 6.10, Table 6.14 indicates that the number of households in full time and part-time employment, trading and gold panning had decreased, indicating that more households were devoted to farming as a full-time occupation. The data also illustrate a twofold increase in the number of households receiving pensions after resettlement.

Table 6.14 Sources of household income after resettlement

Sources of Income	Very Important	Important	Not Important
Crops sales	19	3	1
Livestock sales	5	5	2
Trading	3	4	4
Vegetable sales	2	3	1
Formal employment	1	1	2
Gold panning	1	-	-
Pension	-	2	2
Part-time employment	-	1	-
Remittances	-	-	1

Number of Households = 27

The expenditure of most households since resettlement was largely on the purchasing of inputs such as seeds, livestock, chemicals and packaging material, hiring of labour to clear land, education and setting up infrastructure on their plots. Households that had not farmed prior to resettlement explained that their expenditure was primarily from hiring and/or purchasing farm machinery, whilst those who had been farming prior to resettlement had brought their own equipment. Three households said that most of their income went on educating their children. The proximity of schools at Patchway Mine, Chakari and the farm school enabled children of school-going age to attend school.

Most households spoke positively of changes in expenditure since resettlement as did those at Lanteglos and Pamene. They reported that in the 2003/2004 season, they had generated more money from farming at CC Molina than they had in previous periods. They were therefore able to invest their money in assets for the farm or bank it, whereas previously they could not. Only two households spoke negatively of the changes in their income and expenditure, citing that they made less money from the sale of produce than before, owing to the 2001/2002 drought and the initial capital injection required for the clearing and cultivation of virgin land.

6.3.3.2 Land use practices

A total of 1464 hectares of virgin land was allocated to respondents. Of this total, 327.54 hectares (22.4%) had been cleared for cultivation by December 2004. However, in this period, only 319.7 hectares (21.8%) was actually under cultivation. The land use practices of households at CC Molina were similar to those at Lanteglos and Pamene.

Cultivation

Cotton and maize were the key cash crops grown by respondents, with rice and sunflowers and a variety of small grains, nuts and beans. Table 6.15 gives an indication of the total quantities of maize and cotton produced by households. The yearly increment is ascribed to the expansion of land under cultivation and an increased number of people farming. The mean quantities yielded for 2004/2005 are based on responses from nine households revisited in March/April and June/July 2005. The head of AREX in Kadoma noted that reports from extension officers revealed that most farmers at CC Molina had experienced crop failure in the 2004/2005 season, thus corroborating the low yields stated by the nine households.

Respondents attributed their low yields to the mid-season drought that resulted in very little rain in the last two months of the season, as in the case of Pamene and Lanteglos. However, the head of AREX and the former commercial owner, Lubbe, believed that the farmers had prepared their land late and therefore missed the first rains in October, which would have allowed the maize crops to tassle with the January rains.

Table 6.15 The quantity of maize and cotton harvested by households from 2000 – 2005

Farming Season	Number of households	Maize (tonnes per household)	Cotton (bales per household)
2000 – 2001	2	1.05	none grown
2001 – 2002	7	1.64	6.14
2002 – 2003	19	3.79	5.68
2003 – 2004	27	6.85	11.2
2004 – 2005	27	**7.15	***2.5

**** mean of nine households**

***** mean of three households**

Households in the 2003/2004 season produced an average of 0.58 tonnes of maize and 0.95 bales of cotton per hectare. Three households noted that they had not harvested enough maize for consumption in the 2003/2004 season. Based on the rainfall received in November and December 2004 and on weather forecasts disseminated by AREX extension officers, households had been optimistic of a good harvest in the 2004/2005 season. The district's meteorology department at the Cotton Research Station in Kadoma recorded 336.3 millimetres of rainfall between the months of October and December 2004, a total higher than the 179.1 millimetres received in the same period in 2003. However, as discussed earlier and shown in Figure 4.4, little rainfall (241.3 millimetres) was received between January and March 2005, compared to 616.8 millimetres over the same period in 2003. Therefore in the 2004/2005 season nine households who had cultivated 72.03 hectares obtained 0.89 tonnes of maize per hectare, an average higher than at Lanteglos, and 0.1 bales of cotton per hectare, lower than at Lanteglos.

All 27 households used the traditional cattle-drawn plough for tillage, with three of the 27 households having to hire cattle and/or ploughs. Only six households stated that they at times used tractors and plough disks for tillage. Of these six, four households hired this machinery, whilst two owned their own. Lack of finance to buy fuel and shortages of fuel were cited as the reasons why tractors and plough disks were only used occasionally. The cost of hiring cattle and plough disks ranged from Z\$ 100 000 to \$200 000 per acre and that of hiring a tractor and plough disks was between Z\$200 000 and Z\$300 000 per hectare, excluding fuel. These costs were almost similar to those charged to households at Lanteglos and lower than those at Pamene. This equipment was hired primarily from people within CC Molina, as well as from surrounding commercial and resettled farms.

All households owned hoes and used these primarily for gardening and weeding. Nineteen households used family labour in conjunction with casual labour for the purposes of weeding, cultivating or reaping. There were more households at CC Molina who hired labour, compared to Lanteglos where these relied primarily on family labour.

All households rated their arable land positively with 18 describing it as excellent, eight as good and one as satisfactory. A respondent, who had previously resided at Mhondoro, and who rated the arable land as satisfactory, told the research assistant that the arable land there had been better as compared to CC Molina and regretted leaving. For this reason, the respondent said that animal husbandry would be the only commercially viable and sustainable farming practice at CC Molina.

Animal Husbandry

The majority of the households rated livestock rearing as the second most important land use; this was the same as the opinion expressed by households at Pamene and Lanteglos. All but one household reared some form of livestock. Grazing was accessed on individual plots, although there were cases of livestock grazing on other plots, a possible source of future conflict if resources become depleted. These cases occurred because most plots were not fenced and people were unable to easily determine their boundaries. Table 6.16, when compared with Table 6.12, indicates that households reared less stock after resettlement, presumably because some livestock had been left where they had previously resided. Table 6.16, also shows that there was a wider range and larger quantity of stock kept, compared to those households resettled at Pamene and Lanteglos.

Table 6.16 The quantity and number of households rearing livestock after resettlement

Livestock	Number of Households	Total Stock
Cattle	22	189
Chickens	20	796
Goats	10	136
Donkeys	6	26
Sheep	2	16
Pigeons	1	40
Guinea Fowl	1	4
Turkeys	1	3

All respondents were content with the grazing land, with 15 respondents describing it as excellent and 12 as good. No household at CC Molina, Lanteglos or Pamene had

established pastures for grazing, preferring to concentrate on arable farming, due to the perception that there was ample land for grazing on their plots. Since indigenous grasses deteriorate quickly and there was little growth of most grasses for pasture in the winter period (Department of Conservation and Extension, 1957), former commercial farmers, like Lubbe, Read and Edwards, had established dry land and/or irrigated pastures in order to sustain their pasture. Large amounts of fertilisers were applied to sustain these pastures. Failure to establish pastures compromises animal husbandry, as a sustainable land use practice, and can contribute to the degradation of the rangeland in the future.

Gardening

Only 10 respondents reported maintaining vegetable gardens. They grew the same varieties of crops as those grown prior to resettlement and the same as those grown at the other two farms. These crops were grown primarily for consumption. Households that did not maintain gardens attributed their failure to do so to the poor availability of water.

6.3.3.3 Natural Resources

Households used their natural resources intensively for consumption of water and food, construction, fuel, and mining.

Most households frequently collected wild fruit throughout the year when in season. Two households reported that they hunted wild pigs and dassies. However, informal conversations with one research assistant revealed that more households hunted and killed a wider variety of animals, such as buck particularly when found browsing on their plots. The reasons for the lack of disclosure were the same as those cited at Pamene and Lanteglos.

Informal conversations with one research assistant also revealed that more households than those recorded in the survey were panning for gold on their plots, as at Lanteglos and Pamene. One household in seeking advice from this research assistant showed the research team the area in which he had dug for ore, illustrated in Plate 6.4. In the longer term, this land use pattern is likely to be associated with the loss of arable and

grazing land when practised on a large scale. This pattern may also prove to be a danger to livestock and cause health hazards by allowing mosquitoes to breed in accumulated stagnant water caught within the pit.



Plate 6.4 Evidence of gold panning on a plot at CC Molina

On average, each homestead had three pole and dagha huts, a kraal, a chiguri (hen hut) and a granary. Wealthier households had at least one house built with bricks made from clay.

All households relied on firewood as their main source of energy. A few burnt maize cobs after de-husking, during the harvesting period as a substitute; two households had solar panels. All households stated that they would like electricity as an alternative source of fuel and that a committee had been set up to coordinate this programme and was chaired by the household headed by the anaesthetist. Even though only four of the surveyed households had been forthcoming with payments for this initiative, it is notable that the community at CC Molina had been proactive in attempting to secure electricity, whilst the communities at Pamene and Lanteglos were awaiting government intervention.

One respondent cited that the reason he had not contributed to the Electricity Committee was that he could not raise the Z\$ 10 million contribution required, but hoped that, as he improved as a farmer and saved he would be able to afford to contribute at a later stage. The continuous readjustments of prices of commodities and service deliveries, due to the inflationary environment within the country, and the failure of producer prices to rise with inflation, will most likely prevent electrification as most farmers will not be able to save nor afford to pay the initial capital required, unless the government provides subsidies.

The primary sources of water for consumption were boreholes. Three households said they sourced water from streams that ran through their plots and small dams that had been constructed by the previous commercial farmer for his cattle. Households also obtained water for their livestock from these sources. On average, households travelled 3.3 kilometres to source water, a distance greater than that travelled at Lanteglos and Pamene. Households paid an average of Z\$10 000 dollars a month in 2004 to source water from boreholes that were privately owned. This price was much higher than that paid by those at Pamene.

6.3.3.4 Markets

Cash crops were sold to the GMB and Cottco in Kadoma. The pattern of sale of smaller grains and livestock was similar to that observed at Lanteglos and Pamene. Households reported that the local markets were accessible and that they had access to transport, however, most were not content with the producer prices for maize and cotton set by the government in the 2003/2004 season. Three cited that they would prefer to have more competitors in the market, as was the case before FTLRP, as presently the GMB was the sole distributor and buyer of maize. Although there were a few cotton companies like Cargill and Cottco they still had a monopoly over producer prices.

6.3.3.5 Tenure

Households held a variety of papers to show ownership of their plots. Fourteen households held letters of confirmation from the District Administrator; four households held a card (jeke); seven held both a card and letter of confirmation and one household did not hold any papers. Only six households felt secure in their form of tenure, whilst the majority said that they felt insecure.

Generally most heads of households said that they were not sure what would happen to their plots when they died. Although some had been told by the DA that their spouse would inherit according to the traditional law of inheritance, most still felt unsure as it was not in writing.

6.3.3.6 Obstacles, challenges and conflict

According to the survey, the main source of challenges or obstacles cited by these farmers was lack of capital to inject into farming, unlike households at Lanteglos and Pamene, who had cited damage to crops by pests and wild animals. Table 6.17 summarises other obstacles reported by households. Seven households noted that they had experienced conflict over the encroachment onto land by their neighbours. Most said the dispute had been resolved. One household said that the conflict arose over what seemed to have been the double allocation by the DLIC as they had found another household settled on their allocated plot. When the matter was referred to and adjudicated by the DLIC, it was found that there had been no double allocation as the household that had been occupying the plot was there ‘illegally’, as they had seized this plot during the farm seizures of 2000 and had not applied for formal settlement. This household was asked to leave and apply for land formally.

Other obstacles cited were the lack of availability of water, which households had to travel great distances daily to secure, a number cited that the streams that ran through their properties often dried up in the dry season, making this an unreliable source of water. Others noted that failure to secure inputs in time for farming from the GMB often delayed planting and made them susceptible to crop failure. Whilst others pointed out that there were no working dip tanks on the farm and that vaccines and

pesticides were not readily available, as these were often imported, again making them vulnerable to livestock diseases such as black leg.

Table 6.17 Obstacles to farming experienced by households after resettlement at CC Molina

Obstacles	All the time	Most of the time	Sometimes	Never
Lack of finances	18	1	6	2
Lack of technology/machinery	13	4	3	7
Pests and wild animals	12	1	9	5
Stock theft	7	1	4	15
Lack of labour	5	1	6	15
Poor soils	1	-	-	26
Drought	-	1	26	-
Floods	-	-	4	23
Distance of field to homestead	-	-	-	-

Number of Households =27

6.4 Pamene: A2 resettlement scheme

6.4.1 Introduction

There were 23 households interviewed at Pamene farm. These households contained a total of 105 people, giving an average of 4.5 people per household. This average was lower than that at Lanteglos and CC Molina, which had averages of 6 and 7.6 people, respectively. The majority of the population of Pamene farm was in the 25 – 29 year age group, with 36.2% of the population dependent on 63.8% of the populations' working age. This observation is similar to that of Lanteglos and CC Molina and suggests that young people appeared to have had the greatest 'need' of land in Zimbabwe.

The majority of the beneficiaries at Pamene were urban dwellers from Kadoma whilst nine were rural, as illustrated in Figures 6.4a and 6.4b. Four of the rural households were from the communal areas, whilst two were from Dhoneni and Venice farms within the district and one from Masvingo. Two households, initially resettled at

Alabama Findon and Martin farms at the onset of the FTLRP, were transferred to Pamene by the DLIC, although resettlement and reallocation could only be authorised by the Minister of Lands, Land Reform and Resettlement, through the PLIC. The mean duration of residence of households at Pamene was significantly lower at 1.6 years than Lanteglos and CC Molina because, as aforementioned, the farm had not been ‘invaded’ in 2000 and uptake of land by beneficiaries only occurred in 2002.

According to the chairperson of Pamene, just over half of the 56 beneficiaries were resettled at the farm by December 2004. Households had residential, arable and grazing land in each plot (Figure 4.3). Plots varied in size with the mean size being 21.4 hectares; this mean size was larger than the mean size at Lanteglos, but smaller than that at CC Molina.



Figure 6.4a The places where households resettled at Pamene resided prior to resettlement

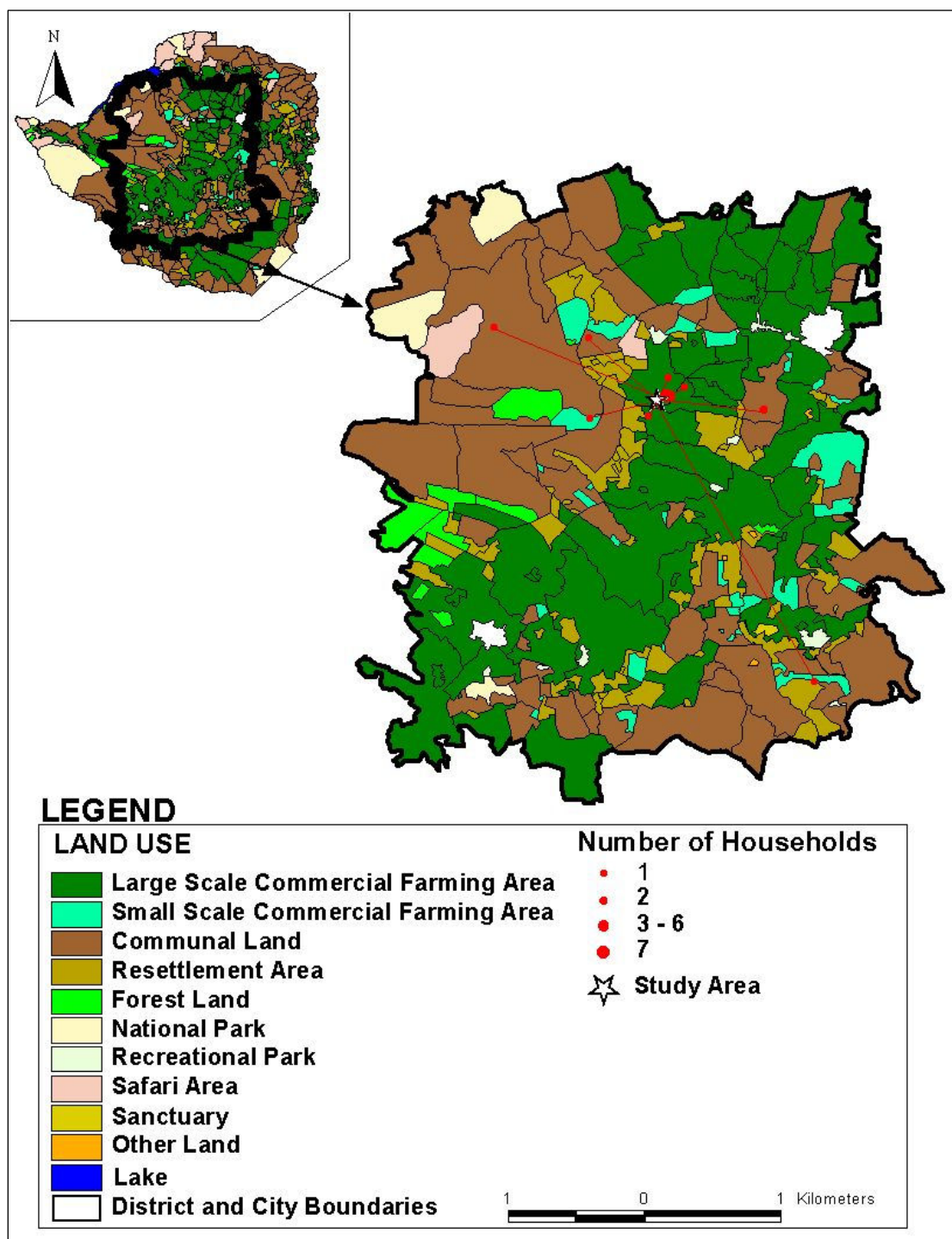


Figure 6.4b Map showing the areas where households at Pamene resided prior to resettlement, according to the type of land tenure there

6.4.2 Livelihoods and land use practices prior to resettlement

This section provides the context on the livelihoods of beneficiaries and a description of land use practices of those that had farmed prior to resettlement.

6.4.2.1 Livelihoods

Nineteen households had been in either full-time or part-time employment, or had managed their own businesses, whilst four relied solely on subsistence farming (Table 6.18). Households, particularly subsistence farmers and those with low-income jobs, depended on a variety of sources of income for their livelihoods, as indicated in Table 6.19

Table 6.18 Occupation of heads of households prior to resettlement

Occupation Before Resettlement	Number of households
Businessmen	9
Subsistence farmers	4
Builder and subsistence farmer	2
Agronomist at Cotton Research Station	1
Mine worker	1
Ex-council worker and war veteran	1
Pharmacist technician	1
Teacher	1
Teacher and subsistence farmer	1
Seasonal farm worker and subsistence farmer	1
Waitress	1

Number of Households: 23

Table 6.19 Household sources of income prior to resettlement

Source of Income	Very Important	Important	Not Important
Full-time employment and business	8	3	3
Livestock sales	7	2	1
Crop sales	6	2	-
Vegetable sales	4	2	1
Trading	3	2	-
Gold panning	1	1	-
Remittances	1	1	-
Part-time employment	-	3	1
Pension	-	-	3

Number of Households = 23

Table 6.20 indicates that households applied for resettlement to different institutions. This shows that the correct procedures for land allocation were not followed, as households were supposed to apply to the PLIC for resettlement, but they applied to various institutions instead. Households have been categorised into rural and urban in order to ascertain their reasons for applying for resettlement under the A2 model.

Table 6.20 The institutions to which households applied to for resettlement

How plots were acquired at Pamene	Number of households
District Administrator	9
Lands Ministry	6
A Lands Officer	5
The District Lands Officer	1
PLIC	1
Rural District Councillor	1

Number of Households = 23

Rural Households

Two respondents from Gokwe and Sanyati communal areas commented that they had applied for resettlement in order to acquire land with better soils. Only one of these households was resettled on fertile red clay soil, whilst the other was on infertile Mopani soils that required large injections of fertilisers to make them productive. Three respondents were motivated by the desire to have personal ownership of a plot to farm on, because they had leased land prior to resettlement, whilst one respondent noted that he had wanted more land to farm on. Two respondents from Alabama-Findon and Weston, both ‘newly’ resettled areas commented that they had been relocated by the DLIC from these communities.

Urban households

The nine business persons at Pamene had applied for land as a means of accumulating capital, whilst the low-income households, headed by a former waitress and a pharmacist technician, had applied as a means of acquiring an alternative source of income. Other households headed by the agronomist and the teacher made similar comments, however the agronomist added that resettlement would provide him with a place to reside on retirement. The household headed by an ex-combatant had applied for land based on the war veteran’s entitlement to that land, by virtue of having contributed to the liberation struggle.

6.4.2.2 Land use practices

This section focuses on the land use practices, productivity and challenges faced by the eight households that had been farming on a subsistence level prior to resettlement.

Cultivation

The main land use practices were cultivation, animal husbandry and growing of vegetables. On average, the sizes of the fields farmed by these eight households had been four hectares. Maize and cotton had been the main cash crops, whilst groundnuts, sugar beans, sorghum, round nuts, runner beans, butternuts, sweet potato and maize had been the key food crops grown. Crops were not grown during the dry winter period due to a lack of irrigation facilities

Households indicated they had been subject to climatic variability because they had relied on rain-fed cropping. This suggested the employment of a risky farming system as in seasons of adequate rainfall households said they had produced an average of 4.69 tonnes of maize and 9.92 bales of cotton; whilst the average was much lower in periods of drought with 0.78 tonnes of maize and 0.62 bales of cotton produced. Seven households said they had harvested sufficient amounts for consumption and sale in seasons of adequate rainfall, whilst one household had only enough for consumption. The situation was significantly different during periods of drought as just over half the households said they had not harvested an adequate amount for consumption, whilst only two said they had, but these households were unable to sell their produce.

Animal Husbandry

Livestock ownership had been for subsistence purposes, for draught power and for consumption and when incomes were low, livestock was sold. There were seven households that had reared livestock as shown in Table 6.21. This situation was similar to that found in Table 6.3 and Table 6.12 for Lanteglos and CC Molina respectively. Six of these households had been content with the grazing land rating with some households rating it as satisfactory and others as excellent.

Table 6.21 The total number of livestock owned by households prior to resettlement

Livestock	Number of households	Total
Chicken	7	435
Goats	6	144
Cattle	6	61
Ducks	1	10
Guinea Fowl	2	8

Gardening

All the households had grown vegetables in the rainy season, with two households growing in both seasons. The vegetables grown were leafy vegetable varieties, tomatoes, onions and cabbage similar to those that had been grown by households

resettled at Lanteglos and CC Molina. Vegetables form part of the staple diet, serving as relish for most people.

Equipment

Traditional cattle and plough, owned by households, had been used for tillage and all eight households possessed hoes, primarily for gardening and weeding. Only four households had been able to hire tractors and plough disks in certain seasons. Seven households said they had hired labour for weeding, cultivation and reaping. This labour was hired from the community. Payment for labour varied amongst households and had depended on the type of activity the labour was employed for. Some households had bartered their produce, whilst some had paid money per acre cultivated, weeded or reaped.

6.4.2.3 Markets and Tenure

Following a season of good rainfall and harvest, seven households had sold their cash crops to the GMB and Cottco. The smaller grains, nuts and maize had been sold to people within the community or used to barter for labour. Livestock and their products had been sold to the community as well.

The tenure for these households had varied. The two households who had been resettled at Alabama-Findon and Martin said that the land had belonged to the state as they had not held any form of papers to show ownership, whilst four households said they had held communal tenure and two said they had leased land. The average plot size of those who had had communal tenure and leased land had been 2.9 hectares, whilst those from Alabama-Findon and Martin had on average 11.9 hectares because plots under the FTLRP were larger.

According to the District Lands Officer and the Assistant District Administrator, the household initially resettled at Alabama-Findon in 2000 had been relocated to Pamene because the farm was acquired by the military for defence purposes in 2004 (Bandura, 2004 and Mapfumo, 2004). The household transferred to Pamene from Martin had been relocated because their plot had been allocated to another person by the PLIC. The District Lands Officer, (Mapfumo, 2004) explained that this household had

settled at Martin illegally, hence the relocation to Pamene which had plots available for uptake. On the other hand, the spouse of this householder stated that they had been forced off to make way for a prominent ZANU- PF member in the District (Chibaya, 2004). This serves to indicate that there is likely to be insecurity of tenure in resettlement areas under the FTLRP, particularly where positions of power, access and control by actors in the locality are uneven.

6.4.2.4 Obstacles, Challenges, Conflict

Responses to the questions administered to households as summarised in Table 6.22, indicate that stock theft, poor soils and lack of finances had been the most significant challenges faced by most households prior to resettlement. Two respondents from Gokwe North and Venice gave other obstacles not listed in the questionnaire, such as the unavailability and high cost of inputs like seeds and fertilisers where they had resided. The respondent from Gokwe North said transportation of produce to markets had been difficult, due to the poor and degraded state of the roads. Because of this, most transport operators were reluctant to service these routes.

Table 6.22 Obstacles experienced by households prior to resettlement

Obstacle	All the time	Most of the time	Sometimes	Never
Stock theft	4	-	1	3
Poor soils	4	-	1	3
Lack of finances	3	-	4	1
Drought	2	1	3	2
Pests and wild animals	2	-	3	3
Lack technology/machinery	1	1	3	3

Number of Households =8

6.4.2.5 Conclusion

From this section, one can deduce that these households had been vulnerable to climatic changes, which had affected their capacity to provide sustainable and stable livelihoods solely based on farming, hence over half the households had off-farm

activities and sources of income. This supports the notion that application for resettlement was and is a livelihood strategy for increasing sources of income for most households under this settlement scheme.

6.4.3 Livelihoods and land use practices after resettlement

A total of 500.51 hectares of land was allocated to the sampled households, giving an average of 21.76 hectares per plot. With the exception of four households, land allocated was virgin and had to be cleared for cultivation. In December 2004, a total of 135.7 hectares was under cultivation giving an average of 5.98 hectares per household with the minimum and maximum of land under cultivation being zero and 20 hectares respectively.

6.4.3.1 Livelihoods after resettlement

Table 6.23 reveals the diversity in the sources of income for households at Pamene. Most households relied on wage income for their livelihoods as 19 beneficiaries were people who owned businesses or those employed full-time or part-time, who had not resigned from their jobs since resettlement. Crop sales were important to households that had been farming on a subsistence level prior to resettlement. Most households supplemented their incomes through livestock sales, vegetable sales, gold panning and remittances. Informal conversations amongst the research assistants, the chairperson of the farm and the guide, not shown in the questionnaire, revealed that many workers of absentee proprietors and certain households at the farm mined pit and river sand for sale to construction companies in Kadoma, panned gold and sold firewood to supplement their sources of income. There was extensive resource exploitation at the farm, which has implications for the sustainability of these natural resources.

Table 6.23 Household sources of income after resettlement

Source of income	Very Important	Important	Not Important
Full-time employment and business	12	-	1
Sale of own crops	10	1	2
Livestock sales	6	-	1
Vegetable sales	4	-	1
Remittances	2	1	-
Gold panning	1	1	-
Part-time employment	-	2	4
Trading	-	-	-

Number of Households = 23

Most households said that their expenditure pattern since resettlement had changed as they spent their income on buying inputs, educating their children, hiring labour, developing the infrastructure on their plots, clearing land for cultivation and buying assets such as equipment. This was a similar trend to that of Lanteglos and CC Molina. The majority of the households spoke positively of the changes in their expenditure pattern since resettlement, citing that they now had more money to spend; the proximity of Pamene to Kadoma, Rimuka and Ngezi townships made for ready markets and cost-effective transportation of produce to these markets. Households that had resided in Kadoma cited the same reasons for changes in their expenditure pattern as those resettled at Lanteglos. Five households who had started farming in 2004 could not comment on these changes.

6.4.3.2 Land use practices

The land use practices at Pamene entailed rain-fed cropping, animal husbandry, gardening of vegetables and the extraction of natural resources for purposes of food consumption, medicine, construction, fuel and mining.

Cultivation

Households at Pamene grew in addition to soya bean, cowpeas and sunflowers, a variety of small grains, nuts and beans, similar to those grown at Lanteglos. One household had grown tomatoes for commercial purposes. Table 6.24 indicates that, prior to the 2003/2004 season, maize was the key cash and food crop grown by the resettled households. Cotton was grown in the 2003/2004 and 2004/2005 farming seasons, perhaps, because in the initial period of resettlement households preferred to grow maize as they could not afford to invest in another cash crop like cotton. Cotton is expensive to grow, as it requires the investments of large amounts of capital, particularly for buying inputs such as seeds, fertilisers and pesticides, which are costly (Ndoro, 2004; Mache, 2004).

It was evident from responses to the questionnaire that most households under this commercial settlement scheme were practising subsistence farming as most retained their small grains, nuts, beans and an average of one tonne of maize for consumption. Table 6.24 indicates that level of production at Pamene was substantially lower, compared to Lanteglos (Table 6.6) and CC Molina (Table 6.15). This settlement scheme, located in a higher potential Natural Farming Region and whose beneficiaries are supposed to have the resources to farm, should have been the most productive.

One reason for this, particularly between the 2001 and 2003 farming seasons, is the slow uptake of plots by beneficiaries, which resulted in little land coming under cultivation in the initial period of resettlement, because beneficiaries had only been settled for a mean of 1.5 years at Pamene, compared to 3.1 and 3.3 years at Lanteglos and CC Molina respectively. This slow uptake of land is in line with the nationwide trend observed by the Presidential Land Review Committee (Utete, 2003) whereby a national average of 97% and 66% of the beneficiaries had taken up plots under the A1 and A2 models respectively by August 2003. The A2 settlement scheme showed lower productivity compared to the A1 scheme (Utete, 2003). Drought conditions experienced in the 2001/2002 and 2003/2004 seasons are said to have contributed to low yields in the initial period of resettlement. However, production levels in the 2003/2004 season, which had an adequate distribution of rainfall, were still low in comparison to the other two communities.

Table 6.24 The quantity of maize and cotton harvested by households at Pamene from 2000 – 2004

Farming Season	Number of households	Maize (tonnes per household)	Cotton (bales per household)
2000 – 2001	-	-	-
2001 – 2002	2	2	-
2002 – 2003	6	2.42	-
2003 – 2004	14	3.3	0.86
2004 – 2005	23	**1.1	crop failure

**** Maize yields from 10 of the 23 households**

In the 2003/2004 season, 10 respondents said they had had harvested enough produce for consumption until the 2005 harvest. However, two households stated that they had not grown enough for consumption, whilst two households, which were run by business people with an alternative source of income, stated that they had only grown maize and cotton for commercial purposes. Most households said that the 2003/2004 season had brought above average rainfall and attributed their good harvest to this.

Whilst conducting the survey, most households in 2004 were optimistic of a good harvest in the 2004/2005 season and informal conversations during transect walks revealed that some households expected yields averaging above 3 tonnes of maize. However, a survey of 10 households in April/March and June/July 2005 revealed that most households had experienced crop failure with an average of 1.1 tonnes of maize harvested per household. These households had cultivated a total of 55.5 hectares. Their output of maize per hectare in the 2004/2005 season was 0.19 tonnes per hectare. This was significantly low compared to Lanteglos and CC Molina. Poor rainfall conditions in the district as aforementioned contributed to this. Plates 6.5a and 6.5b of failed maize crops in the fields of two respondents provide a general picture of the crop production at Pamene in the 2004/2005 farming season. This indicates that farmers are and will continue to be prone to climatic variability, which is likely to impact on their sustainable incomes from crop production in the future.



Plate 6.5a Failed maize crop production at plot number 9



Plate 6.5b Failed maize crop production at plot number 23

Just under half of the respondents employed traditional cattle and ploughs in their agricultural activities, whilst 10 used tractors and plough disks. Two households made use of both cattle and ploughs and tractors and plough disks, depending on their financial position within the particular farming season. Six households hired cattle and ploughs whilst seven hired tractors and plough disks. Households hired this equipment from people within the community and black commercial farmers in the Muzvezve ICA. In December 2004, it cost between Z\$150 000 – Z\$250 000 per acre

to hire cattle and ploughs; and Z\$250 000 – Z\$500 000 per hectare to hire tractors and plough disks excluding the price of fuel. The amounts paid were substantially higher than those paid by households at Lanteglos and CC Molina.

Generally, all households were satisfied with their quality of the arable land. Four households, settled on red clay soils which the previous commercial farmer had farmed, as described earlier, rated the land as excellent; whilst 18 who had to clear virgin land rated it as good and satisfactory. The five respondents who rated their arable land as satisfactory said that this only depended on adequate application of fertilisers to the soils, which were largely sandy. Only one household could not provide a rating for their arable land, as they had not yet started to cultivate. Transect walks showed that several households had granite outcrops (ruware) in their fields, reducing the land available for future cultivation.

Animal Husbandry

Animal husbandry was the second most important land use cited by households, as was the case at Lanteglos and Pamene. Stock kept by 15 households was mostly chickens, cattle and goats, as summarised in Table 6.25. The total quantity of stock reared in comparison to Table 6.7 for Lanteglos and Table 6.16 for CC Molina is much lower, because fewer households had been subsistence farmers prior to resettlement and therefore probably had no livestock upon resettlement. According to AREX, Pamene had been planned as an intensive irrigation scheme for crop production under the FTLRP and therefore had a limitation on the number of stock allowed on each plot (Ndoro, 2004), thus explaining to the low stock numbers as compared to the other two settlements.

Table 6.25 The number of households rearing livestock and the total quantity reared

Livestock	Number of households	Total Amount
Chickens	9	280
Cattle	8	34
Goats	4	47
Pigs	1	19
Sheep	1	3

Cattle were primarily for draught power, whilst other stock, such as chickens, goats and pigs were for commercial sale. Households consumed mostly chickens and milk from the goats. Those that reared livestock were content with the land available for grazing, which took place on individual plots, although one household, from plot 56, allotted only arable land, grazed its cattle on the plots of absentee farmers.

Gardening

Ten households had vegetable gardens and the vegetables grown were similar to those grown by the households prior to resettlement, as well as those at Lanteglos and CC Molina. The gardens were found to be close to a water source or where water could be easily accessed, thus explaining why fewer households grew vegetable gardens. This land use was not very important to households' income and, with the exception of one household at plot 55, which sold vegetables, the remainder grew vegetables primarily for consumption.

6.4.3.3 Natural resources

Households had used their natural resources for food consumption, medicinal purposes, to construct their homesteads and stock pens; to source fuel and water and for the mining of pit sand, river sand and gold.

Pamene was endowed with a variety of fruits such as those found at Lanteglos farm. Most households collected these fruits frequently throughout the year as a supplement to their diets and as a 'snack', whilst herding cattle. In addition, medicinal herbs and roots were collected by households.

Five households said they hunted wild animals, primarily wild pigs that often damaged their crops during the planting season. Informal conversations by the research assistants with respondents, the chairperson and guide revealed that more households hunted wild animals including the different buck in the area, and the lack of disclosure was for the same reasons as those cited at Lanteglos. Transect walks revealed that fishing was widely practised by a number of households that had small dams, streams or the White Water River running through their property. The chairman and guide indicated that people from Ngezi and Rimuka Township also fished from these sources, particularly near the weir on White Water River. One household, whose plot included the weir, complained that it was difficult to prevent these people from fishing there, as they had not fenced off their property and were not sure of their rights to prevent these 'outsiders' from entering their property. This is likely to lead to possible conflict in the long term when resources become scarce.

All but one household relied on firewood as their primary source of energy. The household at plot 56, which had did not have a woodlot, had resorted to asking neighbours for wood, as well as using paraffin and de-husked maize cobs (primarily in the harvesting season) as alternatives. Clearly usage of wood for this household is and will continue to be dependent on the good relationships with their neighbours and their willingness to provide them with wood. Only one household, that of plot 55, had electricity on the farm. All other respondents cited that they would like electricity as an alternative source of energy.

Households used grass to thatch roofs, dagha from anthills to plaster the walls of the dwellings and Mutondo and Mopani trees for poles. There was an average of two pole and dagha huts, a granary and kraal per homestead. The household on plot 55 had a double storey house that had previously housed the former commercial farmer, two other houses, which had belonged to the commercial farmer's two sons, and a number of sheds. This household had resorted to renting out the two smaller houses and sheds for residential purposes to people from Kadoma. At Lanteglos, resettled households had not occupied the house of the previous commercial farm owner. In the pilot survey of June 2004, the chairman of the village indicated that the homestead would be converted into a clinic and nursery school in accordance with the government's

policy for provision of infrastructure on resettled farms. However a return to the farm in March/April 2005 revealed that the current Mayor of Kadoma was renovating the homestead, so as to occupy it when his term of office expired. This illustrates the different power relations and actors in the land reform process in Zimbabwe and the marginalisation of those who do not hold such power.

Plot 54 included the houses of the former compound, which were still inhabited by the ex-farm workers. The head of household said that he planned to evict these workers as he wanted to lease out these houses. He was not sure what the government's policy towards the ex-farm workers was, but felt that as the owner and holder of the plot he had a right to evict these people. This is noteworthy, as according to the Land Policy Document (Government of Zimbabwe, 2004), the state owns all resettled lands.

The primary sources of water for households were from boreholes, wells, rivers and dams. Absentee plot holders sourced their water from Kadoma and one said he brought water in drums daily to water his tomato crop, livestock and for his workers. Transect walks and conversations with households, not revealed in the questionnaire, indicated that several households, who had drilled wells and boreholes (Plate 6.6) on their plots, had failed to strike the water table and had resorted to sourcing water from other households. There were mixed responses to the quality of the water sourced by households; those who obtained water from dams and rivers rated the quality as poor whilst nine who sourced it from wells and boreholes rated it as satisfactory or good and two rated it as excellent. Households that obtained water at the previous commercial farmer's homestead paid an average of Z\$5000 per month in December 2004. Households travelled an average of 0.71 kilometres to source their water.



Plate 6.6 A dry well dug by a household at plot 25

Transect walks and drives to the different plots revealed many depressions due to pit sand mining, notably on plots with absentee landowners. A great part of plot 41 (Plates 6.7, 6.7b, 6.7c) had depressions due to the abstraction of pit sand. The spouse of the household transferred from Martin to Pamene, who had accompanied the research team to view her allocated plot corroborated that mining had taken place on this plot as she had partaken in this since she is a part-time builder. The long term implication for the environment will be increased gullying if reclamation does not take place. This is one of the problems experienced where soils can be used for purposes other than farming, such as mining.

Plates 6.8a and 6.8b show the results of the abstraction of river sand at White Waters River whilst Plate 6.8c shows accumulated river sand near a homestead. This was sold primarily to ‘indigenous’ small-scale construction companies in Kadoma. Ngoro (2004), Madoda (2004, 2005), Bandura (2004), Mapfumo (2004), stated that this was very typical of the settlement, particularly for households that did not hold permits that allowed them to abstract river sand. They also commented that permits were often

abused by plot holders especially by workers of mostly absentee plot holders, who, allowed other people to abstract sand for a personal fee of Z\$100 000 per load. They said that they found it difficult to enforce the law on these people and thus this activity continued unabated.



Plate 6.7a Huge depressions created by the abstraction of pit sand at plot 41



Plate 6.7b Accumulation of water in the depression created by the abstraction of pit sand at plot 41



Plate 6.7c A new area for pit sand abstraction had just been dug on plot 41



Plate 6.8a A tributary of White Water River had been mined for its sand



Plate 6.8b A side view of the banks of the tributary that was mined for its sand



Plate 6.8c Abstracted river sand near a homestead

6.4.3.4 Markets

Households indicated that they sold their surplus maize and cotton to the Grain Marketing Board and the Cotton Company depots in Kadoma respectively. Maize, smaller grains, nuts and beans were also sold to households within Pamene and at Ngezi Township. Householders cited that markets were readily accessible and it was easy to secure transportation to Kadoma, as Pamene was located close to the highway.

6.4.3.5 Tenure

Households had a variety of papers to show ownership of their plots. Eighteen households held offer letters (Appendix 7) of which four had been revoked as they were said to be fake (Bandura, 2004; respondents, 2004). One household said it did not hold any papers to show ownership of the plot; another was leasing from an absentee landowner who had an offer letter. One household held a card (see Plate 6.3) and confirmation letter (see Figure 6.5), whilst one had filled in forms given to him by AREX and held a receipt of levy payment to the Rural District Council (Plate 6.3). With the exception of two households, all felt that the papers they held were insecure forms of tenure. The letter of confirmation given to one household was actually a

notification of recommendation for allocation to a plot by the DLIC and had not received authorisation from the Minister of Lands, Land Reform and Resettlement. Furthermore, in December 2004, households had to send their offer letters, to the PLIC, for confirmation of the authenticity of their offer letters following the revocation of four of these letters. For these reasons most respondents cited that they were not willing to invest extensively in the land until they are given a lease of '99 years' or title deed to the land. Therefore, the widespread destruction of the natural environment at Pamene seen in sand mining, deforestation for commercial sale of wood, gold panning, degradation of access roads, is a symptom of lack of security of tenure. The evidence of environmental degradation at plot 41 clearly illustrates negative approaches to the environment associated with unclear tenure arrangements or insecurity thereof.

6.4.3.6 Conflict, Obstacles and Challenges

The responses cited in Table 6.26 are only for 16 households that had been farming at Pamene for more than a year, as the other respondents who had been settled in 2004 were unable to cite their challenges. Accordingly, most households cited that their main obstacle was damage to crops by pests and wild animals, such as buck (nhoro), monkeys, wild pigs, mice and birds (zvikwari). The problem of stock and crop theft was more pronounced at this settlement scheme than at the other two due to the proximity of the farm to Ngezi and Rimuka townships and the lack of fencing for plots.

THE LAND IDENTIFICATION COMMITTEE: KADOMA DISTRICT:

DATE: 8 DECEMBER 2004

DEAR MR/MRS/ MISS.

RE: RECOMMENDATION OF OFFER OF LAND UNDER A2 MODEL

This letter serves to notify you that the District Land Identification Committee has recommended you for resettlement under the A2 Model on S/D.....of

....., which is Ha in extent.

Please be informed that this offer is tentative and can only be confirmed by the Minister through the issuance of an offer letter. Be also informed that it is only the Minister who can confirm, cancel or withdraw the offer and as such you will be expected to abide by whatever decision the Minister decides to take as regards this application.

SIGNATURE OF APPLICANT

DISTRICT ADMINISTRATOR.....

WAR VETS CHAIRMAN.....

LANDS OFFICER.....

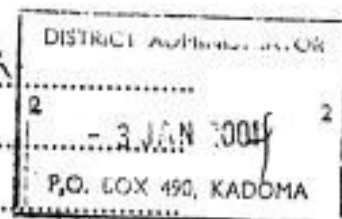


Figure 6.5 A letter of recommendation/confirmation held by some households as a sign of tenure

Table 6.26 Obstacles to farming experienced by households after resettlement at Pamene

Obstacles	All the time	Most of the time	Sometimes	Never
Pests and wild animals	10	1	4	1
Lack of finances	7	6	-	3
Lack technology /machinery	6	1	1	8
Stock theft	5	3	1	7
Lack of labour	1	3	1	11
Poor soils	1	-	4	11
Drought	-	-	7	8
Floods	-	1	2	13
Distance from fields to homestead	-	-	-	16

Number of Households = 16

The continued deforestation and sand mining was a cause of concern to some households. The District Lands Officer and the Assistant District Administrator cited that they had received complaints from households, but were unable to assist, because it was the responsibility of the Department of Natural Resources (DNR), as their job was to select and resettle beneficiaries only. This clearly shows what Masiwa (2004) reported as fragmented implementation responsibilities amongst government agencies with ‘inadequate coordination ... and synchronisation’, for neither Bandura nor Mapfumo said they referred households to the DNR in the district. The other reason cited was that fines imposed by the DNR were too small to curb these practices and were in need of legislative revision (Bandura, 2004; Mapfumo, 2004).

Some households cited that they had failed to secure inputs such as seed and fertilisers and this had delayed their preparation and in turn contributed to poor harvests. One household felt that the producer price of Z\$ 750 000 per tonne of maize offered to farmers by the GMB for the 2003/2004 season was not adequate to cover the farmers’ costs, particularly for inputs and seeds for the next season, due to the inflationary environment. Several households cited that the AREX extension officer hardly ever came to the farm and when they did, it was to attend political rallies, a situation also cited by households at Lanteglos.

Households that were settled further from the main road said that the access roads on the farm were now in poor condition as the government had not maintained the roads and that this had made transportation, particularly in the rainy season, difficult. Households felt that the government, through the RDC, should fix the roads on the farm, since they paid levies to it. Heavy trucks that collected pit and river sand from White Waters River had contributed to the deterioration of the roads and four households complained that, because the roads were owned communally, there was no ownership or responsibility to restore them. The visit to the farm in April 2005 revealed that a number of the access roads had developed rills and depressions.

Four households said there was conflict over encroachment on to their fields by other households. Significantly, these four were located at plots 53, 54, 55 and 56, which had the fertile red clay soils. The reasons cited were similar to those at Lanteglos whereby households had removed the pegs outlining boundaries.

Households complained that people from Ngezi and Rimuka Townships, who collected firewood for commercial sale, were largely responsible for much of the deforestation on the farm. Households cited that they could no longer control the rate of deforestation and the DNR had made no effort to prevent this problem. They said that because of absentee plot holders, it was difficult to determine who was clearing land for cultivation and who was cutting it for sale as many would claim to be the workers of these plot holders.

The challenges faced by households at Pamene, particularly over the use of natural resources, are likely to have a long-term impact on the sustainability of the natural environment.

6.5 Conclusion

This chapter shows that not all who applied for land in the settlement schemes necessarily met the criteria for resettlement. In addition applicants for resettlement applied through various government institutions, an indication that the procedures detailed in the literature were not followed. The majority of the households were subsistence farmers whose livelihoods depended largely on dry land crop production. The ensuing chapter contains a commentary on information gathered from interviews with key informants.

CHAPTER SEVEN: INTERVIEWS WITH KEY INFORMANTS

7.1 Introduction

Five key officials were interviewed, who have an interest in the Zimbabwe land question. They were interviewed with the intention of establishing the context surrounding the FTRLRP, the policies pursued by the government and its land institutions, the effect of the country's political economy and its associated impact on the FTRLRP, as well as changes in the natural and social environment. This knowledge will make possible a broader commentary on the FTRLRP from a political ecology perspective. The interviewees included: Professor Sam Moyo, Professor Lloyd Sachikonye, Dr Chitsike, Mr Made and Mr John Worsley-Worsick.

Professor Moyo is the director of the African Institute for Agrarian Studies (AIAS). He has written widely on land and agrarian issues in Zimbabwe and Africa (Moyo, 1995, 1997, 1998, 2000, 2004c, 2004b). Although Moyo is a critic of the government's land policy, he served, as the head of the technical unit, on the Utete and the Buka Land Commissions which were endorsed by the President of Zimbabwe. He has also been a policy advisor to government and was a member of the UNDP Technical Mission in 2000, which assessed the 'land crises' in Zimbabwe (Moyo 2004).

Professor Sachikonye worked as the head of Land Policy in the Department of International and Development Studies at the University of Zimbabwe. He has been working in this department since 1983 and his research interests are largely labour studies, agrarian and land issues, as well as the role of civil society and democratisation (Sachikonye, 1992, 2003). He has written widely on the plight of the farm workers in Zimbabwe since the FTRLRP (Sachikonye, 2003).

Dr Chitsike was a former Permanent Secretary in the Ministry of Lands, Resettlement and Rural Development during the 1980s. He was a part-time lecturer, in the

Department of Geography and Environmental Science and was the Chairman of the Forestry Commission Board.

Mr Made is a land consultant in the Environment and Land Support Unit (ELSU) of the UNDP. He is responsible for providing technical support to the UNDP on land and agricultural issues, assessing food and crop analysis in Zimbabwe and coordinating projects on agricultural recovery and irrigation rehabilitation, disaster risks and management. Furthermore he coordinated the 2001 UNDP technical mission.

Mr John Worsley-Worsick is the Director of Justice for Agriculture (JAG) and a former commercial farmer. Worsley-Worsick, before his eviction, had been farming since 1979. He began his farming career as the manager for a number of farms before he purchased his own farm in 1987. Worsley-Worsick's farm was located in Darwendale, Mashonaland West Province. According to JAG (2003) and Worsley-Worsick (2005), the JAG Trust was formed in June 2002, registered and legally constituted in September 2002. Its aim was to challenge 'the illegalities and injustice' of the FTLRP. Its formation arose from dissatisfaction amongst commercial farmers with the CFU's policy of 'appeasement and dialogue' towards government. This was compounded by the failure of government to adhere to the principles of ZJRI, curb land occupations and enforce the rule of law, most notably as it pertained to property rights. The government perceives this organisation as militant in its pursuit of legal redress in the courts.

Selection of these key officials was by means of a snowball technique and a semi-structured interview guide (Appendix 3) was administered. The length of interviews ranged from 45 minutes (Dr Chitsike) to 1 ½ hours (Moyo and Worsley-Worsick) and they were recorded on a Dictaphone. Therefore, there are variations in the length of documentation and analysis of transcribed data for each interviewee, obtained using content analysis. Interviews with Chitsike (who provided referrals to key government officials and other key stakeholders in the land process), Moyo and Made took place in October 2004, with that of Sachikonye in November 2004 and that with Worsley-Worsick in June 2005.

This chapter has been organised to include descriptions of the interviews with the key officials, followed by a discussion of the key themes raised by respondents and the conclusion.

7.2 Professor Moyo

7.2.1 The political structure

Moyo provided a general overview, of the land process in Zimbabwe and placed some emphasis on the FTLRP. He emphasised that the FTLRP had been a highly politicised/ political programme and needed understanding within this context. The process had been radical and did not happen or start overnight or in 2000. The radical approach to land reform in Zimbabwe began in 1997 with the initial designation of 1471 farms for acquisition by the government.

At the same time, he maintained that Zimbabwe had experienced land occupations since 1980 and that the land occupations of 2000 were the result of the build-up of processes and structures that had already existed. In his interview, he referred to the words 'structure' and 'processes' 28 times, emphasising that the FTLRP was a process and not an event and that different structures relating to the land question had existed prior to the formal adoption of the programme by the government in June 2000. He acknowledged that the FTLRP had created or changed the agrarian and spatial structure within the country.

The processes and changes in structure before 2000, started with the amendment of the constitution to allow for the compulsory acquisition of land in 1992 and then the gazetting of 1000 farms for acquisition in 1997. This signified that the government had adopted a radical land reform policy prior to 2000. There was a revision of land policy in 1996/1997, which resulted in the reduction of the farming models from four (models A, B, C, D) to two (models A1 and A2), as described in the literature. Politically, alliances on two fronts took place prior to 2000. Firstly, ZANU – PF restructured itself and formed an alliance with war veterans in 1997/1998, with the subsequent cooption of the war veterans into key government posts. Secondly, alliances of trade unions, civic organisations (that had been reacting to the

compulsory acquisition of land and advocating good governance) and white and black proprietors resulted in the creation of the MDC party, a new structure within the Zimbabwean political field.

These structures resulted in changes within the political landscape of Zimbabwe. When the MDC posed a strong electoral challenge to the ruling party, the war veterans already incorporated into ZANU-PF, mobilised people who were already in favour of farm seizures, thus accelerating the radical land programme already embarked on by the government prior to 2000. Moyo referred to the opposition party more than he did to ZANU-PF, emphasising the highly political motivation behind the FTLRP.

For Moyo, quantitatively, the FTLRP created a new structure in land ownership as there are 'more' indigenous farmers 'owning' a piece of land, through the reduction of large to smaller land holdings in the commercial farming areas. Since land acquired for resettlement automatically becomes state land, the government of Zimbabwe increased the size of the land under its ownership. The land policy has resulted in changes from freehold tenure to an 'interim' period of tenure, causing insecurity as beneficiaries have not yet been given leases or forms of title to their lands by the government.

It is important to note that Moyo did not refer to the farm occupations as 'land invasions', this is significant as it illustrates and emphasises that the land occupations of 2000 were part of a movement that had already existed in Zimbabwe; and that the government had come to accept as part of the land question prior to 2000. He said the occupations of 2000 started through the mobilisation of people already prone to land occupations/squatting.

7.2.2 Land institutions

Moyo described the changes in government land institutions as evolving from events rather than the result of technocratic planning. Although there had been technocratic planning prior to the FTLRP, Moyo stated that the implementation process since the FTLRP was loosely structured, but that it was presently evolving into a clearer

structure. This evolution is indicated particularly in the creation and restructuring of government institutions administering land issues, such as the establishment of a separate Ministry of Lands, Land Reform and Resettlement, which prior to the FTLRP had been a department in the Ministry of Agriculture, Resettlement and Rural Development (Moyo, 2004; Samuriwo, 2004). The amalgamation of the research and extension functions in the former Departments of Agritex and Research Specialist Services into AREX (Moyo 2004; Makhado 2003), the creation of a Department of Livestock Production and Development and the Department of Agricultural Engineering (Moyo, 2004; Makhado 2003) were further indications of the changes in government's land institutions.

7.2.3 The macro-economic environment

Moyo states that the poor macro-economic environment in Zimbabwe after 1992 contributed to events in 2000. These economic conditions precipitated social discontent in the urban areas and caused the war veterans to be militant in their demands for monetary compensation and land from government. The poor performance of the economy, coupled with dissatisfaction with the political landscape resulted in the formation of the MDC party, which then posed a strong electoral challenge to the ruling party in 2000. Moyo said that there had been 'opportunists' in this land programme; he used this word seven times, often after making a statement about the government, war veterans and ZANU–PF, perhaps inferring that most of the opportunists within this land programme had come from this group of people.

7.2.4 Tenure

In terms of tenure, Moyo shows preference for the leasehold system, as he spoke positively about this system of tenure 18 times in the interview. He supported the government's proposal to issue the A2 farmers with leases and believed that this system would prevent the misuse and underuse of land and make it easy for the government to control and administer the land process. He mentioned freehold tenure three times in the interview, and at all times spoke negatively about it and used the word 'insecure' next to it indicating that freehold tenure in Zimbabwe was not a sign of security and thus he did not advocate this system. He said that beneficiaries would

receive leases in 2005, once the Administration Court confirmed the farms acquired for resettlement. According to Moyo, as of October 2004, the Administration Court had only confirmed 500 farms for acquisition and resettlement.

7.2.5 Conclusion

Moyo placed emphasis on understanding the context of the FTLRP, the structures and processes that govern it and how economic and political factors had been major contributors to the FTLRP. He placed little emphasis on the impact the process has had on the environment, compared to Chitsike, as he believed that the statistics on the ground did not reflect debilitation of the environment to levels that are unsustainable or irreversible.

7.3 Dr Chitsike

Chitsike was interviewed twice because in the first interview he provided referrals to government officials, particularly the Permanent Secretary of Land, Land Reform and Resettlement, a former colleague, from whom permission to undertake the research had first to be sought. In the second interview, Chitsike concentrated on the provision of the historical overview of the land process in Zimbabwe, unlike Moyo who focused on the FTLRP. He spoke positively about the government's resettlement programme in the 1980s and referred to it as 'orderly' and 'planned', in concurrence with Moyo's assertion of technocratic planning prior to the FTLRP. Chitsike contrasted this to the FTLRP of which he spoke of negatively through the usage of words such as 'jambanja' (chaos), 'disorderly', 'unsustainable', 'degradation'.

The main emphasis in the interview was that he viewed the land use practices of the new farmers as being unsustainable due to lack of capital to invest and care for the land and poor land management. Chitsike felt that lack of ownership by the new farmers had led to Hardin's concept of the 'Tragedy of the Commons' in the newly resettled communities. He constantly referred to the high rates of deforestation, forest/veld fires being experienced countrywide, and the lack of measures taken by government to curb malpractices in resource utilisation. This he attributed to the lack of clear structure in the government and the failure of government to control the usage

of the land and its resources in the newly resettled areas. Chitsike's viewpoint is illustrated by the failure of government institutions to intervene in order to control the over-exploitation of the natural resources in the study areas.

This research's findings, particularly at Pamene farm, indicated uncontrolled abstraction/mining of river and pit sand and high levels of deforestation for firewood collected for sale to the community in Kadoma. The effects of this will be environmental degradation and unsustainable resource utilisation. The lack of structure and control by government, said by Chitsike, to curb these environmental problems was evidenced by the failure of local government officials to reach a consensus as to which institution was responsible for monitoring and enforcing fines. The assistant DA, District Lands Officer and AREX felt that it was the responsibility of the Ministry of Environment and Tourism and the role of the Department of Natural Resources (DNR) to impose fines to curb such activities. Whilst an official from the head office of the DNR in Harare felt that that it was the role of the RDC to monitor such activities in the resettlement areas and enforce sound management of the resources through local council by-laws and regulations, with the help of the police.

Furthermore, since the RDC issued permits to abstract sand, these could be withdrawn from permit holders who abused the premise of the permit. All these government officials noted that the fines imposed through statutes were not sufficient to curb malpractices in the environment. For example as of December 2004, the fine for gold panning was Zimbabwean \$25 000 or three months imprisonment, but with the poor macro-economic environment and the large amount of money, that one can earn through panning, this fine was not prohibitive. The official from the DNR cited said that lack of enforcement was due to the political nature of the FTLRP and fears of being perceived as a member of the opposition if one tried to implement legislation. This could be a reason for the reluctance on the part of the departments to take responsibility for law enforcement and monitoring in the resettled areas.

7.4 Mr Made

The focus of this interview was primarily on the role of government in the FTLRP as Made, referred to the government 45 times. Made focused on its capacity, resources

and institutions to provide for a sustainable land reform programme. He referred to each of these three concepts eleven times in the interview and mostly in relation to government's inadequacy to provide for the FTLRP. In addition, he emphasised the need for 'dialogue', referring to this 13 times, amongst government, commercial farmers and the donor community through the facilitation of the UNDP. The UNDP's role as a brokering institution according to Made was based on its decision to remain neutral and impartial over the land crisis in the country.

Eleven times in the interview, Made referred to the diminished 'capacity' within government institutions for policymaking, its human resources to implement the land reform programme and to provide resources to the beneficiaries alone. He commented that the brain drain had weakened these institutional capacities, particularly since young and inexperienced people were employed to fill the gap as is evidenced in the comments made by the Director of Resettlement in the Lands Ministry concerning this in Chapter Two. Hence, for Made this led to 'piece meal' policies, legislation and anomalies in the FTLRP, also observed by the Utete report. Made suggested five times in the interview the need to 'strengthen' government institutions, particularly its human resources that were under extreme pressure to achieve government policies. These reinforce Chitsike's point regarding the lack of clear structure, control and coordination in government institutions since the FTLRP.

He illustrated the government's diminished capacities by using example of the AREX extension officers in the country. Made said that the ideal ratio for extension officers to farmers is 1:37 but presently the figure was 1:66, clearly exerting tremendous pressure on the ability of extension officers to provide extension services satisfactorily. The fact that some respondents in the study areas had complained that AREX extension officers hardly ever came to assist them, except when there was political rally held by the ruling party and that AREX had countered this by citing that they did not have transport to visit all resettled areas, supports Made's observations. He used the word 'resources' eleven times and mostly in association with phrases such as 'lack of', 'need for' and 'failed access to', alluding to the fact that the government did not have the resources to implement the FTLRP successfully. This therefore compromised the ability of the government to bring about sustainable development. All four references to the phrase 'sustainable development' were

associated with the decline in productivity, lack of resources, diminished capacity of government institutions and the ‘disorderly’ method in which the FTLRP was implemented.

For these reasons, Made felt that there was a need for donor support to assist with the technical aspects of the FTLRP, such as the provision of infrastructure, policy advice, transport and communication. He was also concerned about the level of agricultural productivity in the country, which he mentioned 20 times in the interview, of which 14 instances were associated with words such as ‘decreased’, ‘declining’, and ‘reduced’. Made said that since the UNDP concerned itself with issues of development, poverty reduction and improvement in livelihoods, they felt that the situation in the country since the FTLRP required mediation amongst the government, stakeholders, commercial farmers and the donor community. He used the word ‘dialogue’ 14 times in the interview, particularly with reference to the donor community, whom he referred to in this context seven times compared to the others. He felt that the donor community was the best-placed source for the provision of resources and technical support to assist the government in its FTLRP and provide for sustainable rural development. This is further emphasised by his statement that “dialogue is there not only to help the farmers, but really to stabilise the land and the agricultural sector in order to bring back production to its normal levels, but to do this you need resources and the resources are the donors”

Made recognised that the FTLRP was political, as did Moyo and Chitsike, and his reference to it was associated with words such as ‘disorderly’, ‘chaos’, ‘jambanja’, ‘unplanned’. However, he focused more on the government’s limitations in this process by highlighting a variety of problems it faced that hindered productivity, the development of a comprehensive policy and sustainability of the programme. The solution posed was for the government to engage in dialogue primarily with the donor community for technical assistance.

7.5 Professor Sachikonye

Sachikonye, like Chitsike spoke positively about the resettlement process prior to 2000 and negatively about the FTLRP. Sachikonye felt that the role of the

government since the FTLRP should be the provision of a stable economic and political environment, as well as to train and equip the new farmers with skills appropriate for farming in the particular agro-ecological zones resettled. This was important for sustainable rural development and the livelihoods of the new farmers. He, similarly to Made, conceded that this development was unlikely to occur at present, due to the government's lack of capacity to provide technical, infrastructural and financial support to the new farmers. Judging from the research, with the exception of providing the beneficiaries with land, the government had supplied little else. Sachikonye concurred with Chitsike on the lack of coordination of government institutions responsible for land issues and that this often led to the duplication of work. He felt that there were few resources for the new farmers to utilise in their farming and, like Made, favoured donor intervention in the land process, which he referred to over six times in the interview.

For Sachikonye, the government needed to plan for the training and equipping the new farmers with skills, capital and credit facilities, provision of access to markets, locally, regionally and internationally, or through contract farming. This would allow for the realisation of a successful land reform programme that could lead to sustainable development and livelihoods in the resettlement areas. Sachikonye stated that new farmers were unable to secure markets apart from those owned by the government. Contract farming had diminished since the FTLRP because the remaining large-scale commercial farmers no longer contracted smallholders due to the government's failure to provide a stable political environment conducive for such transactions.

Both Moyo and Sachikonye concur that it will take "almost a decade or more" for the new farmers to reach the level of productivity of the former white commercial farmers, provided that they received similar subsidies and support from the government. This viewpoint illustrates the notion provided by Made that production levels in the country had severely decreased since the inception of the FTLRP and that the government needed donor support to provide the same kind of support as had been given to the former commercial farmers. The research findings at all three of the study areas showed a substantially lower productivity rate compared to that of the previous commercial farmers.

Sachikonye added that shortages of fuel, inputs, tenure insecurity and lack of labour and skills would continue to hinder the productivity and success of the new farmers. Responses and observations made from the surveys showed that these factors were mentioned as part of the challenges and obstacles faced by beneficiaries at the three settlements studied. Sachikonye placed less emphasis on the natural environment as he only referred to this twice in the interview, compared to Chitsike. He did however, acknowledge the negative impact of the FTLRP on the environment through poaching and deforestation.

7.6 John Worsley-Worsick

Like Chitsike, Worsley-Worsick provided a historical overview of the land question in Zimbabwe, dating back to the occupation of the country by the BSAC in 1890. Worsley-Worsick emphasised that the responsibility for the segregationist policies in Rhodesia lay with the British government and the Privy Council ruling that gave the BSAC authority to administer and sell land, and NOT with the white commercial farmers. Because of this, Worsley-Worsick said he believed that the British government had an obligation to compensate white commercial farmers whose property had been compulsorily acquired through the FTLRP. Both he and the government of Zimbabwe agreed that compensation had to be paid by Britain, but differed in that the government blamed both Britain and the white commercial farmers for segregationist land policies.

At the start of the interview, Worsley-Worsick stated that his organisation recognised and supported the need for land redistribution in the country, but did not support the manner in which the government had implemented the FTLRP. All 12 referrals to the 'FTLRP' were associated with negative words and phrases such as 'unsustainable', 'lack of transparency', 'uneconomical', 'destruction', 'degradation of environment', 'low productivity', 'insecurity' and 'lack of tenure'.

Worsley-Worsick, like Moyo, Chitsike, Made and Sachikonye, commented that the FTLRP was highly political and directly correlated to the strong electoral challenge of the MDC. Worsley-Worsick used the word and phrase 'political' and 'strong electoral

challenge’ twelve and seven times, respectively, in the interview. This emphasised that he felt the motivation behind the FTLRP had been political and largely a result of the electoral challenge by the MDC, which was perceived by government to have been funded and supported by the white commercial farmers. Worsley-Worsick said that a survey done by the Farm Community Trust of Zimbabwe prior to the referendum indicated that land had been of least concern to both urban and rural respondents. Only seven and eight percent of the urban and rural respondents rated it as being an important national question, contrary to the government’s pronouncement that it was being pressured by landless people from both the urban and rural areas. Furthermore, he recognised that due to the political nature of the FTLRP, land and the financial support offered by the CFU under ZJRI to government was belated. Government was no longer interested in negotiating, as its political ‘survival’ was dependent on enforcing the FTLRP.

In terms of tenure, Worsley-Worsick, unlike Moyo, preferred freehold tenure, as he spoke positively of it eight times in the interview. He argued that it provided security; allowed for long-term investment, which facilitated the development of land to its full productive potential; and was a strong source of collateral. He attributed the successes and development of LSCF prior to the FTLRP to this. On the other hand, compared to the 18 times Moyo spoke of leasehold tenure, Worsley-Worsick only spoke of it once and negatively. This indicated his preference for freehold tenure. His statements “you cannot be a commercial farmer without title” thrice in the interview revealed his preference for freehold tenure.

Worsley-Worsick mentioned ‘insecurity of tenure’ ten times in the interview. Of which three times were prior to and seven times after the FTLRP. This suggested increased insecurity of tenure since the FTLRP. He noted that from satellite images compiled by his organisation and its observations, acquired farms for resettlement showed an increase in environmental degradation, particularly from deforestation and gold panning, mainly in Kadoma and Kwekwe Districts. This was suggested as a symptom of lack of security of tenure since the FTLRP.

According to Worsley-Worsick, sustainable farming is largely dependent on the recognition of appropriate land use patterns, the injection of capital and good and

sound management policies for farming enterprise. Failure of this is likely to lead to unsustainable farming methods and negative repercussions on the environment as a whole. Worsley-Worsick cited that if the remaining 500 commercial farmers in Zimbabwe, as of June 2005, are permitted to return to their farms, they would be able to solve Zimbabwe's acute food shortages and foreign currency deficits. This suggested that the current farming practices of the resettled farmers were not as productive compared to those of the former commercial farmers and therefore economically unsustainable. As aforementioned, the research findings indicated that, since the FTLRP, the total output/ productivity of the beneficiaries was much lower than that of the previous commercial farmers. It also showed that most farmers were growing food crops such as maize of which little was sold on the domestic market, compared to the previous commercial farmers, who grew both food and cash crops for the domestic and international markets.

7.7 Conclusion

All the officials who were interviewed acknowledged that, numerically, the government had redressed the historical imbalances in land ownership through the FTLRP; however, this was associated with lowered productivity and, perhaps in the interim, the people are worse off than before. All stated that the FTLRP was political and had not been planned well, however Moyo differs by stating that although it was a highly political process, the government had embarked on a radical land programme in 1997 and that 2000 was a 'rapid radicalisation of the process'.

Moyo and Sachikonye were both in favour of leasehold tenure, compared to Worsley-Worsick, who abhorred it in his preference for freehold tenure. The other two informants did not state which system of tenure they favoured, although they mentioned tenure insecurity associated with the present FTLRP.

Worsley-Worsick and Chitsike, unlike Moyo, believe that the FTLRP has brought about severe and, in some cases irreversible environmental degradation. They attribute this to insecurity of tenure, the tragedy of the commons and the poor macro-economic environment that has forced people to turn to the natural environment as a source of income. Moyo, on the other hand, believes that the changes in the

environment and ecosystem are not as severe as purported by conservationists and that “nature can reconstruct itself or be recreated by man”.

Chitsike and Sachikonye believed that the future land problem in Zimbabwe would be competition for urban land, rather than rural land. Made and Sachikonye stated that the government needed to restore international relations and create a stable economic and political environment for investment in the agricultural sector to take place, as well as for the restoration in the agro-based industry. Both were concerned with the need for sustainable rural development in the country.

The next chapter will provide further insight into the changes in the natural environment.

CHAPTER EIGHT: THE NATURAL ENVIRONMENT

8.1 Introduction

This chapter provides an overview of the changes in the natural environment at Lanteglos, CC Molina and Pamene. GIS based techniques were used in assessing three sets of thematic map images from the following dates 1972/76, 1992 and 2002. This chapter documents and analyses the spatial pattern of resources use, landscape structure and changes that have occurred in the study areas. The principal aim of this chapter is to extend understanding of how human activities have altered the natural environment of these three study areas. The observations are integrated with information from the household surveys and the interviews with the former commercial farmers, which describe the activities on the farm before and after transfer, in order to understand the nature of the changes that have occurred and to meet the objectives of this research.

The spatial changes that have occurred in the Muzvezve ICA under the FTLRP have been documented first to provide a context for the changes in the spatial environment throughout the district. This is followed by a descriptive account of each study area. A description of conditions in the base year (1972 in the case of CC Molina and 1976 in the case of the other two farms) will be introduced in order to provide the reader with a context from which to view changes in land cover/uses on the farms.

8.2 Muzvezve ICA

Preceding the FTLRP there were 167 farm holdings in the Muzvezve ICA, which were owned by various organisations and individuals. Figure 8.1 illustrates the spatial landscape of the Muzvezve ICA before the FTLRP. It indicates that the majority of the farms, 97, were owned by white commercial farmers, whilst 57 were held by black commercial farmers. It also shows that three farm holdings had been acquired for resettlement prior to the FTLRP and that the Muzvezve ICA included Kadoma Municipal. The land holding structure shows increased black participation in the commercial agricultural sector in line with the literature, previously mentioned.

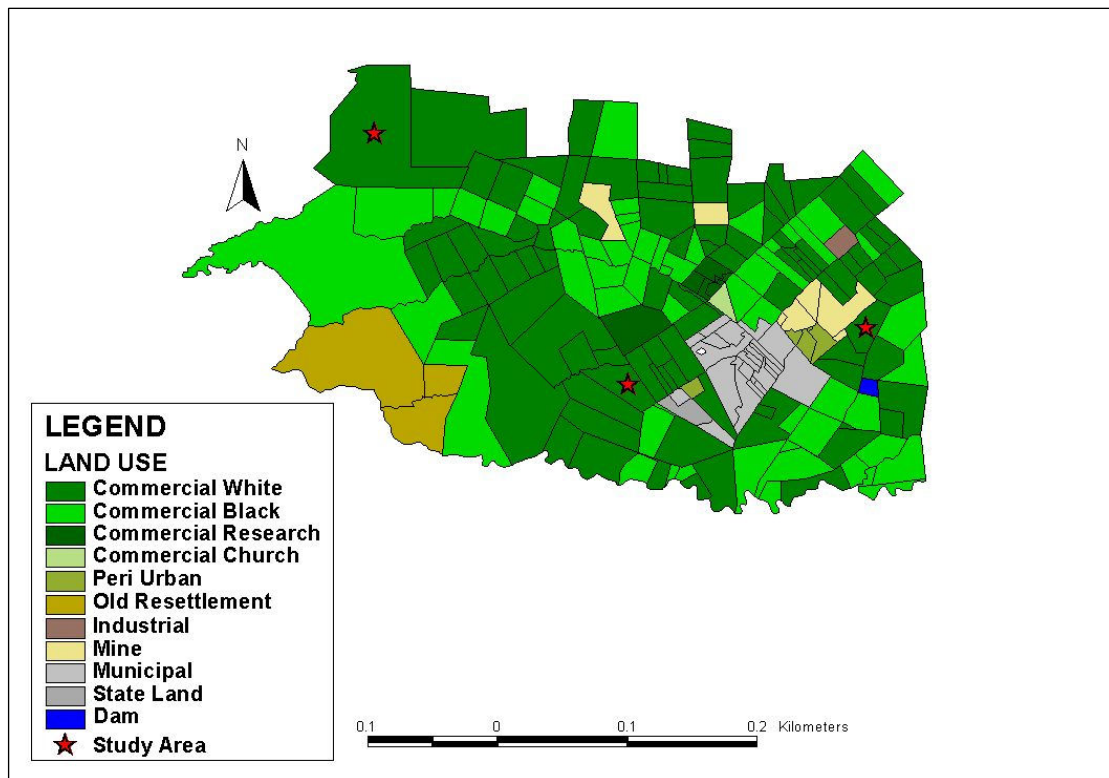


Figure 8.1 The spatial landscape of the Muzvezve ICA prior to the FTLRP

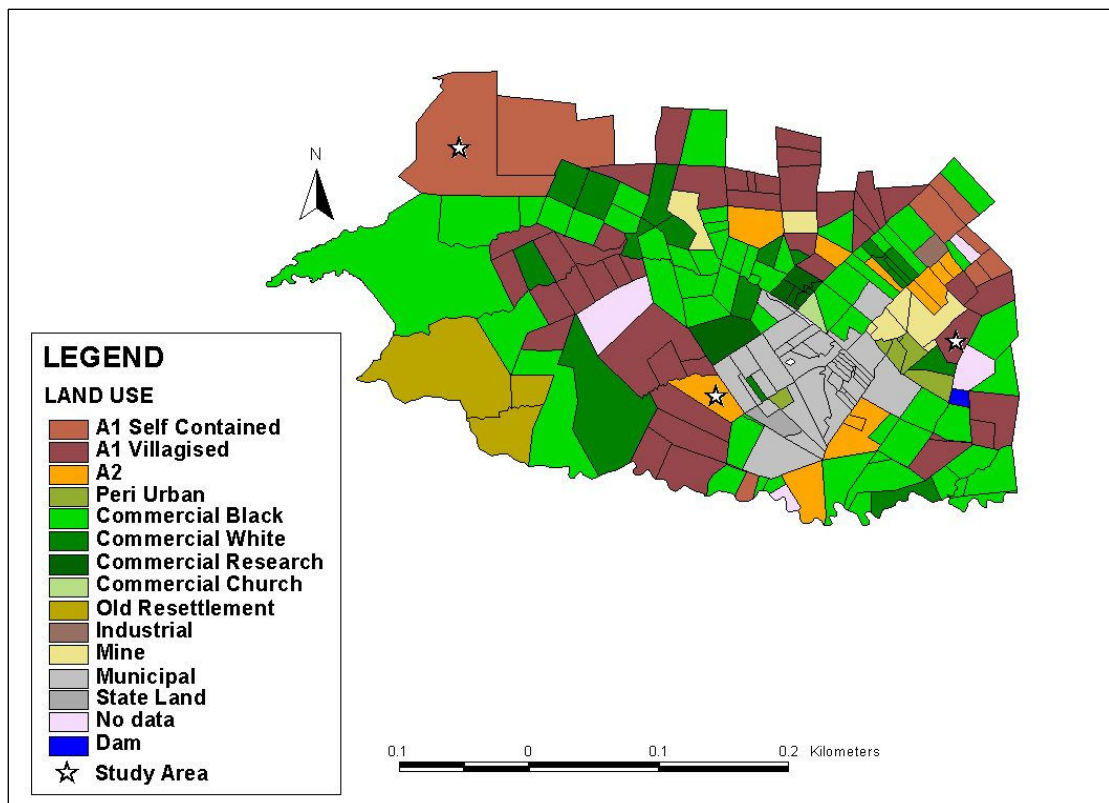


Figure 8.2 The spatial landscape of the Muzvezve ICA under the FTLRP

Significant changes, indicated in Figure 8.2, to the spatial landscape of the ICA occurred under the FTLRP. By December 2004, the white owned commercial farms had been drastically reduced from 97 to 18, of which the remainder were mostly, according to Mapfumo (2004) and Mupeta (2004), dairy farms. The area under Municipal ownership had increased significantly as the Municipality had acquired 11 farm holdings under the FTLRP. The majority, 42, of the acquired farms were placed under the A1 villagised resettlement scheme, followed by the A2 small-scale settlement scheme. Black owned commercial farms and those used for research and held by the church were not acquired for resettlement.

8.3 Lanteglos Farm

The dominant land cover/use at the farm in 1976 was bush followed by woodland and then cultivation. Cultivation in 1976, was practised mostly on the south-west side of the farm and along the central and eastern parts. The farm was largely comprised of Musasa and Mupfuti woodland.

Table 8.1 Changes in land cover on Lanteglos farm between 1976 and 2002

Lanteglos			
1976-1992 and 1992-2002			
Landcover	Area 1976 (ha)	% change 1976 - 1992	% change 1992 - 2002
Bushland	388.529	-36.04%	112.20%
Cultivation	244.277	-3.46%	-53.50%
grassland	9.200	-2495.76%	-90.5
riverine	11.589	100.53%	30.70%
woodland	265.533	-38.32%	40.10%

In 1976, the largest single type of land cover on the farm (388.529 hectares) was bush. The period 1976 to 1992 saw large decreases in woodland and bushland with both types of land cover decreasing by over 30%. The area under cultivation stayed more or less constant in this period. On the other hand, there was a significant increase in grassland land cover by 2495.76%. Appendix 8A shows the actual conversion from one particular type of vegetation cover to another. From Appendix 8A and Figure 8.3, it can be seen that in the period 1976 to 1992 nearly 60% of the woodland initially present was converted to bushland, thus accounting for the losses in woodland areas and this in itself would suggest an increase in the total bushland area. However, in the

same period just over 167 hectares, 43% of the bushland was itself converted into grassland, resulting in a net decrease in bushland by 1992.

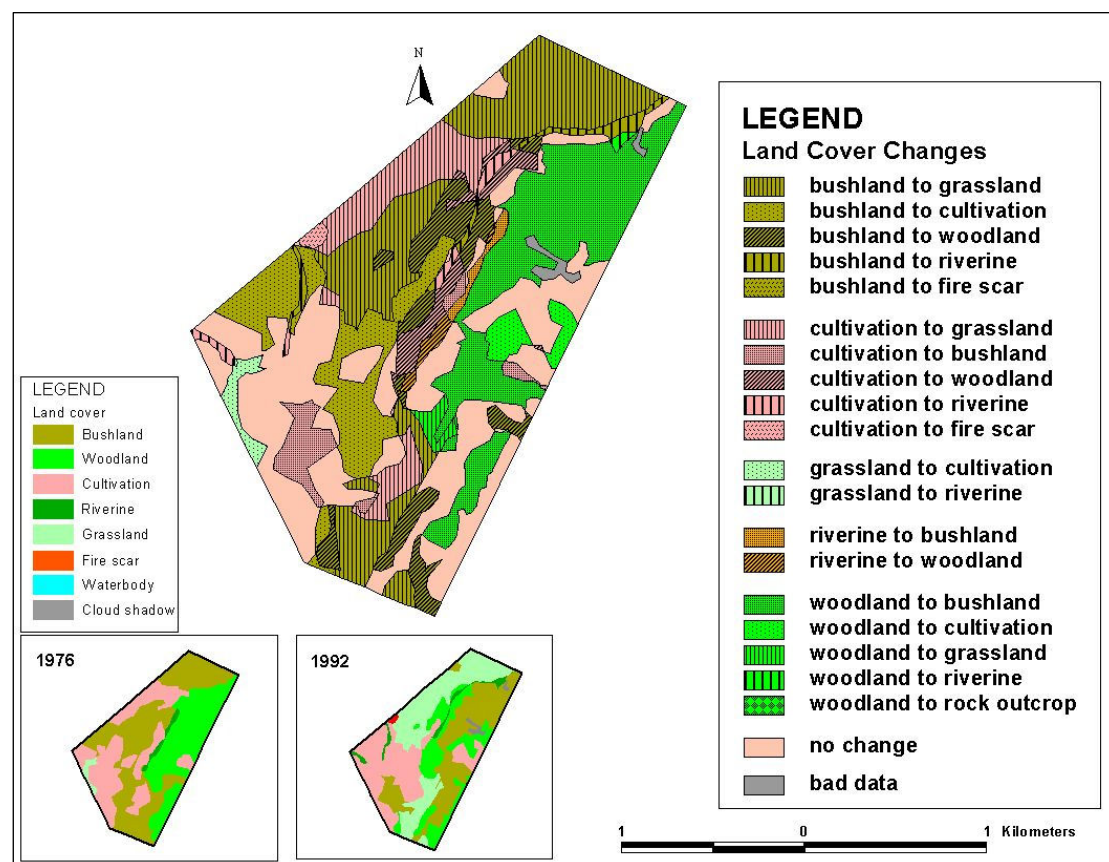


Figure 8.3 Land cover changes at Lanteglos between 1976 and 1992 (insert maps show the land cover on Lanteglos in 1976 and 1992)

The period 1992 to 2002 saw a drastic decrease in the area under grassland by 90.5%. The next major change was a decrease in the area under cultivation, followed by decreases in woodland on Lanteglos farm. The major causes of these decreases (Appendix 8A and Figure 8.4) were conversions to bushland (64.1%, 37.5% and 42.8% respectively). Therefore, there was a net increase in the area under bushland. This data suggest that between 1992 and 2000 the former commercial farmer, Edwards, had reduced the area that he had cultivated. This is consistent with the history of land use practices commented remarked upon by Edwards and reported earlier, that he had ceased certain crop activities and reduced the area under cultivation, preferring to practise intensive crop production at the other two farms, Tannach and Weston, which were located in a better agro-ecological region, Ilb. This

also explains why most households reported that in the first two years after resettlement they had to clear land for cultivation. This was done manually and through slash and burn methods. Appendix 8A, shows that significant losses in grassland and some losses to bushland were from fire scar. From the household surveys and observations during transect walks, it is expected that the 2004 landsat images would have indicated an increased area of cultivation, although not to the same extent as that in 1976. This would be followed by significant losses of bushland, grassland and riverine vegetation due to conversion mostly to cultivation and clearing for building and firewood.

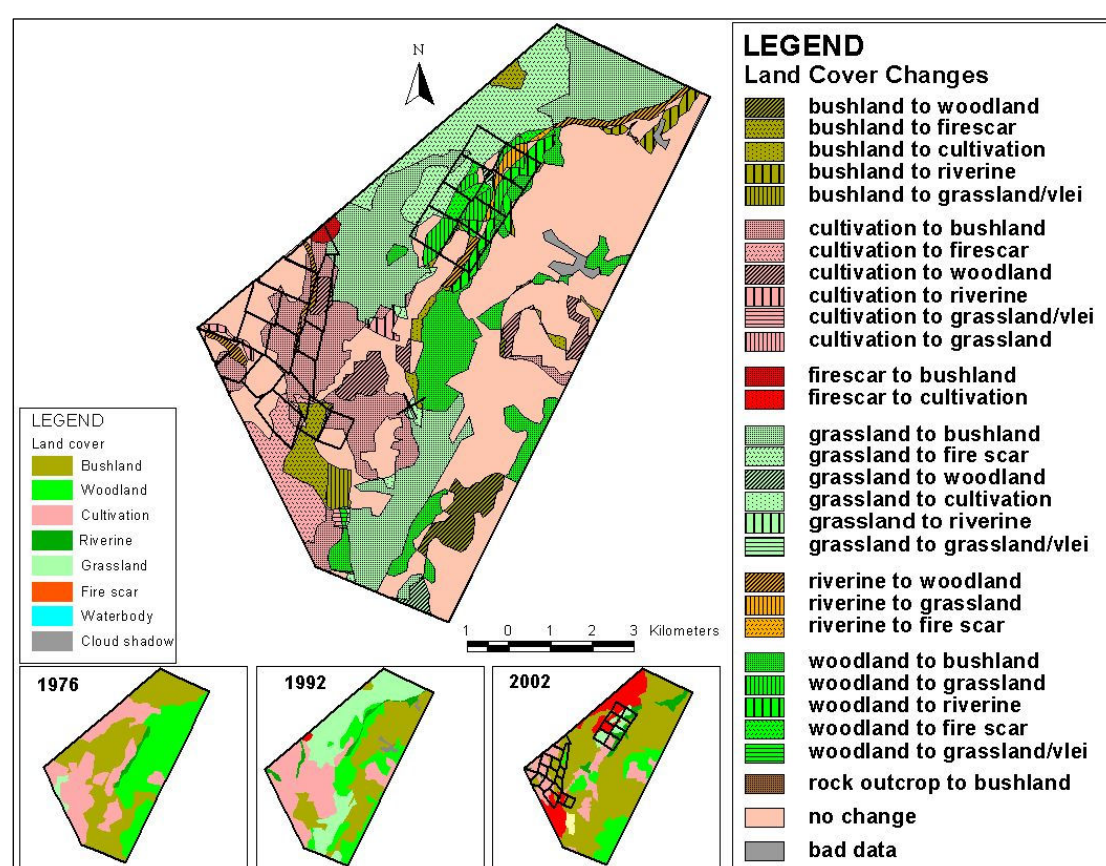


Figure 8.4 Land cover changes at Lanteglos between 1992 and 2002 (insert maps show the land cover on Lanteglos in 1976, 1992 and 2002)

8.4 CC Molina

In 1972, CC Molina, like Lanteglos, consisted predominantly of bushland, but this was followed by a higher portion of land under cultivation, primarily on the western

margins of the farm, and then by woodland vegetation. Large patches of grassland, totalling 1114.25 hectares, were interspersed throughout the farm, as indicated in Figure 8.5. There was also a significant amount of riverine forest at the farm in 1972. Table 8.2 summarises the changes in land cover that occurred from 1972 to 2002 at CC Molina.

Table 8.2 Changes in land cover on CC Molina farm from 1972 and 2002

CC Molina			
1976-1992 and 1992-2002			
Landcover	Area 1976 (ha)	% change 1976 - 1992	% change 1992 - 2002
Bushland	2822.651	42.85%	43.80%
Cultivation	1544.809	-63.30%	19.10%
grassland	1114.251	63.53%	-89.7
grassland/vlei	52.459	105.27%	91.3
riverine	287.864	20.48%	-36.90%
woodland	1289.485	-88.41%	-81.30%

In the period from 1972 to 1992, significant decreases were observed in the total area under woodland and cultivation on CC Molina farm. Much of the area initially under cultivation was converted to bushland in this period, whilst most of the area initially under woodland was also converted to bushland (Appendix 8B and Figure 8.5). These conversions resulted in a significant increase in the area covered by bushland on CC Molina by 1992. The losses of cultivation correspond with information provided by the former commercial owner, Lubbe. He mentioned that together with his brother, they had bought the farm primarily for cattle breeding in 1976, and only continued with crop production on the south eastern part of the farm. Chinese Lantern bush encroachment, previously mentioned in Chapter Five, on areas cleared for cultivation in this period could explain the increase in bushland from cultivation.

The changes between 1992 and 2002 are more significant, as under the FTLRP, the spatial structure of the farm changed from one consolidated unit to 125 small self-contained units. Although not reflected on the maps, each farming unit had an average number of 3 homesteads, a kraal and a chiguri, all of which have altered the landscape and spatial structure of the farm.

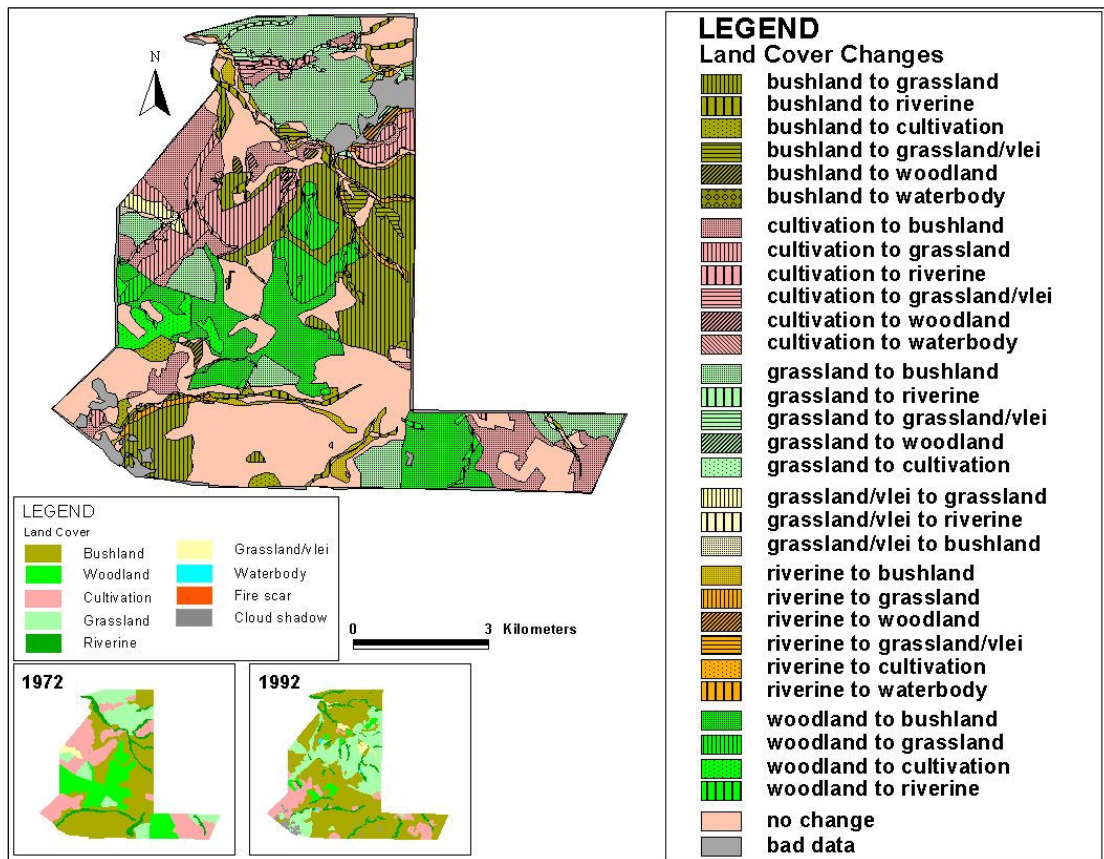


Figure 8.5 Land cover changes at CC Molina between 1972 and 1992 (insert maps show the land cover on CC Molina in 1972 and 1992)

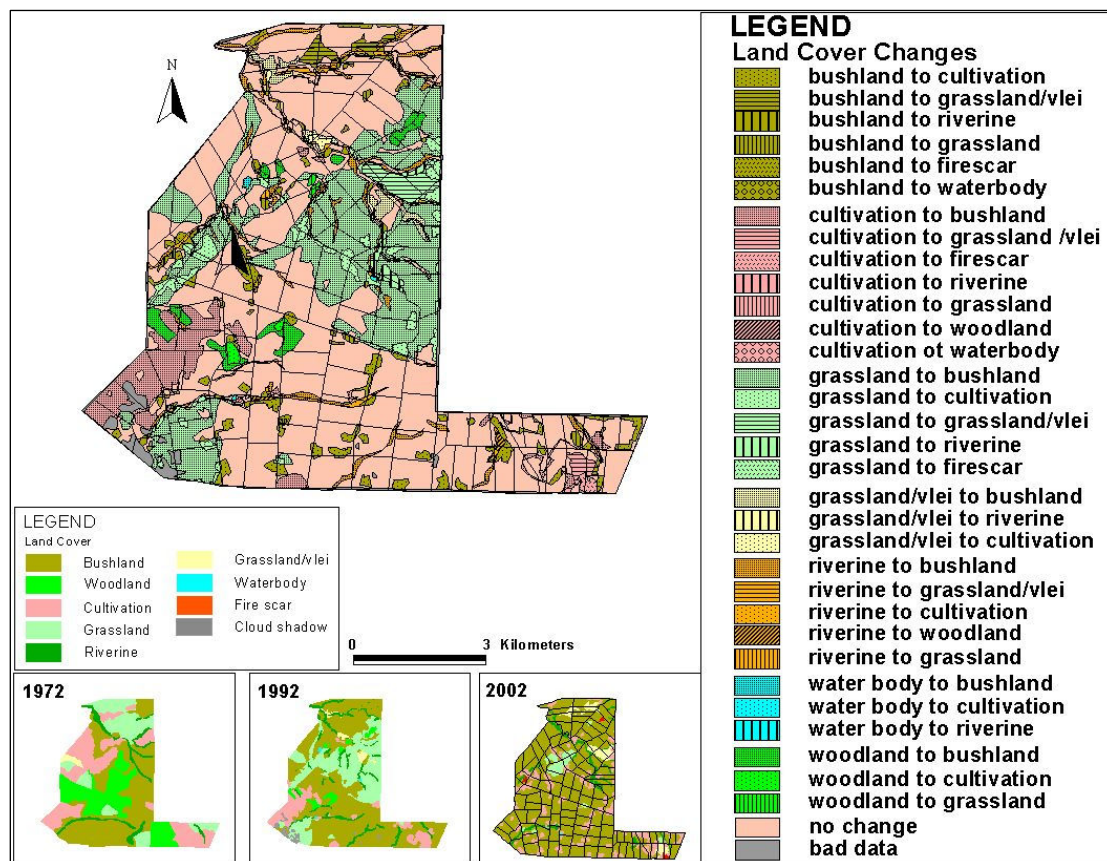


Figure 8.6 Land cover changes at CC Molina between 1992 and 2002 (insert maps show the land cover on CC Molina in 1972, 1992 and 2002)

The period from 1992 to 2002, as indicated in Figure 8.6, saw further losses of woodland and drastic losses of grassland. The losses of woodland and grassland were primarily conversions into bushland and land under cultivation. The conversion of woodland into bushland is ascribed to indiscriminate tree cutting during the farm invasions of 2000 and later by resettled households for fuel consumption and sale (Plate 8.1), and for construction. Appendix 8B shows that 12.1% of woodland and 9.9% of grassland was cleared for cultivation and Plates 8.2 and 8.3 show plots at CC Molina that were cleared by slash and burn methods



Plate 8.1 Firewood collected for sale by a resettled household at CC Molina in November 2004



Plate 8.2 Clearance of vegetation using slash and burn methods on a plot at CC Molina in November, 2004



Plate 8.3 Clearance of vegetation using slash and burn methods on a plot at CC Molina in November, 2004

8.5 Pamene

In 1976, the farm was mostly endowed with bush vegetation, as was the case on the other two farms. The areas under cultivation and woodland vegetation, which comprised the next major land covers, were interspersed around the farm. There was a fair amount of riverine forest and grassland vleis during this period, indicating the presence of both a ground and a surface water supply. The White Water River ran along the northern boundary of the farm and there were three water bodies presumably, dams.

Table 8.3 summarises the changes in land cover that occurred from 1976 to 2002 on Pamene farm. Table 8.3 indicates that the principal landscape changes that occurred between 1976 and 1992 included a significant decrease in the area under cultivation, followed by decreases in the area occupied by water body and woodland. On the other hand there was a significant increase, by 19%, in the area under bushland. From Appendix 8C and Figure 8.7, the increase in bushland is seen to be a result mostly of the conversion between woodland and bushland. Changes from riverine and cultivation to bushland were also significant contributors. As mentioned in Chapter Five, failed tobacco production in the 1950s and 1960s had resulted in crop production being limited to about 80 hectares on the clay soils. Read then bought two other farms, like Edwards, on which to increase his crop production.

Table 8.3 Changes in land cover on Pamene farm from 1976 to 2002

Pamene			
1976 to 1992 and 1992 to 2002			
Landcover	Area 1976 (ha)	% change 1976 - 1992	% change 1992 - 2002
Bushland	662.511	19%	-13.8%
Cultivation	209.994	-54%	92.3%
Riverine	67.123	3%	-47.4%
Water body	13.966	-15%	-3.7%
Woodland	181.678	-12%	-19.2%
grassland/vlei	98.545	-6%	14.6%

The significant changes in land cover between 1992 and 2002 on Pamene farm seen in Figure 8.8 were decreases in riverine land cover followed by woodland and then bushland. However, there was a significant increase in the area under cultivation. From Appendix 8C, it can be seen that in the period between 1992 and 2002, 47.4% of the riverine forest initially present was converted to bushland, thus accounting for the losses in riverine areas and this in itself would suggest an increase in the total bushland area.

However, in the same period, 279.343 hectares, just over 35%, of the bushland was converted into other land covers. Observations and complaints raised by surveyed households indicated that woodland and riverine forests that had been converted to bushland, were, as on CC Molina, the result of indiscriminate felling of trees on the farm after it was acquired in 2001. The woodland was not necessarily felled by residents of Pamene, as complaints were raised that people from Ngezi and Rimuka Townships, which were in close proximity to the farm, cut wood for sale to the urban area. The research team whilst collecting data observed this.

The spatial change that occurred after the farm was acquired in 2001 was that the farm was divided from a single consolidated unit into 56 small self-contained units, similar to those on CC Molina. The changes in the vegetation in 2002 were not as drastic as those at CC Molina, partly because resettlement at Pamene took place at a slower pace.

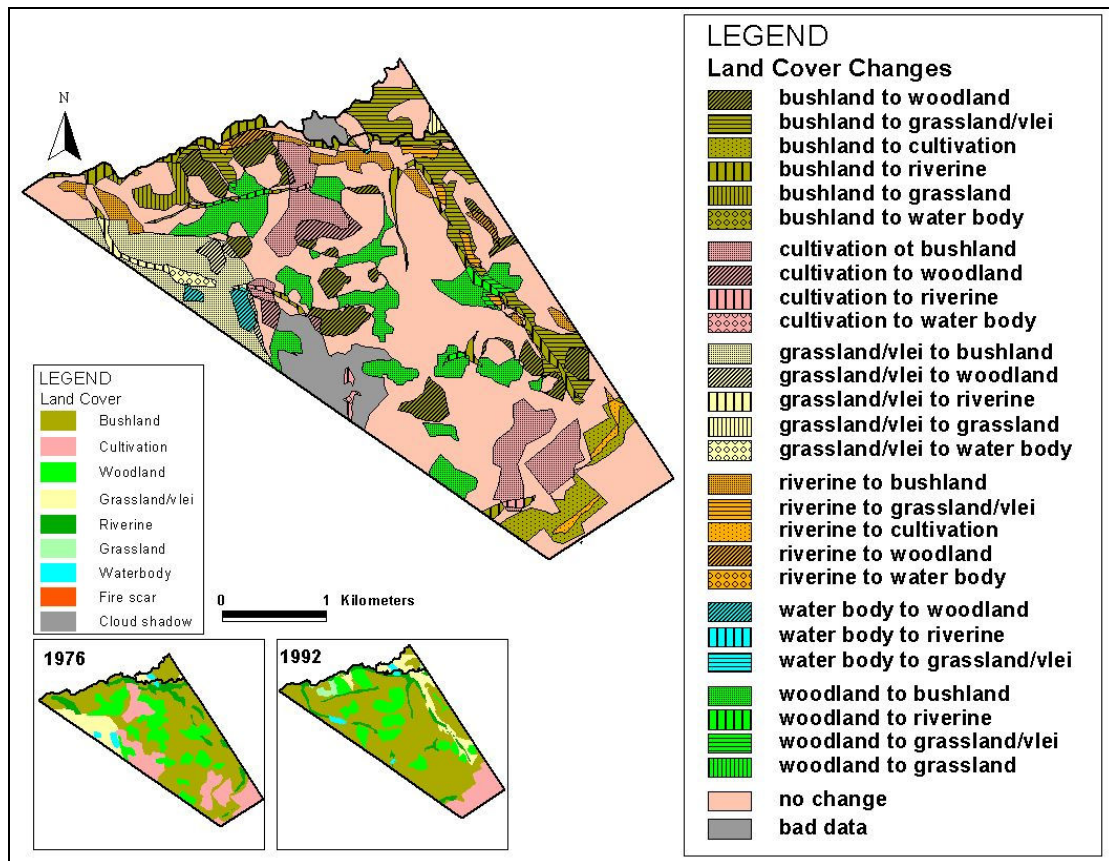


Figure 8.7 Land use/cover changes at Pamene between 1976 and 1992 (insert maps show the land cover on Pamene in 1976 and 1992)

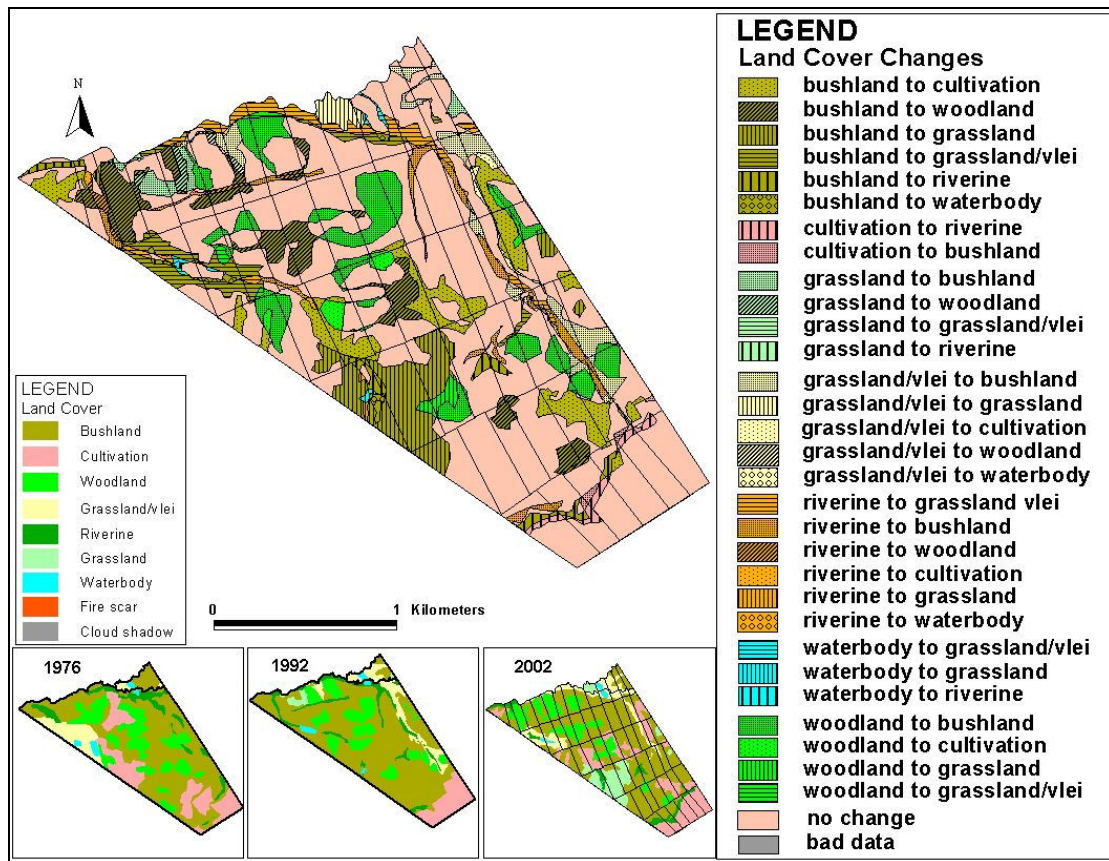


Figure 8.8 Land use/cover changes at Pamene between 1992 and 2002 (insert maps show the land cover on Pamene in 1976, 1992 and 2002)

8.6 Conclusion

From the above it is evident that the spatial and structural changes that occurred at the three farms were affected by increased human activities like cultivation and felling of trees for the purposes of energy consumption, construction and sale. Observations during transect walks indicated that more vegetation had been lost due to expansion in cultivation and felling of trees. It is envisaged, that at CC Molina and Lanteglos, and particularly at Pamene when all 56 plots are settled, more vegetation will be lost due to expanded cultivation, increased consumption of firewood and its sale.

McCusker (2004) noted that African agricultural land was spatially different from industrial or white agricultural land in that the former is spatially represented as a patchwork of small fields without definitive boundaries. The latter is largely a collection of rectangular or square fields with an occasional centre-pivot irrigation

system. When comparisons were made between the land patterns under the former commercial farmers and newly resettled farmers, McCusker's observations were noted to be true.

CHAPTER NINE: DISCUSSION

9.1 Introduction

The principal aim of this chapter is to provide an appraisal of the research findings and to contribute to the debates concerning land reform discussed in Chapter Two. It begins by exploring the justification for land reform under the FTLRP and the political economy of the country. This is then followed by an appraisal of the impact of this programme on productivity, livelihoods and the natural environment.

9.2 Is there justification for the FTLRP?

Having taken an historical overview of land apportionment and experiences of land reform in Zimbabwe in order to achieve the first objective of the research, this section aims to answer the question of whether or not the FTLRP can be justified. Moyo (2004a), Made (2004) and Sachikonye (2004) contended that land reform through redistribution is justifiable and needed to take place. The justification is based on the premise for decongesting the communal areas, providing for the landless, and encouraging the growth of black commercial agriculture, in tandem with white commercial agriculture in order to reduce loss of productivity.

On the other hand, although numerically more land was redistributed under the FTLRP, the radical, politicised and unplanned nature of the programme has been counter-productive. It has had negative effects on the macro-economy and in turn has adversely affected the beneficiaries. Furthermore, the findings of the research indicated that decongestion of the communal areas in Kadoma and countrywide, as observed by the Utete Commission (2003), Moyo (2004a) and Made (2004) has not occurred and that the majority of rural beneficiaries have not been resettled under the FTLRP. Moyo (2004a) and Chitsike (2004), amongst others concluded that the FTLRP was a political strategy for the ruling ZANU-PF government to keep power when threatened by a strong opposition, and that Fast Track initially had little to do with poverty alleviation and the promotion of sustainable livelihoods.

9.3 The impact of the FTLRP on the political economy

The most notable impact associated with the FTLRP was that the ruling ZANU-PF party, which had lost the referendum, was re-elected, in a closely contested general election held in June 2000. This was followed by the highly disputed re-election of President Mugabe in 2002, which created a political impasse between ZANU-PF and the MDC, perpetuated political instability and reduced investment in the country. On the international front, the government was widely criticised over its programme, for failing to adhere to property rights and the rule of law. This resulted in Zimbabwe's expulsion from the Commonwealth, international isolation and reduced donor funding and support for the country.

Chapter Two provides an overview of the poor socio-economic and political environment in which the FTLRP was undertaken. The FTLRP is in fact largely seen by JAG (2003) as having contributed to the current socio-economic decline and as having negatively affected agricultural production and the ability and capacity of the government to provide infrastructure, inputs and support to beneficiaries. Because most agricultural inputs are imported, the acute foreign currency shortages in the country have resulted in shortages in certain agricultural commodities, equipment and inputs that, as will be discussed in ensuing sections, has had adverse effects on the productivity of the new farmers. Furthermore, the inflationary environment has made farming difficult and expensive for most beneficiaries with a low capital base and most have failed to adequately invest in improving their farms and asset base.

The following sections will discuss how the FTLRP has affected land use and farming practices and the production levels of beneficiaries in the study areas and debates raised in the literature.

9.3.1 Land use practices and productivity

The previous chapters revealed that there were a number of ways in which the FTLRP has impacted on the land use practices and productivity of beneficiaries. The general trend countrywide, observed by Moyo (2004a, 2004c) and the Zimbabwe Parliament's Portfolio Committee on Lands, Agriculture, Water Development, Rural Resources and Resettlement (2003) was that the FTLRP had brought redistributed land under

new and different production and natural resource exploitation. According to this Committee, beneficiaries of the FTLRP were interacting, managing and modelling ecological systems in order to suit their livelihood systems, resulting in changes in land use patterns and farming practices that were not necessarily appropriate for the land being farmed. This research found that this was indeed the case at all three study areas.

The notable changes to the study areas, which shall be expounded on later included:

1. increased land under crop production;
2. virgin and vlei land brought under crop production;
3. land that was used for ranching and wildlife/game farming was brought under crop production;
4. a move from irrigated to rain-fed crop production;
5. a switch from highly mechanised production to traditional methods;
6. shifts from high value crop production to low value and low input food grains;
7. decline in levels of productivity;
8. the intensive use of natural resources for purposes of food consumption, building materials, energy and as an alternative source of income generation.

The findings showed that there was a substantial increase in the land under cultivation at Lanteglos, Pamene and CC Molina since resettlement in 2000. The increased population on these farms has had the effect of further increasing land under cultivation at all three study sites. At CC Molina, the area under crop production had increased from 150 to 319.74 hectares; at Lanteglos from 56.56 to 70.63 hectares and at Pamene from 80 to 135.7 hectares. A total of 458.68 hectares of virgin land was cleared for crop production by December 2004, most of which was on CC Molina, as this farm had a large number of households resettled on it compared to the other two communities.

Despite more land being under cultivation, the survey results revealed that total production at all three study areas had decreased significantly since resettlement. By way of example, according to Lubbe, on 150 hectares of rain-fed maize crop production at CC Molina, he had produced approximately five to six tonnes of maize

per hectare. Using the 2003/2004 figures for rain-fed maize crop production, since this was a particularly good season with adequate rainfall, the 27 FTLRP beneficiaries, who had cultivated a total of 319.74 hectares, were only able to produce an average of 0.57 tonnes of maize per hectare. Evidently, crop production had decreased substantially at this farm since resettlement.

According to the CFU, quoted in Muller (2003) and JAG (2003), grain production in Zimbabwe as a whole fell from 810 000 tonnes in 2000 to 80 000 tonnes in 2003. This figure is expected to have decreased dramatically since then as more commercial farms were acquired for resettlement by the government after the period for which the data were released, namely 2003 to June 2005. Therefore, if one takes the above-mentioned example of productivity at CC Molina to be typical of smallholder production countrywide then these results corroborate the findings of the CFU and JAG. They also indicate that radical land redistribution is associated with significant short-term losses in agricultural production and therefore a substantial decline in the contribution of agriculture to the economy. This would support neo-liberal arguments reported by the World Bank, amongst others, against radical state-led land redistribution.

The findings indicated that all beneficiaries interviewed grew low value crops such as maize, sorghum etc., compared to the high value crops grown by the former commercial farmers, like Read, for export markets. This has resulted in agricultural production, as shown in Table 2.3, contributing less to foreign currency earnings and further compounding the foreign currency shortages in the country. As mentioned in Chapter Six, there were no households producing seed crops such as maize, as was done by the previous farmers, such as Edwards. Generalising these findings of smallholder agriculture since the FTLRP was applied countrywide, the net effect will be seed shortages in the country, a situation that has been reported by Moyo *et al.*, (2004) and by the media (Daily Mirror Reporter, 2005) and has resulted in Zimbabwe importing seed, particularly maize, from South Africa.

As previously mentioned in the literature review, beef and dairy production had decreased substantially since resettlement. The reason for this was threefold: firstly, the former commercial farmers had culled most of their stock since the FTLRP, thus

drastically reducing breeding stock. Secondly, the pattern of keeping stock for consumption and draught power at the three farms mirrors practices countrywide of smallholder production, and, thirdly, smallholders had left livestock where they had formerly resided due to uncertainty about their tenure in these new resettlement areas (this last point shall be discussed later).

The above-mentioned findings and the marked reduction in national output of various cereals, grains and horticultural crops support arguments by the World Bank and scholars sponsored by it, Deininger and Binswanger (1999), Deininger and Feder (1999), amongst others, that radical state-led land redistribution leads to an aggregate loss of agricultural production. These scholars argued that the best form of land redistribution is redistribution through market forces and that in the periods during which Zimbabwe followed a market-assisted land reform programme aggregate crop production had not been severely affected.

Kinsey (1999), Robillard *et al.* (2002), Moyo (2004a) and Sachikonye (2004) believed that disruption of agricultural production should be expected in the first years of resettlement and evaluation of resettlement can only be intimated after a 15-year period. This rationale is presented on the basis of studies of various successful resettlement schemes after independence using methods such as the cost benefit analysis and regression models. Robillard *et al.*'s. (2002:i) cost benefit analysis rested on the premise that 'farmers operated in an enabling environment [which] included critical government support especially during the years 1-5'. In light of the poorly performing macro-economic environment described in Chapter Two, most surveyed households complained that government had failed to provide them with infrastructure, technical and financial support, indicating, that a positive cost benefit outcome from resettlement is unlikely to take place in the next five years.

The levels of production in the study areas when compared to those of the former commercial farmers, confirmed Dorward's (1999) assertion that the inverse relationship to farm size does not hold for smallholder farming in sub-Saharan Africa. Instead, there is a positive relationship between farm productivity and farm size. This is based on the availability of capital-intensive investments and the production of high value crops and livestock.

Changes from mixed farming to mainly crop production were noticed at all three farms. Whilst cattle breeding, for which Edwards, Read and Lubbe held stocks of 56, 500 and 3000 respectively, had taken place in conjunction with crop production, prior to resettlement, it was observed, in Chapter Six, that beneficiaries only reared a few livestock for subsistence purposes and for sale during periods of financial difficulty. Lubbe (2004) maintained that rain-fed crop production in Kadoma District was vulnerable to failure caused by the occurrence of mid-season droughts, as observed in the 2004/2005 season, or flooding during periods influenced by La Niña. This necessitated that commercial farmers diversify to livestock production to counter losses in income and shocks to livelihoods. On this point, Poulton and Dorward (2003:620) also showed that:

‘households that rely on rain-fed agriculture in Africa face fluctuations in annual income ... and are vulnerable to downward variations in consumption, which at low income levels can be a serious risk to survival ... making it difficult for households to save and invest’.

Therefore, it is most likely that the beneficiaries will continue to suffer from losses of income and reduction in livelihoods until diversification in their farming practices occurs.

The surveys indicated that households had experienced crop failure due to the mid-season drought in the 2004/2005 farming season. The drought conditions of 2001/2002 and 2002/2003 had also affected production negatively. According to Swift and Izac (1999:107):

‘a cropping system is sustainable if it has an acceptable level of production of harvestable yield which show a non declining trend from cropping cycle to cropping cycle over the long term’.

In the five farming seasons since resettlement, individual household crop production has fluctuated. This indicates that the future sustainability of crop production in these communities is questionable, particularly if all households continue to rely on rain-fed agriculture. This will in turn affect livelihoods based solely on farming, as farming is less likely to be the main source of income for these households. This may in turn

lead to households continuing to exploit their natural resources (as has already been observed) in order to obtain off-farm incomes.

9.3.2 Infrastructure

It was noticed that the majority of the beneficiaries had limited resources relative to the previous commercial farmers. The previous commercial farmers had infrastructure such as boreholes, reservoirs, dip tanks and Read and Edwards had centre pivot and drip irrigation equipment, which had allowed for all year round crop production. This meant that income generation was not limited to a single season as was the case with the rain-fed production of the newly resettled farmers. The impact of this on households and the national economy is reduced income from agricultural production in the winter season.

These former commercial farmers had been highly mechanised and owned all their farm equipment compared to the FTLRP beneficiaries, who had to hire modern farming equipment. Lack of ownership of farming equipment resulted in the beneficiaries relying on other farmers for equipment and often being delayed in their land preparation and cultivation whilst waiting for this equipment. This subsequently caused them to be vulnerable to crop failure when mid-season droughts were experienced, as was the case in the 2004/2005 farming season. Lubbe (2005) and Ndoro (2005) have attributed the crop failure of these farmers to poor timing in their crop production. Matarira *et al.* (1995) pointed out that the timing of farming operations, such as planting dates, application of fertilisers etc., is critical if farmers are to reduce their vulnerability to the impacts of climatic change, particularly for those practicing dry land agriculture. Therefore, the future success of these farmers is largely dependent on their ability to build their asset base and have ownership of equipment so that they do not rely on hiring and knowing how to time their farming.

9.3.3 The ecological impact of the FTLRP

Informal conversations between the research team and some respondents and research by Moyo (2004b) and Moyo *et al.* (2004) established that one of the primary factors that prompted several households to form part of the 'land occupation movement' and

apply for resettlement was the perception that white commercial farmers in Kadoma District had abundant land that was underutilised compared to the overcrowding in the communal areas. These perceptions were largely shaped by political rhetoric propagated by the government and ZANU-PF politicians (Manzungu, 2004; Samuriwo, 2004). Those who wanted land gave little consideration to why such land was not used for crop production and why some of the commercial farmers held more than one set of properties whilst others did not. It is the contention of this research that those with little agricultural knowledge perceive that all land in former commercial administrative areas in Zimbabwe is fertile and should be used for crop production. The reality, as evidenced from the study areas is that the land and soil capability of a farm is not uniform throughout and, in the cases of Pamene and Lanteglos, there was only a small portion of land that had soils suitable for crop production, whilst the rest was mostly infertile sandy soils. Because of the former owner's knowledge of the land, farming practices suited to the land's capabilities were practiced and these, according to the Department of Extension and Conservation (1957), and the commercial farmers, prevented degradation of the land.

Prior to resettlement, as mentioned in the previous chapters, land under bush, grassland and woodland in the study areas was used for game farming and/ or ranching or for wildlife. Resettlement resulted in changes to the ecological system, which led to the displacement of wild life from its habitats, particularly at Pamene. Lanteglos and CC Molina, according to Lubbe and Edwards, contained a significant population of naturally occurring wildlife. This wildlife was displaced because of the increased population on the farms, opening up of virgin land, often through slash and burn methods. This in turn destroyed natural habitats and modified the ecological systems in all the resettled communities. The impact on the economy has been reduced foreign currency earning, as trophy hunting on commercial farms had been a tourist attraction prior to resettlement.

According to Samuriwo (2004) pressures on the ground and from politicians expedited the planning of farms for resettlement and this had resulted in AREX not allowing for the land capability of the farms when planning and subdividing it for resettlement. This was reiterated by Mache (2004) and observed in the study areas particularly at Lanteglos, where some settlers were settled on land classes IV to V, which were only suitable for cultivation under conditions of extremely careful

management of the soils. Therefore, land with poor soil structure was brought under cultivation, which, according to Manzungu (2004), tends to be fragile and easily degradable. Furthermore, he characterised light sandy soils, land on steep slopes and soils with a high water table, such as vleis, as being fragile and requiring careful management. From the survey, it was noticed that vlei areas were used for vegetable gardening and orchards at Lanteglos and Pamene farms. The long term impact may be soil degradation, if careful management is not practiced on these soils.

With the exception of one household of the 72 interviewed, most could not tell what conservation measures they needed to practise, some reported that they would grow orchards to replace trees cut for firewood and cultivation. This clearly suggests that households are not aware of the appropriate conservation practises for the land use practises and soils on which they are farming. This is likely to lead to a recurrence of the degradation observed in the communal areas, which will later affect the livelihoods of these households and create future pressure for land in areas where people have managed to keep these lands well, particularly the remaining black owned large-scale commercial farms.

Chapter Five details some of the conservation measures that the former commercial farm owners practised. Key to these conservation measures was fallowing, crop rotation and grazing land; furthermore these farmers grew fodder for cattle to reduce pressure on grazing land. None of the households at the study areas had grown fodder and had not started to practise conservation measures. Based on informal conversations with some respondents, it is the contention of this research that there was a perception amongst the beneficiaries that, since land was still abundant and mostly virgin, then the soils were fertile and required little intervention on the part of these farmers. Mache (2004) and Ndoro (2004) noted that, although some beneficiaries practised crop rotation the majority under the A1 villagised model did not, because of the small portions of land that had been given to them. By way of example, he stated that if a farmer is given a six-hectare field and plants maize on four hectares and legumes on two hectares, only two hectares can be rotated considering that maize is the main crop grown by households and needs to be grown on a bigger portion of land. The former commercial farmers with larger portions of arable land found their available land inadequate for crop rotation and fallowing and had

therefore purchased other farms with arable land to allow for adequate crop rotation and fallowing. It is the contention here that the soils in all three study areas are likely to be exhausted in the near future, particularly since very few households added fertilisers to replenish soil nutrients lost through crop production.

In the case of Pamene, the Mopani sandy soils were, according to Read, the Lands Officer, Assistant DA and some of the beneficiaries, unsuitable for intensive and continuous crop production, unless considerable amounts of fertilisers were applied. From the results and responses of some households, it was concluded that a number of households were unable to afford the purchase of these agrochemicals, which were in short supply, due to the macro-economic problems.

9.3.4 Tenure

The findings of this thesis showed that most households felt insecure about the tenure held. Households reported that they could not use the papers given by the government as collateral to access credit from banks. The high failure rate of loan repayment noted by Moyo (1995) of 'old' resettled households combined with insecure tenure has prevented many financial organisations from providing beneficiaries under the FTLRP with credit.

In an inflationary environment, where prices are constantly revised, failure to secure credit makes it difficult to obtain inputs and to farm productively. It is thus likely that many newly resettled farmers will turn to extracting the natural resources on the plots, which, because of the lack of tenure, may be perceived not to belong to them. In Kadoma, the likely effect will be increased gold panning, as was already taking place on all three farms, although on a small scale.

The political environment in Zimbabwe could result in tenure insecurity being used as a political tool to manipulate rural voters into voting for ZANU-PF and thereby preserving the *status quo*.

9.4 Land institutions and policy

Debates over farm size productivity influenced Zimbabwe's land policy of 1997, which created the A1 and A2 smallholder settlement schemes. Policy advisors, such as Moyo, favoured smallholder production and advanced debates in favour of this line of land reform. However, it is questionable whether land allocation under the FTLRP, which was relatively unstructured, had smallholder farming in mind. Based on interviews with key officials, the research contends that events and the political imperatives dictated the subdivision of land into smallholder plots to meet land demands and appease the rural electorate, which had voted against the draft constitution in 2000. In the Muzvezeve ICA, as indicated in Figure 8.2, most of the commercial farms that were acquired, were resettled under the A1 villagised model, in which beneficiaries were given a maximum of six hectares in one plot. Ndoro (2004) said that the A1 villagised model allowed for a large number of people to be settled, thereby meeting land demands. A government official in the lands ministry (name not supplied) explained that officials were aware that certain farms were not suitable for A1 villagised settlement relative to the resources available. However, they were forced to allocate land, due to the political pressure governing the FTLRP and they feared that if they reported that certain land was not conducive for settlement they would be perceived as supporting the opposition party. As a result, this official said that some resettlement areas under the A1 villagised model are likely to be degraded in the near future as their carrying capacity has been exceeded.

Changes in policy were reflected by the many amendments of the Land Acquisition Act, which were aimed at creating an enabling environment and curbing regional and international criticism over the unlawful manner in which farms were acquired by the government. The latest legislative change of October 2005, as this thesis was being written, was the nationalisation of all land in Zimbabwe, which has implications for both new and old farmers as it prevents any farmer from contesting land acquisition in the courts. For beneficiaries and black commercial farmers it means that government can easily evict or acquire their land without recourse to the courts.

The evidence presented earlier shows that land policy has not created security of tenure for resettled households since they are given cards (Plate 6.3), letters of

recommendation/confirmation (Figure 6.6) and offer letters (Appendix 7). This has, and will presumably continue, to contribute to poor productivity, caused by lack of real investment in farming enterprises, particularly by A2 farmers. Furthermore, deforestation and exploitation of natural resources will continue, leading to Hardin's 'Tragedy of the Commons' as propounded by groups of scholars such as Chitsike (2004) and Sibanda (2001), caused by a lack of ownership and excludability rights.

One of the criticisms, for example of government land institutions prior to the FTLRP, was that land administration and allocation was highly centralised. Although allocation of land was decentralised to the districts and provinces, policy-making and administration continues to be ZANU-PF driven and highly centralised even though the government has restructured and created new institutions. The Utete Commission (2003) acknowledged that restructuring and the creation of new institutions had only increased confusion as to land administration, coordination and the roles of government officials. As is evident from Chapter Two, in 2004, there were too many institutions and committees administering the land programme, hence the resultant inconsistencies, corruption and poor coordination of the land reform programme. This was reflected at Pamene farm where four businessmen from the same family had corruptly acquired offer letters from a land official, who, at the time of writing up the research had been arrested. As a result, all settlers at Pamene were asked to send their original offer letter for verification of authenticity, creating insecurity amongst these households, which could also explain the poor levels of production on the farm.

It is clear that policy had not taken into account the need for residential land and the effects of this on production. Figure 8.2 indicates that the Municipality acquired productive farms, 11 in total, under the FTLRP, for future residential and industrial expansion. Presently this land has not been utilised for these purposes and agricultural production has since ceased further contributing to the declining agricultural production levels in the country.

9.5 The impact on livelihoods

This section had been subdivided into three sectors, namely households comprised of farm workers, those from the rural areas and those from the urban areas. This was

done to provide for a clearer appraisal of the impact of the FTLRP on these households and to contribute to debates over land reform as a developmental agenda for poverty alleviation and sustainable livelihoods.

9.5.1 Former commercial farm workers

This research found that the FTLRP adversely affected the lives of the former commercial farm workers surveyed at Lanteglos compared to those who had either been farming or working prior to resettlement. In line with Hartnack's (2005:173) findings, the FTLRP disrupted the lives of the farm workers and made them 'highly insecure- economically, socially and politically'.

These farm workers lost a stable source of monthly income and benefits such as monthly food rations and subsidised education for their children, which were formerly provided by the former commercial farmers. Most reflected that since resettlement, they could no longer afford to feed themselves let alone educate their children whom they had withdrawn from the schools. The findings, which are similar to those found by Sachikonye (2003) and Hartnack (2005), revealed that these farm workers were surviving by doing piecework for other beneficiaries in the resettled communities. They complained that these jobs were low paid and often food was bartered instead of cash payments, resulting in them seeking other forms of wage employment to the detriment of their own farming on the land allocated to them.

The farm workers were marginalised in the allocation of land as each received a small portion of land of between 1.5 and three hectares, compared to the other beneficiaries who had been given six hectares each. Furthermore, the arable land allocated to them was either prone to water logging or very stony and therefore difficult to cultivate and manage and this, in turn, placed a limitation on successful crop production. It is the research's contention that despite the fact that these farm workers are mostly of Malawian origin, their children by virtue of being born in Zimbabwe are Zimbabwean citizens and are entitled to the same rights as other citizens. Therefore, by disenfranchising the parents under the FTLRP, the programme has created a future class of landless citizens and in turn failed to address its objective in resolving landlessness in the country. In the long-term, demand and pressure for land is likely to

come from the children of the former farm workers whose parents have not benefited from the FTLRP or from those who were given sub-economic units to farm, which cannot be subdivided or provide an adequate source of income. Therefore, the FTLRP has created another long-term problem.

Sustainable land management and conservation practices given the technology and capital available to former farm workers on 1.5-hectare land such as fallowing or crop rotation are impracticable, as it would reduce the area under which food crops are grown and create food insecurity. Therefore, the long-term impact of this will be soil exhaustion, which will lead to degradation, further marginalising and making this group of farmers vulnerable to poverty.

9.5.2 Urban households

A total 27 (38%) resettled households had previously resided in urban areas, mostly in Kadoma. With the exception of the nine business people, most of the urban households that were resettled were low income earners. The research findings indicated that several of the low-income households had applied for resettlement in order to acquire residential land and for this group, who were still employed, farming was of secondary importance. Others saw it as an opportunity to diversify their sources of income. The form of part-time farming by business persons at Pamene and at the A1 settlements, according to Moyo (2004b:38) represented a strategy of 'capital accumulation.' This indicates that not all who applied for land wanted to be farmers and that there is weakness of government policy in assuming this. The effect of this will be largely subsistence production in A2 small scale and peri-urban and A1 settlement schemes. The net effect of this will reduce aggregate national output of key agricultural products and in turn increase the acute shortages of agricultural produce presently being experienced in the country.

9.5.3 Rural households

Twenty-six of the households (36% of the total) resettled were from communal areas, whilst the remainder from a rural background were from large scale (where they had been leasing) and small scale commercial (African Purchase Areas) farms and old

resettlement areas. The majority had opted for resettlement in order to obtain a bigger portion of land and, with respect to this, resettlement under the FTLRP met the needs of these households. However, those who had applied for better soils to farm on had not necessarily benefited because the soils on all three farms varied and were not all necessarily fertile. Those who had been farming on a subsistence basis continued to do so with little diversification in their incomes and they were heavily dependent on the sale of crop produce. It was noted that several householders who had held part-time or full-time jobs had not relinquished these to concentrate on farming, indicating that farming was viewed as part of the diversification favoured by Ellis and Briggs (2001) for sustainable rural development.

9.5.4 Employment

The argument that smallholder farming will result in increased employment (Lipton, 1996; and Moyo, (2004a, 2004b, 2004c) does not hold in these study areas, because most households used family labour, whilst a few hired labour from poorer beneficiaries within the settlement scheme. Although these smallholders used their family labour intensively when compared to the levels of employment by former commercial farmers, smallholder farming, as seen in the study areas, in contributing to aggregate employment falls short. At Pamene, business persons had hired one or two workers to act as farm managers, in accordance with the government regulations. However, unlike trained managers on former commercial farms, most of these workers tended to be inexperienced youths of between the ages and 18 and 20.

In the absence of adequate income from crop production or loans, smallholder farmers are unable to hire labour for cultivating and harvesting. This in turn contributes to delays in land preparation, planting and susceptibility to climatic vulnerability. Thereby indicating as discussed in the literature that there are many variables that affect smallholder production and in turn make them less efficient compared to large-scale commercial farming.

9.5.5 Overall impact on livelihoods

Generally, most beneficiaries were able to produce enough food for consumption until the next harvest in seasons of adequate rainfall and a few were able to do so in bad seasons. According to Ndoro (2004), a household of six required approximately 0.5 tonnes of maize for food consumption, until the next harvest, however, AREX encouraged households to retain one tonne of maize.

According to Wiggins (2004), vulnerability is a combination of the degree to which a person is exposed to a hazard and the extent to which they can cope with the hazard. The crop failure experienced by most households in the study areas in the 2004/2005 season showed that these beneficiaries are highly vulnerable to drought conditions and that deriving sustainable livelihoods solely from dry land crop production was not possible at that time. Wiggins' study noted that newly resettled farmers lacked access to inputs, labour and tractors, particularly the A1 farmers. His observation confirmed the findings of this thesis, as the majority of the farmers complained about lack of access to inputs, which were often in short supply, affecting the timing of their farming and land preparation. This often made them susceptible to crop failure for example in the 2004/2005 farming season, when a mid-season drought occurred and to problems such as shrub and weed encroachment on already prepared land awaiting cultivation. These problems are associated with the poorly performing macro-economic environment previously mentioned.

Another problem that is likely to take place in resettlement areas that will constrain sustainable livelihoods and income is continued population growth and the traditional custom of fragmentation of land for their children. There is presently no policy regarding inheritance and fragmentation of land in the 2004 land policy document. Furthermore, the subdivision of land on poor soils, particularly at Pamene and in the A1 villagised settlements, would create sub-economic units that would prevent households from realising a livelihood, based on farming as their principal source of income.

Mache (2004) believed that the Rhodesian and postcolonial government had given white farmers much support and so the new farmers will require this level of support

in order for them to thrive. Scholars at an Southern African Regional Poverty Network (SARPN) (2005) seminar raised this idea concerning support and agricultural subsidies for emerging black farmers in South Africa. The support would need to come in the form of soft loans, inputs availability, adequate funding for research and extension, farmer training and giving land to people with potential rather than randomly. In Zimbabwe, this would only be possible if the government, which is presently financially incapable, allowed for private stakeholder and NGOs to participate in the land programme.

Poulton *et al.* (2002) pronounced that ‘it is often easy to transfer natural capital (land) of existing large-scale commercial farms to smallholders than it is to transfer human and social capital associated with it’. Judging from information provided by households particularly on the challenges and obstacles to farming, and the sustainable livelihood framework developed by Sen (1981) and Chambers (1985) as quoted in Ellis and Briggs (2001), the beneficiaries and communities as a whole are seen to possess low levels of human, physical, financial and social capital, despite the availability of land (natural capital). This then compromises the ability of these farmers to possess sustainable livelihoods from agricultural production. Householders at Pamene farm, which had been initially planned as an intensive irrigation scheme, did not have the financial capital to buy irrigation equipment, pay for the costs associated with running such a scheme, such as electricity and water, as did the former commercial farmer. Therefore in the absence of financial capital, households continued to rely on rain-fed agriculture and were vulnerable to climatic changes.

9.6 Conclusion

Although land has been availed to beneficiaries, the poorly performing macro-economic environment, inconsistencies in land policy and low levels of capital amongst beneficiaries are adversely affecting rural livelihoods. Land reform has of present not brought with it the desired poverty alleviation and economic growth that is envisaged. Faced with the inability to raise an adequate income from crop production it is likely that householders will continue to diversify their incomes and exploit their natural environment to enhance their livelihoods. All this has long term consequences

on the environment and the ability of land redistribution to alleviate poverty and improve livelihoods.

CHAPTER TEN: CONCLUSION

10.1 Introduction

This section provides a summary of the thesis and is then concluded by recommendations for future policy implementation, based on the findings of the research.

10.2 Summary of findings

The aim of this thesis in providing an appraisal of the impact of the FTLRP on the livelihoods of the beneficiaries and the natural environment of the three study areas was achieved through the six objectives of this research. The events that led to the FTLRP were contextualised through the provision of an historical overview of land alienation/appropriation by successive settler governments, the processes of redistribution followed by the post-colonial government and the political economy in which it has operated. Household surveys, interviews with government officials, key informants and former commercial farmers and the production of maps provided for the appraisal for the land use practices and livelihoods of the beneficiaries, on the natural environment of the study areas and the sustainability of these.

The findings of this thesis showed that agricultural production of the new farmers was lower compared to that of the former commercial farmers. Householders were mainly subsisting off the land and exploiting their natural resources for purposes of consumption, construction, grazing and income generation. At all three study areas the levels of human, social, physical and financial capital were low and this constrained the ability of these farmers to rely solely on agricultural production. The inflationary and the declining macro-economic environment had affected the new farmers adversely. Households had stated that they had received little support from government, complained of the increasing costs of agricultural inputs and the unavailability of certain inputs such as agro-chemicals and seeds, and how these factors constrained their ability to be productive.

If the findings from the study areas are typical of newly resettled areas in Zimbabwe, then the unstable political and declining economic environment in the country has and will continue to constrain agricultural growth and sustainable rural development in newly resettled areas. This will be compounded by the failure of government to provide infrastructural and financial support to these new farmers. In addition livelihoods from agricultural activities in the short term are unlikely to improve significantly causing beneficiaries to resort to off-farm sources of income and exploitation of their natural resources.

This research has shown that the land problem in Zimbabwe has not been adequately resolved, not all who should have benefited from the programme have land and therefore land demands in the future are imminent. In light of all the above the following recommendations have been proposed

10.3 Recommendations

1. There is a need for a comprehensive and holistic land policy as the FTLRP has resulted in many institutional and spatial changes. Government needs to revise its policy in order to address any future land problems and the changes that have recently occurred. Until now, the concentration has been on amending the constitution, without a subsequent amendment of policy. A new land policy also needs to be integrated with other agrarian, water, environmental and developmental policies for it to be comprehensive.
2. Future land policy should be based on the vision of how agriculture should evolve. For example, Moyo and Tevera (2000) propose national self-sufficiency through import substitution and self-reliance in agricultural products.
3. The issue of tenure needs to be adequately addressed for the new farmers to invest in their land and to be encouraged to farm productively. Not only will security of tenure be a form of collateral for farmers, but it will allow households to enforce their right to exclude others from their property. In the case of Pamene, because households were not sure of their security and so they found it difficult to prevent the extraction of resources by outsiders from

their properties. This would prevent land owners from degrading land allocated to them and encourage them to look after it.

4. Increased extension and technical support is required for resettled communities. Government may therefore need to work with donors, NGOs and the private sector to provide for this. According to the World Bank (1999:4) 'effective development needs partnership among the different levels of government, the private sector, donor groups, and civil society'. Collaboration between the NGOs and governments of Brazil and Columbia, as indicated in Chapter Two, resulted in successes in pilot resettlement projects. Zimbabwe can learn from such collaboration.
5. There needs to be a realisation of the positive impacts of white commercial agriculture on national production and foreign currency earnings. Government should maintain the remaining commercial farms that were not redistributed. This would allow foreign currency that is being used for importing food grains and seeds to be invested in industrialising the economy, in order to resuscitate this sector as well as develop resettlement areas.

Unless there is political will on the part of the government the economic situation in Zimbabwe is unlikely to improve and rural livelihoods are not likely to improve. There needs to be a concerted effort by the government to provide for a stable economic and political environment. The livelihoods of the newly resettled farmers are largely dependent on the macro environment and failure to change this will continue to hinder agricultural production in the country.

APPENDICES

APPENDIX 1

Household survey of Land use practices in Kadoma District

Questionnaire number -----

Date of Interview -----

Name of Interviewee -----

Interview Type Head of household
 - Male -Female
 -Housewife

Section I. Demographic, Socio-economic and Life History of the Farmer

- 1.1 What is the name of your farm/village? -----
- 1.2 What is your plot number? -----
- 1.3 How many people live in your household including yourself? -----
- 1.4 Please state your age, their ages, whether they are male or female and relationship to you?

Age	Male	Female	Relationship to head of Household
0 – 4			
5 – 9			
10 – 14			
15 - 19			
20 – 24			
24 – 29			
30 – 34			
35 – 39			
40 – 44			
45 – 49			
50 – 54			
55 – 59			
60 – 64			
+65			

1.5 Do you have other dependants who are not presently living with you?

Yes	
No	

1.6 If yes what do they do? -----

1.7 How long have you lived on this farm? -----

1.8 Where did you live before you came here? -----

1.9 What was your occupation before you came here? -----

1.10 How many years have you been farming for? -----

1.11 How did you obtain your farming experience? -----

1.12 Which of these were your sources of income before resettlement?

Source of Income	Yes	No	Rank 1- 9 (least – most important)
Wages from formal employment			
Wages from part-time employment			
Pension			
Trading			
Remittances			
Crop sales			
Vegetable sales			
Livestock sales			
Gold panning			
Other			

1.13 If other, please state and rate the importance. -----

1.14 What has been your source of income since resettlement?

Source of Income	Yes	No	Rank 1- 9 (least – most important)
Wages from formal employment			
Wages from part-time employment			
Pension			
Skilled trade/Artisan			
Remittances			
Crop sales			
Vegetable sales			
Livestock sales			
Gold panning			
Other			

1.15 If other, please state and rate the importance. -----

1.16 How has your expenditure pattern changed since resettlement? -----

1.17 Why did you apply to be resettled? -----

1.18 How did you acquire your farm? -----

Section II. Farm Subdivisions

2.1 How many hectares is your farm? -----

2.2 Who subdivided/pegged your farm? -----

2.3 How was this done? -----

2.4 Are there any conflicts that exist due to the way the farm was subdivided?

Yes	
No	

2.5 If yes please explain? -----

Section III. Land use practices and output before resettlement

3.1 How many hectares was your plot/farm where you previously lived (immediately before you relocated)? -----

3.2 Did you cultivate all the land allocated to you?

Yes	
No	

3.3 If no why were you not cultivating all the land allocated to you? -----

3.4 How many hectares were you cultivating on? -----

3.5 How many fields did you have? -----

3.6 What crops did you grow?

Crops grown	Yes	No	Rank
Maize			
Cotton			
Millet			
Sorghum			
Runner beans			
Sugar beans			
Rapoko			
Groundnuts			
Sweet potato			
Potato			
Other			

3.7 If other please state -----

3.8 In a good season how many bags or bales of your two important products did you harvest? -----

3.8.1 Did you sell your products?

Yes	
No	

3.8.2 Who did you sell your products to?

3.8.3 Did you grow enough food for consumption?

Yes	
No	

3.9 In a bad season how many bags or bales of your two most important products did you harvest? -----

3.9.1 Did you grow enough food for consumption?

Yes	
No	

3.10 Did you cultivate in the winter season?

Every winter	
Some winter	
Never	

3.10.1 If you ticked every/some, please state what you cultivated? -----

3.10.2 If never, why did you not cultivate? -----

3.11 What equipment did you use to cultivate your fields?

Equipment	Yes	No
Cattle and Plough		
Hoes and picks		
Shovels		
Tractor and plough disk		
Harvester		
Other		

3.12 If other, please state. -----

3.13 Did you hire or use your own equipment?

Yes	
No	

3.14 If you hired your equipment how did you finance this? -----

3.15 Did you hire labour to cultivate, weed and /or reap your fields?

Labour Activity	Yes	No	Amount paid for labour
Cultivate			
Weed			
Reap			

3.16 If you hired labour, please state where you hired from and how much you paid them? -----

3.17 If you did not hire labour, please state who cultivated, weeded/or reaped your fields? -----

3.18 Who owned the land used for Cultivation?

Own private land	
Communal land	
State land	

3.19 Did you rear any livestock?

Yes	
No	

3.20 If yes what did you rear and how much stock of each kind did you have?

Type of Livestock	Yes	No	Total number of livestock	Very Impt (1)	Impt (2)	Not Impt (3)
Cattle						
Donkeys						
Horses						
Chickens						
Ducks						
Goats						
Sheep						
Pigs						
Other						

3.21 If other please state and rank according to importance? -----

3.22 What did you keep your livestock for? -----

3.23 Did you have access to grazing land?

Yes	
No	

3.24 If yes, who owned the land used for grazing

Own private land	
Communal land	
State land	

3.25 How did you rate the quality of the grazing and arable land?

Rating	Grazing	Arable
Excellent		
Good		
Satisfactory		
Poor		
Very Poor		

3.21 Did you own a vegetable garden?

Yes	
No	

3.22 If yes what did you grow?

Crops grown in vegetable garden	Yes	No	Very Impt (1)	Impt (2)	Not Impt (3)
Onion					
Tomatoes					
Green vegetable varieties (covo, rape, tsunga)					
Beans					
Cabbage					
Other					

3.23 If other, please state and rank according to importance what you grew?

3.24 Which of the following presented obstacles to your farming?

Factors	Always (1)	Usually (2)	Sometimes (3)	Never (4)
Drought				
Floods				
Poor soils				
Pests				
Damage of crops by wild animals				
Distance of field from homestead				
Lack of labour				
Lack of technology and machinery				
Lack of finances				
Stock Theft				
Other				

3.25 If other please state and rank? -----

Section IV. Land use practices and output after resettlement

4.1 Please could you draw a sketch map showing your homestead, fields and what you grow in the fields.

4.2 What did the previous farmer use the land for before you settled on your plot? -----

4.3 How did you clear your fields? -----

4.4 How many hectares did you clear? -----

4.5 Did you hire labour to clear you land?

Yes	
No	

4.5 Are you cultivating all the land that was allocated to you?

Yes	
No	

4.6.1 If no, why are you not cultivating all the land allocated to you? -----

4.6.2 How much land are you presently cultivating? -----

4.7 How many fields do you have? -----

4.8 What crops are you currently growing and what crops did you grow in the following seasons?

	2003/ 2004		2002/ 2003		2001/ 2002		2000/ 2001		Rank		
Crops grown	Y								1	2	3
Maize											
Cotton											
Millet											
Sorghum											
Runner beans											
Sugar beans											
Rapoko											
Groundnuts											
Sweet potato											
Potato											
Other											

4.9 If other please specify the year grown and rank according to importance?

4.10 How many bags or bales of each crop did you harvest in the following seasons?

Crops	Amount harvested 2003/2004	Amount harvested 2002/2003	Amount harvested 2001/2001	Amount harvested 2000/2001
Maize				
Cotton				
Millet				
Sorghum				
Runner beans				
Sugar beans				
Rapoko				
Groundnuts				
Sweet potato				
Potato				
Other				

4.11 If other please state and specify the amount harvested? -----

4.12 Did you sell your products?

Yes	
No	

4.13 If yes, whom did you sell your products to? -----

4.14 Did you grow enough food for consumption until the next season?

Yes	
No	

4.14.1 If no, please explain? -----

4.15 Please rank the years you harvested the most products since being resettled.

Year	Rank 1-4 (least to most important)
2003/2004	
2002/2003	
2001/2002	
2000/2001	

4.16 Do you cultivate in the winter season?

Every winter	
Some winters	
Never	

4.17 If you ticked every/some please state what you cultivated -----

4.18 If never, why do you not cultivate in winter? -----

4.19 Who owns the land used for cultivation?

Own private land	
Communal land	
State land	

4.20 Do you collect wild fruits for consumption?

Yes	
No	

4.21 If yes, please state the fruits that you harvest? -----

4.22 Do you hunt wild animals for consumption?

Yes	
No	

4.23 If yes please state the animals you hunt? -----

4.24 Please state the seasons you hunt for animals and collect

Only in summer	
Only in winter	
Both seasons	

4.25 What equipment did you use to cultivate your fields?

Equipment	Yes	No
Cattle and Plough		
Hoes and picks		
Shovels		
Tractor and plough disk		
Harvester		
Other		

4.26 If other please state. -----

4.27 Did you hire or use your own equipment? -----

4.28 If you hired your equipment how did you finance this? -----

4.29 Did you hire labour to cultivate, weed and or reap your fields?

Labour	Yes	No	Amount paid for labour
Cultivate			
Weed			
Reap			

4.29.1 If you hired labour, please state where you hired from and how much you paid them? -----

4.29.2 If you did not hire labour, please state who cultivated/ weeded and/or reaped your fields? -----

4.30 Did you rear any livestock?

Yes	
No	

4.31 If yes what did you rear and how much stock of each kind did you have?

Type of Livestock	Yes	No	Total number of livestock	V.Impt (1)	Impt (2)	Not Impt (3)
Cattle						
Donkeys						
Horses						
Chickens						
Ducks						
Goats						
Sheep						
Pigs						
Other						

4.32 If other please state the number in stock as well as rank their importance.

4.33 What do you keep your livestock for? -----

4.34 Do you have access to grazing land?

Yes	
No	

4.35 Who owns the land used for grazing and cultivation?

Own private land	
Communal land	
State land	

4.36 How do you rate the quality of the grazing and arable land land?

Rate	Grazing	Arable
Excellent		
Good		
Satisfactory		
Poor		
Very Poor		

4.30 Do you own a vegetable garden?

Yes	
No	

4.31 If yes what do you grow?

Crops grown in vegetable garden	Yes	No	V.Impt (1)	Impt (2)	Not Impt (3)
Onion					
Tomatoes					
Green vegetable varieties (covo, rape, tsunga)					
Beans					
Cabbage					
Other					

4.32 If other, please could you state what you grow?

4.33 What is your most important land use?

Cultivation	
Vegetable Garden	
Livestock	

4.34 Which of the following presents obstacles to your farming?

Factors	Always (1)	Usually (2)	Sometimes (3)	Never (4)
Drought				
Floods				
Poor soils				
Pests				
Damage of crops by wild animals				
Distance of field from homestead				
Lack of labour				
Lack of technology and machinery				
Lack of finances				
Stock Theft				
Other				

4.35 If other please state and rank? -----

Section V. Resources and Environment

5.1 Where do you source you water for drinking, domestic household use e.g. cooking and washing?

Purpose	Source	Payment Yes/No	Amount Paid	Distance from Homestead
Drinking				
Cooking				
Washing Self				
Washing laundry				
Cleaning				

5.2 Do you pay for any of these sources?

5.2.1 If yes, how much do you pay per month?

5.2.2 How far is each water supply from your homestead?

5.2.3 How would you rate the quality of water from the source/s you utilize?

Rating	Source 1.	Source 2.	Source 3.	Source 4.
Good				
Satisfactory				
Bad				
Very Bad				

5.2.4 Is water always available from these sources? If no please state the reason.

5.2.5 Do you source water for cultivation and for you livestock?

Purpose	Yes	No
Cultivation		
Livestock		

5.2.6 If yes where do you source your water?

Purpose	Source	Payment yes/no	Amount paid	Distance form the homestead
Cultivation				
Livestock				

5.2.7 Do you pay for this source?

5.2.8 If yes how much do you pay?

5.2.9 How far is this source/(s) from your fields?

5.2.10 Is this an adequate source? Please explain. -----

5.2.11 If no, do you rely on rain fed cultivation? -----

5.2.12 Can you describe the pattern of rainfall in this area? -----

5.3 What source of energy do you use for domestic purposes?

Source	V. Impt (1)	Impt (2)	Not Impt (3)
Electricity			
Firewood			
Solar Panel			
Maize cobs			
Biomass			
Other			

5.3.1 If other, please state the source of energy and rate the importance? ----

5.3.2 What alternative source of energy would you like and why? -----

5.3.3 What resources did/do you use to construct buildings, fencing, and stock pens?-----

5.3.4 Where did/do you source these resources? -----

5.3.5 What measures have you taken to conserve these resources? -----

Section VI. Tenure

6.1 As a beneficiary of land reform what form of paper/title do you possess to show ownership of your plot?

Title	Yes	No
Title Deeds		
Leasehold		
Certificate of occupation		
Letters of allocation		
Other		

6.1.1 If other please state? -----

6.1.2 Who gave you this title/paper? -----

6.1.3 How secure is this as compared to what you previously held?

More Secure	
Less Secure	
The same	

6.2 What will happen to your plot when the head of the family dies? -----

6.3 When your children grow will you subdivide your plot in order to give them land?-----

6.4 Do you have enough land? -----

Appendix 2

Interview Guide: Former Commercial Farmers

1. Could you provide a brief historical overview of the land use practices at your farm, how and when you acquired/inherited the farm?
2. How many hectares was your farm?
3. What was your production levels for crops and livestock reared?
4. Could you describe your water sources for domestic and agricultural purposes?
5. Could you describe the quality of the soils at your farm
6. To which markets did you sell your crops?
7. How many people were employed at your farm?
8. How was your farm acquired for resettlement under the FTLRP?
9. In your opinion what does it take to be a successful farmer?
10. Can successful arable crop production take place at your farm?

APPENDIX 3

Interview Guide with key officials in the Lands Ministry

Name of interviewee -----

Date of interview -----

Position Held by the interviewee-----

Section I Land Institutions

- 1.1 Could you provide an overview of your job?
- 1.2 What are the institutions that deal with land and agrarian reform in Zimbabwe?
- 1.3 Are these institutions centralised or decentralised?
- 1.4 What changes have taken place in government land institutions since 1980?
- 1.5 What was the rationale of creating a new ministry of lands, land reform and resettlement?
- 1.6 Why did it take two decades create a separate lands ministry?
- 1.7 What is the role of the ministry of lands, land reform and resettlement?
- 1.8 How is this ministry structured and coordinated?
- 1.9 How do the functions of this ministry differ to that of the ministry of agriculture?
- 1.10 Are there any problems being encountered with the separation of these ministries. Please explain your answer?
- 1.11 Water is an important aspect to any successful land reform programme, why is there a separate ministry of water resources and Infrastructural development?
- 1.12 How does the Lands ministry coordinate with the ministry of water resources and Infrastructural development?
- 1.13 How is land reform and resettlement administered and coordinated at the district level?

Sections II Land Policies

- 2.1 Could you explain the changes/shifts in Zimbabwe's land policy since 1980?
- 2.2 Why have these changes occurred?
- 2.3 How far is the 1980's policy of growth with equity being pursued in the current FTLRP?
- 2.4 Please explain the reason behind the reduction from four to two resettlement models under the FTLRP?
- 2.5 With the world moving towards Agribusiness is the A2 small scale farming not a regression to the current trend?
 - 2.5.1 Will the A2 farmers not suffer from economies of scale?
 - 2.5.2 How competitive and productive is this group of farmers?
- 2.6 The aim of the A1 model was to decongest the communal areas, how far had this been achieved by FTLRP?
 - 2.6.1 How many people have been resettled under the A1 model?
- 2.7 Is government integrating FTLRP with other local development initiatives?
 - 2.7.1 If yes, how is this being done?
 - 2.7.2 If no, why is this not being pursued?
 - 2.7.3 Part of the Colombian land policy is the active role played by NGOs in providing technical assistance and support to land reform beneficiaries rather than it being state driven. How far is government working with NGOs to provide technical and financial assistance to land reform beneficiaries? ***
- 2.8 How sustainable is the current FTLRP?
- 2.9 Why has land policy not provided for the ownership of land for beneficiaries of land reform, yet some black elites have title deeds to the land?
- 2.10 Will this not cause future conflict?
- 2.11 There are debates over the nationalisation of land in academic discourse and popular media, what are the benefits of nationalising land in Zimbabwe?***

Section IV Political and Socio-economic

- 3.1 Does a land market still exist in Zimbabwe?
- 3.2 Can commercial farmers sell their land and does government retain the right to land being offered to it first after FTLRP?
- 3.3 Former Commercial farmers had loans with banks, how has the banking sector been affected by FTLRP?
- 3.4 Has government compensated the banks?
- 3.5 Who are the beneficiaries of land reform
- 3.6 Have the beneficiaries acquired the enough land?
- 3.7 Can a future land crisis be foreseen in Zimbabwe between those who have benefited from the FTLRP and those who have not?
- 3.8 The current socio economic environment has been described as not being conducive for viable farming especially for small scale farmers what strategies has government put in place to overcome this?
- 3.9 Should government provide financial and infrastructural assistance to the new farmers?
- 3.10 Has the government imposed restrictions on land use practices in A1 and A2 resettlements?
- 3.11 If yes what are these restrictions?

APPENDIX 4

Interview Guide with AREX officials

Questionnaire Number _____

Date of Interview _____

Name of Interviewee _____

Role of Interviewee in the organisation _____

Section I. Structure of Arex

- 1.1 What is the role/purpose of AREX?
- 1.2 Could you describe the structural organisation of AREX?
- 1.3 Which central government department does AREX fall under?
- 1.4 Has your job changed with the split of Ministry of Agriculture and Lands?
- 1.5 If it has changed could you describe how it has changed?
- 1.6 Has this split helped or not in the coordination of AREX's activities?

Section II. Subdivision of Farms

- 2.1 Prior to the FTLRP was your organisation involved in subdividing farms?

Yes	
No	

- 2.2.1 If yes who within the organisation subdivided the farms?
 - 2.2.2 What was the criterion used to do this?
 - 2.2.3 How was this done?
- 2.3.1 Under the FTLRP how many farms were acquired in the Muzvezve Intensive Conservation Area (ICA)?
- 2.4 Under the FTLRP does your organisation subdivide farms?

Yes	
No	

- 2.4.1 If yes, who within the organisation subdivides the farms?
- 2.4.2 What criterion was and is used to subdivide the farms acquired in the Muzvezve ICA?
- 2.4.3 How were the farms subdivided?
- 2.4.4 If no who subdivides these farms?
- 2.4.5 How many households were resettled under the A1 model?
- 2.4.6 How many households were resettled under the A2 model?
- 2.5.1 Has there been conflict amongst the new farmers in the Muzvezve ICA caused by these subdivisions?

Yes	
No	

- 2.5.2 If yes, who within the organisation resolves these conflicts?
- 2.5.3 Please explain how these conflicts are resolved?
- 2.6 Are there specific areas set aside/demarcated for grazing, cultivation and homesteads for the A1 farmers in the ICA?

Land use	Yes	No	Area in hectares
Cultivation			
Grazing			
Homestead			
Other			

- 2.6.1 If other please specify?
- 2.6.2 If yes, how many hectares is each land use?
- 2.6.3 Is the area for grazing sufficient for this group of farmers?
- 2.6.4 How was the land allocated for grazing and what criterion was used?
- 2.6.5 If farmers were not allocated grazing land where do they graze their livestock and is this area an adequate amount?
- 2.6.6 Why was land not set aside for grazing for this group of farmers?
- 2.7 Is there a specific area set aside /demarcated for grazing for the A2 farmers in the ICA?

Land use	Yes	No	Area in hectares
Cultivation			
Grazing			
Homestead			
Other			

2.7.1 If other please specify.

2.7.2 If yes, how many hectares is each land use?

2.7.3 Is the area for grazing sufficient for this small-scale commercial farming group?

2.7.4 How was the land allocated for this use and what criterion was used?

2.7.5 If no, where do the farmers graze their livestock and is this an adequate amount?

2.7.6 Why was land not set aside for grazing for this group of farmers?

Section III. Land use and Output of the A1 and A2 Farmers

3.1 What were the land use practices of the former commercial farmers in the ICA?

3.2 What are the land use practices of the A1 farmers in the ICA?

3.3 What are the land use practices of the A2 farmers in the ICA?

3.4 Which group of farmers A1/A2 is more productive?***

3.5 Which group of farmers A1/A2 needs most help?

3.6 Please explain your answer?

3.7 How is the lack of security of tenure presently affecting the operations of the A1 and A2 farmers in the ICA?***

3.8 In what ways do these new farmers need assistance?

Section IV. Environmental Impact

4.1 Before the FTLRP why was Muzvezve designated as an ICA?

4.2 Under the FTLRP has the density of people in the ICA increased?

- 4.3 What is/will be the effect of this increase on the environment in the ICA?
- 4.4 Do you think that there is a higher density of people than can be supported by the resources in this area?
- 4.5 How much livestock can be supported in the Muzvezve ICA?
- 4.6 Do you think there is an increase in livestock units in the ICA since the inception of the FTLRP?
- 4.7 What is/will be the effect of this increase on the environment in the ICA?
- 4.8 What measures has AREX taken to ensure that livestock units do not exceed the required limit in the ICA?
- 4.9 A pilot survey in the ICA, firstly, revealed that most A1 and A2 farmers were intercropping a single field and rotating different crops on it. As well as relied on firewood as their main source of energy
 - 4.9.1 What is the impact of this on the environment?
 - 4.9.2 How sustainable is intercropping as a method of farming?
 - 4.9.3 In general how sustainable are the land use practices of these new farmers?
- 4.10 What measures has AREX taken to ensure the new farmers practice good land husbandry and preserve the environment from degradation?

APPENDIX 5

List of the key informants and governmental officials interviewed and the positions held.

The key informants interviewed

- Professor Sam Moyo: Director of the African Institute for Agrarian Studies (AIAS).
- Professor Lloyd Sachikonye: Head of Land Policy in the Department of International and Development Studies at the University of Zimbabwe.
- Dr Langford Chitsike: Lecturer at the University of Zimbabwe and former Permanent Secretary in the Ministry of Lands, Resettlement and Rural Development.
- Ambrose Made: Land Consultant in the Environment Land Support Unit (ELSU) of the United Nations Development Programme (UNDP) in Harare, Zimbabwe.
- John Worsley-Worsick: Director of Justice for Agriculture (JAG) and a former commercial farmer.

Government officials interviewed

- Dr Maunganidze: The former Principle Director in the Ministry of Lands, Land Reform and Resettlement in the Office of the President.
- Mr Pazvakavambwa: the former Permanent Secretary in the Ministry of Lands, Land Reform and Resettlement (not formally administered with the interview guide like the others but provided information, nevertheless)

- Mrs Tsvakwi: the former Director of Acquisition (she did not wish to be interviewed formally but provided with documentation regarding the process of acquisition and follow up question to this documentation.)
- Mr Samuriwo: The Director of Resettlement
- Mr Maguranyanga: The Acting Director of Lands Information Systems
- Mr Moyo: Chief Evaluation Officer in the Ministry of Lands, Land Reform and Resettlement in the Office of the President.
- Mr Mlambo: The Director of AREX
- Mr Mache: Deputy Director of Planning of AREX
- Mrs Ndoro: Head of AREX in Kadoma District
- Mr Mapfumo: Kadoma District's Lands Officer
- Mr Bandura: Assistant District Administrator of Kadoma

APPENDIX 6

Maps and electronic spatial data purchased for the research

Maps:

- 1: 250 000 Kwekwe SE-35-12
- 1:250 000 Chegutu SE-36-9
- 1:250 000 Copper Queen SE-35-9,

(Both hard and electronic copies of each map series were obtained)

Seven 1:50: 000 hard copy map series covering the Muzvezve ICA

- Robb's Drift 1829 A2
- Sakurgwe 1829 B1
- Chakari 1829 B2
- Mafungabusi 1829 A4
- Umsweswe Ranch 1829 B3
- Gatooma 1829 B4
- Lone Kopje 1830 A3

Environmental, population and topographical covers of Zimbabwe

- Natural Farming Regions
- Land tenure
- Soils
- Relief
- Rivers
- Administrative provinces, districts and ward boundaries
- Settlement
- Communication

Covers of Landsat© purchased from the Forestry Commission in Harare.

- Lanteglos- 1976, 1992, 2002
- Pamene- 1976, 1992, 2002
- CC Molina-1972, 1992, 2002

The landsat© type from which images were obtained.

Date	Path	Row	LandSat©
22/11/72	183	073	MSS
11/08/76	182	073	MSS
12/06/92	170	073	TM
03/08/02	170	073	ETM


MSS-Multi Spectral Scanner

TM-Thematic Mapper

ETM-Enhanced Thematic Mapper

APPENDIX 7


Offer Letter for beneficiaries under the A2 settlement scheme

<p>Telephone: 707091/9 Telegram: "SECPRES"</p>	 ZIMBABWE	<p>Reference: OFFICE OF THE PRESIDENT AND CABINET Private Bag 7700 Causeway Zimbabwe</p>
<p>Ref: To:</p>	<p>DATE: 05-Apr-05</p>	

Dear Sir/Madam

Re: OFFER OF LAND HOLDING UNDER THE LAND REFORM AND RESETTLEMENT PROGRAMME, (MODEL A2 PHASE II)

1. The Minister of Special Affairs in the President's Office in charge of Lands, Land Reform and Resettlement has the pleasure in informing you that your application for land under Model A2 Scheme has been successful.
2. You are offered Subdivision _____ of _____
in _____ District of _____ for
agricultural purposes. The farm is approximately _____ hectares in extent.
3. The offer is made in terms of the Agricultural Land Settlement Act [Chapter 20:01] whose provisions you are advised to acquaint yourself with. Conditions that go with the offer are attached.
4. You are requested to indicate on the attached form whether you accept this offer or not, within 30 days of receipt of this offer.
5. If you accept this offer, you are required to declare any state land you maybe leasing for agricultural purposes or whether you have been allocated agricultural land under any Government scheme.
6. A lease agreement will only be entered into once the Minister is satisfied that all conditions have been met.
7. The Minister reserves the right to withdraw or change this offer if he deems it necessary, or if you are found in breach of any of the set conditions. In the event of a withdrawal or change of this offer, no compensation arising from this offer shall be claimable or payable whatsoever.


Hon. J. L. Nkomo (MP)
Minister of Special Affairs in the President's Office in charge of Lands, Land Reform and Resettlement

CONDITIONS APPLYING TO THE OFFER OF LAND UNDER THE ZIMBABWE LAND REFORM AND RESETTLEMENT PROGRAMME (PHASE II, MODEL A2 SCHEME)

1. The offer is subject to the following conditions: -

- a) (i) that you take up personal and permanent residence on the holding upon your acceptance of this offer which should be communicated to this office within 30 days of receipt

.OR

- (ii) You appoint a manager who shall personally and permanently take up residence on the holding within three months of your acceptance of this offer and
- b) That you undertake to initiate developments on the holding in accordance with the five year development plan you submitted with your application.
In the event of your plan not being specific to the farm that you are now offered, you shall be required to submit a new land use plan to this office for approval before it is implemented within one month of your acceptance of the offer
- c) (i) that you shall not cede, assign or make over any right or obligation or sublet or part with possession or grant any form of right of occupation in respect of this farm or part thereof without the prior written consent of the Minister; and
- (ii) That in the event of death of the Lessee, the rightful heir shall apply for succession
- (iii) That in the event of the Lessee not being able to continue farming operations because of physical or mental factors, he/she can apply for cession or surrender his rights to the Ministry of Lands, Agriculture and Rural Resettlement.
- d) That you comply with all the provisions of the Agricultural Land Settlement Act [Chapter 20:01] pertaining to the leasing of state land and, in addition, any special conditions which may be imposed by the Minister and
- e) That you shall comply with any laws requiring the grant of any servitudes over the holding should you be required to do so by the Minister.

2. You are further advised as follows:-

- a) The onus of notifying this office of any change of address shall lie with you and your failure to do so shall absolve this office from responsibility for misdirected correspondence;
- b) (i) when it is established that you have occupied and you are developing the offered land holding, an Agreement of Lease shall be prepared and forwarded to you for signature.
- (ii) The lease shall be up to 99 years (renewable).

- c) Irrespective of the date of signature of the lease agreement, the commencement date shall be set back to cover the actual period of occupation and you will be responsible for payment of lease rentals and council rates from the date of your acceptance of this offer;
 - d) You shall be required to assume responsibility for any existing developments on the farm from the date of your acceptance of this offer.
3. The offer may also be cancelled or withdrawn for breach of any of the conditions set out above.
4. The Ministry reserves the right to cancel/withdraw this offer if it is established that you failed to disclose essential information when you completed your application or when you were interviewed such as the ownership or lease of other state lands or lands should you fail to dispose of same. In the event of such cancellation or withdrawal no compensation shall be paid for improvements effected on the land or for any disturbance whatsoever.

APPENDIX 8A

Lanteglos changes in land cover/use 1976 to 1992			
Change	Area (hectares)	% Change by 1992	Rank
bad data	6.025		
bushland to grassland	167.218	43.0%	1
bushland to cultivation	90.781	23.4%	2
bushland to woodland	58.996	15.2%	3
bushland to riverine	12.636	3.3%	4
bushland to fire scar	0.028	0.0%	5
cultivation to grassland	64.780	26.5%	1
cultivation to bushland	25.879	10.6%	2
cultivation to woodland	22.347	9.1%	3
cultivation to riverine	8.942	3.7%	4
cultivation to fire scar	2.935	1.2%	5
grassland to cultivation	9.005	97.9%	1
grassland to riverine	0.194	2.1%	2
no change	254.762		
riverine to woodland	5.810	50.1%	1
riverine to bushland	5.779	49.9%	2
woodland to bushland	158.092	59.5%	1
woodland to cultivation	16.645	6.3%	2
woodland to grassland	6.811	2.6%	3
woodland to riverine	1.464	0.6%	4
woodland to rock outcrop	0.013	0.0%	5

Lanteglos changes in land cover/use 1992 to 2002			
Change	Area in hectares	% Change by 2002	Rank
bad data	6.167		
bushland to woodland	18.684	7.5%	1
bushland to firescar	18.469	7.4%	2
bushland to cultivation	7.454	3.0%	3
bushland to riverine	7.017	2.8%	4
bushland to grassland/vlei	5.633	2.3%	5
cultivation to bushland	88.523	37.5%	1
cultivation to firescar	25.375	10.8%	2
cultivation to woodland	21.580	9.2%	3
cultivation to riverine	5.306	2.2%	4
cultivation to grassland/vleis	0.873	0.4%	5
cultivation to grassland	0.015	0.0%	6
firescar to bushland	2.955	99.8%	1
firescar to cultivation	0.007	0.2%	2
grassland to bushland	153.185	64.1%	1
grassland to fire scar	72.616	30.4%	2
grassland to woodland	4.040	1.7%	3
grassland to cultivation	3.457	1.4%	4
grassland to riverine	0.664	0.3%	5
grassland to grassland/vleis	0.348	0.1%	6
no change	354.182		
riverine to woodland	14.411	62.0%	1
riverine to grassland	3.815	16.4%	2
riverine to fire scar	0.613	2.6%	3
rock outcrop to bushland	0.013	130.0%	1
woodland to bushland	70.137	42.8%	1
woodland to grassland	14.188	8.7%	2
woodland to riverine	12.288	7.5%	3
woodland to fire scar	6.510	4.0%	4
woodland to grassland/vleis	0.676	0.4%	5

APPENDIX 8B

CC Molina changes in land cover/use 1972 to 1992			
Change	Area in hectares	% change by 1992	Rank
bad data	425.8530		
bushland to grassland	966.0450	34.2%	1
bushland to riverine	133.1150	4.7%	2
bushland to cultivation	78.5880	2.8%	3
bushland to grassland/vlei	53.5240	1.9%	4
bushland to woodland	23.4360	0.8%	5
bushland to waterbody	3.1870	0.1%	6
cultivation to bushland	675.4710	43.7%	1
cultivation to grassland	394.4690	25.5%	2
cultivation to riverine	50.2990	3.3%	3
cultivation to grassland/vlei	24.0450	1.6%	4
cultivation to woodland	15.0730	1.0%	5
cultivation to waterbody	2.5010	0.2%	6
grassland to bushland	928.1070	83.3%	1
grassland to riverine	39.4520	3.5%	2
grassland to grassland/vlei	19.3710	1.7%	3
grassland to woodland	6.3510	0.6%	4
grassland to cultivation	1.3290	0.1%	5
grassland/vlei to grassland	38.3510	73.1%	1
grassland/vlei to bushland	9.6060	18.3%	2
grassland/vlei to riverine	2.9630	5.6%	3
no change	2008.3870		
riverine to bushland	106.8270	37.1%	1
riverine to grassland	61.2740	21.3%	2
riverine to woodland	17.0490	5.9%	3
riverine to grassland/vlei	10.7380	3.7%	4
riverine to cultivation	2.5860	0.9%	5
riverine to waterbody	0.8020	0.3%	6
woodland to bushland	779.7560	60.5%	1
woodland to grassland	242.1990	18.8%	2
woodland to cultivation	125.4020	9.7%	3
woodland to riverine	39.0660	3.0%	4

CC Molina changes in land use 1992 to 2000			
Change	Area in hectares	% change	Rank
bad data	174.847		
bushland to cultivation	307.055	7.6%	1
bushland to grassland/vlei	59.034	1.5%	2
bushland to riverine	46.730	1.2%	3
bushland to grassland	23.682	0.6%	4
bushland to firescar	7.432	0.2%	5
bushland to waterbody	1.271	0.0%	6
cultivation to bushland	374.785	66.1%	1
cultivation to grassland /vleis	29.263	5.2%	2
cultivation to firescar	13.484	2.4%	3
cultivation to riverine	1.658	0.3%	4
cultivation to grassland	1.129	0.2%	5
cultivation of waterbody	1.106	0.2%	6
cultivation to woodland	1.041	0.2%	7
grassland to bushland	1338.332	73.4%	1
grassland to cultivation	180.139	9.9%	2
grassland to grassland/vleis	78.792	4.3%	3
grassland to riverine	71.759	3.9%	4
grassland to firescar	4.740	0.3%	5
grassland/vleis to bushland	70.376	65.4%	1
grassland/vleis to riverine	13.504	12.5%	2
grassland/vleis to cultivation	8.616	8.0%	3
no change	3946.200		
riverine to bushland	202.609	58.4%	1
riverine to grassland/vleis	23.294	6.7%	2
riverine to cultivation	21.794	6.3%	3
riverine to woodland	11.267	3.2%	4
riverine to grassland	5.308	1.5%	5
water body to bushland	3.977	61.3%	1
water body to cultivation	1.119	17.2%	2
water body to riverine	0.992	15.3%	3
woodland to bushland	123.642	82.7%	1
woodland to cultivation	18.046	12.1%	2
woodland to grassland	7.626	5.1%	3

APPENDIX 8C

<u>Pamene changes in land cover/use 1976 to 1992</u>			
Change	Area in hectares	% change by 1992	Rank
bad data	77.889		
bushland to woodland	74.277	11.2%	1
bushland to grassland/vlei	70.490	10.6%	2
bushland to cultivation	37.684	5.7%	3
bushland to riverine	37.407	5.6%	4
bushland to grassland	12.812	1.9%	5
bushland to water body	0.640	0.1%	6
cultivation of bushland	84.380	40.2%	1
cultivation to woodland	15.070	7.2%	2
cultivation to riverine	4.829	2.3%	3
cultivation to water body	0.801	0.4%	4
grassland/vlei to bushland	68.675	69.7%	1
grassland/vleis to woodland	8.038	8.2%	2
grassland/vleis to riverine	5.549	5.6%	3
grassland/vleis to water body	5.086	5.2%	4
grassland/vlei to grassland	2.284	2.3%	5
no change	555.924		
riverine to bushland	29.497	43.9%	1
riverine to grassland/vlei	9.780	14.6%	2
riverine to cultivation	6.744	10.0%	3
riverine to woodland	5.815	8.7%	4
riverine to water body	0.087	0.1%	5
water body to woodland	8.132	58.2%	1
water body to riverine	0.437	3.1%	2
water body to grassland/vlei	0.069	0.5%	3
woodland to bushland	117.118	64.5%	1
woodland to riverine	5.797	3.2%	2
woodland to grassland/vleis	3.620	2.0%	3
woodland to grassland	0.187	0.1%	4

Pamene changes in land cover/use 1992 to 2002			
Change	Area in hectares	% Change by 2002	Rank
Bad data	0.065		
bushland to cultivation	84.196	10.7%	1
bushland to woodland	70.419	8.9%	2
bushland to grassland	70.036	8.9%	3
bushland to grassland/vlei	33.307	4.2%	4
bushland to riverine	18.507	2.3%	5
bushland to waterbody	2.878	0.4%	6
cultivation to riverine	8.368	8.7%	1
cultivation to bushland	2.529	2.6%	2
grassland to bushland	10.520	68.8%	1
grassland to woodland	4.194	27.4%	2
grassland to grassland/vlei	0.318	2.1%	3
grassland to riverine	0.252	1.6%	4
grassland/vlei to bushland	38.594	41.6%	1
grassland/vlei to grassland	8.945	9.6%	2
grassland vlei to cultivation	3.252	3.5%	3
grassland/vlei to woodland	1.794	1.9%	4
grassland vlei to waterbody	0.038	0.0%	5
no change	699.923		
riverine to grassland vlei	26.806	38.7%	1
riverine to bushland	26.790	38.7%	2
riverine to woodland	4.444	6.4%	3
riverine to cultivation	1.228	1.8%	4
riverine to grassland	0.961	1.4%	5
riverine to waterbody	0.293	0.4%	6
waterbody to grassland/vlei	2.277	19.1%	1
waterbody to grassland	0.861	7.2%	2
waterbody to riverine	0.519	4.3%	3
woodland to bushland	92.084	57.6%	1
woodland to cultivation	10.597	6.6%	2
woodland to grassland	5.356	3.4%	3
woodland to grassland/vlei	3.480	2.2%	4

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