A proposed economic household model on land acquisition and utilisation between males and females in A1 Resettlement Schemes in Zimbabwe, 2000-2002

BY

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Abstract

The fast track land reform programme implemented in an accelerated manner in Zimbabwe during 2000-2002 resulted in a major and drastic reconfiguration of land use and ushered in a new regime of gender relations on land. Although much has been documented about the fast track land reform programme, the gendered outcomes of the programme, especially the consequences on different categories of women still remain an inadequately researched area. Whereas women in single-headed households could obtain land in their own right, the security of land rights for married women has not been adequately investigated. This thesis makes a contribution to filling this lacuna. The primary purpose of the study was to make a critical evaluation of the distribution of land between men and women under the fast track land reform programme using a gender approach. The approach specified the imbalances in the division of labour between men and women, status of women in the domestic units, the diversity and asymmetry of households, intra-household and extra-household power relations and gender-based differentials as regards access to and control over assets in A1 resettlement areas.

The study used statistical tests and econometric analysis on baseline survey data collected by the African Institute of Agrarian Studies and supplemented by qualitative data gathered in Goromonzi District. The qualitative data were collected using questionnaire interviews, focus group discussions, observations and document analysis in order to triangulate the evidence. The study did not find evidence of the discrimination of married women. The study revealed that women enjoyed the same land rights as men in A1 schemes. Women were assigned land rights as individuals and through joint registration of offer letters with their husbands. Intra-household factors were not significant determinants of the security of women’s land rights in A1 schemes. Instead, extra-household factors like social assets determined the security of women’s land rights. Using the mean size of arable area allocated to men and women, the study did not find evidence of gender asset gap in A1 schemes. However, the study found that more men than women received land under the land reform programme because the government used the household as the beneficiary unit. Although the gendered relations of production still shaped the division of labour within households, women had equal status on decision making about crop production, acquisition and disposal of livestock, household and productive assets and marketing of agricultural products.

The study recommended that there should be legal recognition of dual-headed households in the land redistribution programme. The allocation of land under the land reform programme should focus on individuals within households. Methods should be devised to inform women about their land rights and the avenues through which these rights can be enforced. The proposed land policy reform should focus on land titling in order to promote agricultural production and investment.

Future research should focus on the security of women’s land rights in the event of divorce and the impact of off-farm residence of A1 farmers on agricultural production efficiency and investment.
Acknowledgements

In the course of producing a thesis, one accumulates numerous debts. This is particularly true in my case. I am grateful to many individuals and organisations that supported, encouraged and assisted me in completing this thesis. To all those who made tremendous contributions to the successful completion of this thesis but whom I do not mention by name, I beg for your forgiveness.

To the A1 farmers who facilitated this work by agreeing to become participants of my case study in Goromonzi District, I profusely thank you. Dozens of A1 farmers in Bains Hope and Ingwenya Farm spent time orienting me to their farms, sharing with me their perspectives and answering endless questions. I am deeply indebted to the District Administrator of Goromonzi District, District Lands Officer for Goromonzi District, the headwoman of Bains Hope, the headman of Ingwenya Farm, the Committee of Seven in Ingwenya Farm, the Information Officer of Zimbabwe Women Resource Centre and Network, the Gender Officer in the Ministry of Women Affairs, Gender and Community Development and anonymous farm worker from Bains Hope who generously gave their time. To the staff of the African Institute of Agrarian Studies, I thank you for all your kindness and support, especially for allowing me to use raw data of the nation-wide baseline survey of A1 and A2 resettlement areas as well as giving me access to your library.

I would like to thank my supervisor, Dr. Donald P. Chimanikire who has always believed in me more than I have. You agreed to be associated with this research when it was still in its raw form and helped to transform it to what it is now. I am so grateful for your patience, guidance and invaluable support which sometimes transcended beyond academia. Above all, you always impressed me with your immense knowledge in the domain of research in development planning and your love and dedication to the field. It is my fervent hope that this thesis would be the beginning of our collaboration in research.

Here, at the Zimbabwe Open University, I have had the pleasure of getting help from more people. Special thanks go to Dr. Adolph S. Chikasha and his team for providing the much needed support during the course of this thesis. To all Supervisors of Doctoral studies at the Zimbabwe Open University I say thank you for your constructive criticisms and suggestions. In particular, I am indebted to Dr. Timothy Musankuleni Kaputa and Dr. Lighton Dube for your critical comments on the research instrument and focus group schedule. Dr. Dube, thank you for helping me sort out the mysteries of multinomial logit model. Professor Takawira Cuthbert Gwarinda, your place is special in the whole process. Above all, you were a constant reminder and inspiration that the thesis must be permanently resolved. My thanks go to my colleagues Farai Choga, Kudakwashe Sithole and Nelson Mazuru for their valuable comments and advice.
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The memories of my late mother, Josephine Gorondondo Njaya continued to be a source of inspiration. Were you here today VaChidembo, I know you would have been so proud.

As always, my family has been the best moral support for me during my studies. My other half, Miriam and our lovely three sons, Kudzai, Tavonga (jnr) and Kudakwashe, I wish I could give the title to you.

I thank God for making this day possible.
Dedication

This thesis is dedicated to the memories of my late mother, Josephine Rayirayi Gorondondo Njaya (nee Ndige) who inculcated in me a strong sense of discipline and hard-work. You would have been proud.
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<td>AIAS</td>
<td>African Institute of Agrarian Studies</td>
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<tr>
<td>AIDS</td>
<td>Acquired Immune-Deficiency Syndrome</td>
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<td>AREX</td>
<td>Agricultural Extension Services</td>
</tr>
<tr>
<td>CEDAW</td>
<td>Convention on the Elimination of all forms of Discrimination against Women</td>
</tr>
<tr>
<td>COHRE</td>
<td>Centre for Housing Rights and Evictions</td>
</tr>
<tr>
<td>CSO</td>
<td>Central Statistical Office</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development of United Kingdom</td>
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<tr>
<td>FAO</td>
<td>Food and Agriculture Organisation</td>
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<tr>
<td>$df$</td>
<td>Degrees of freedom</td>
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<tr>
<td>FTLP</td>
<td>Fast Track Land Reform Programme</td>
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<td>GII</td>
<td>Gender Inequality Index</td>
</tr>
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<td>GOZ</td>
<td>Government of Zimbabwe</td>
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<td>GRDC</td>
<td>Goromonzi Rural District Council</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GNI</td>
<td>Gross National Income</td>
</tr>
<tr>
<td>Ha</td>
<td>hectare</td>
</tr>
<tr>
<td>HDI</td>
<td>Human Development Index</td>
</tr>
<tr>
<td>HHH</td>
<td>Household head</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immuno-Deficiency Syndrome</td>
</tr>
<tr>
<td>ICFU</td>
<td>Indigenous Commercial Farmers Union</td>
</tr>
<tr>
<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organisation</td>
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<td>IV</td>
<td>Independent Variable</td>
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<td>LSCF</td>
<td>Large Scale Commercial Farms</td>
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<tr>
<td>MDC</td>
<td>Movement for Democratic Change</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>MMR</td>
<td>Mixed Methods Research</td>
</tr>
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<td>MNLM</td>
<td>Multinomial Logit Model</td>
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<td>MLE</td>
<td>Maximum Likelihood Estimation</td>
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<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<td>SADC</td>
<td>Southern African Development Community</td>
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<td>SIDA</td>
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<td>SPSS</td>
<td>Statistical Package for the Social Scientists</td>
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<tr>
<td>SSCF</td>
<td>Small Scale Commercial Farms</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNECA</td>
<td>United Nations Economic Commission for Africa</td>
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<td>WID</td>
<td>Women in Development</td>
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<td>WLZ</td>
<td>Women and Land in Zimbabwe</td>
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<tr>
<td>ZANU-PF</td>
<td>Zimbabwe African National Union-Patriotic Front</td>
</tr>
<tr>
<td>ZCDT</td>
<td>Zimbabwe Community Development Trust</td>
</tr>
<tr>
<td>ZIC</td>
<td>Zimbabwe Junior Certificate</td>
</tr>
<tr>
<td>ZIMSTAT</td>
<td>Zimbabwe National Statistics Agency</td>
</tr>
<tr>
<td>ZWRCN</td>
<td>Zimbabwe Women Resource Centre and Network</td>
</tr>
</tbody>
</table>
### Glossary of Shona, Ndebele and other Foreign Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roora/lobola</td>
<td>bride price</td>
</tr>
<tr>
<td>Tseu/isivinde</td>
<td>piece of land allocated to a married woman to grow small crops such as groundnuts, pumpkins and sweet potatoes.</td>
</tr>
<tr>
<td>Miombo</td>
<td>a group of trees comprising a large number of species <em>(Brachystegia)</em></td>
</tr>
<tr>
<td>Mazhanje</td>
<td>fruits of Muzhanje tree found in Zimbabwe <em>(Uapaca Kirkiana)</em></td>
</tr>
<tr>
<td>Latifundio</td>
<td>large landed estate (more than 500 hectares) in Spain or Latin America</td>
</tr>
<tr>
<td>Minifundio</td>
<td>smallholding (less than 50 hectares) in Spain or Latin America</td>
</tr>
<tr>
<td>Appendix</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
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<td>Appendix I</td>
<td>Questionnaire for A1 farmers in Goromonzi District</td>
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<td>Appendix II</td>
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</tr>
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</tr>
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</tr>
</tbody>
</table>
CHAPTER ONE

INTRODUCTION

1.0 Introduction

The objective of this chapter is to motivate the need for the study and to indicate the reasons for the development of an economic household portfolio model on the acquisition and utilisation of land in A1 schemes. The background to the study, especially the colonial legacy of land alienation in Zimbabwe and the two phases of the Land Reform and Resettlement Programme would be discussed in section 1.1 so as to lay the foundation on which the study would be based. Section 1.2 provides the theoretical framework of the study. The rationale for the study is presented in section 1.3. The statement of the problem is formulated in section 1.4. The outlines of the main aim and specific objectives of the study are provided in sections 1.5 and 1.6 respectively. The research questions and hypotheses are presented in section 1.7. Section 1.8 provides the assumptions underlying the study. The significance of the study is presented in section 1.9. In section 1.10, a demarcation of the study is provided. Limitations of the study are highlighted in section 1.11. Section 1.12 provides the data collection methods and techniques. Section 1.13 provides a brief literature review. In section 1.14, the ethical conduct during the research process is explained. The reference technique used in the study would be outlined in section 1.15. The organisation of the thesis is presented in section 1.16. In order to avoid terminological uncertainty, a glossary will be presented in section 1.17. Section 1.18 provides the summary to this chapter.
1.1 Background to the Study

Land is an important resource especially for an agricultural economy. It constitutes the primary form of wealth and source of economic and political power (Deere and Doss, 2006). In Zimbabwe, where the majority of people obtain their livelihood directly from agriculture, land ownership and use have always been highly emotional, sensitive and contested issues. The debate on land acquisition and restructuring of land rights in Zimbabwe needs to be examined in a historical perspective in order to contextualise the current gender relations on access to and control over land.

1.1.1 Land Alienation in Zimbabwe

The roots of the land question can be traced back to the colonisation of the area comprising modern day Zimbabwe by the British South Africa Company (in September 1890) on behalf of the British government which, while interested in the extension of British imperialist interests in the Southern Africa following the Berlin Conference of 1884 was reluctant to spend public funds on further colonial acquisitions (Tshuma, 1997). The law was used as an instrument of land dispossession (GOZ, 2003; Madhuku, 2004). By 1894, the Land Commission had dispossessed the indigenous people of over 80 percent of their cattle while land was alienated to mines, farms and industries (Palmer, 1977). In 1898 the Natives Reserves Order in Council created native reserves for Africans in dry and barren areas (Palmer, 1977; Phimister, 1988 cited in Tshuma, 1997). The native reserves acted as labour reservoirs for settler farms and mining interests (Raftopolous and Phimister, 1997; Lebert, 2003). By 1914, the white settlers who constituted a mere three percent of the population controlled 19,032,320 acres of land while the indigenous blacks (or 97 percent of the population) occupied 21,390,080 acres of the land mostly in fragile and marginal areas (Palmer, 1977).
The Land Apportionment Act (1930) segregated landholding by race (Palmer, 1977). Native Purchase Areas (now small scale commercial farms) were created as freehold (Cheater, 1986 Marongwe, 2008) with the primary objective of rewarding civil servants and to provide an option for some black Zimbabweans to invest in land (Muir-Leresche, 2006 cited in Marongwe, 2008). Table 1.1 shows that more than 51 percent of the land was reserved for the white settlers. The bulk of this land was in the fertile and arable high rainfall central highlands (Lebert, 2003). The indigenous blacks were allocated 29.8 percent in Native Reserves (now called communal areas) and the newly created Native Purchase Areas. Although there was a slight increase in landholding by the indigenous blacks after the apportionment, most of that land was in low rainfall and poor ecological areas (Lebert, 2003).

Table 1.1 Land classifications after the Land Apportionment Act (1930)

<table>
<thead>
<tr>
<th>Category of Landholding</th>
<th>Size of Landholding (Acres)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Reserves</td>
<td>21,127,040</td>
<td>22</td>
</tr>
<tr>
<td>Native Purchase Area</td>
<td>7,464,566</td>
<td>7.8</td>
</tr>
<tr>
<td>European Area</td>
<td>49,149,174</td>
<td>51.0</td>
</tr>
<tr>
<td>Unassigned Area</td>
<td>17,793,300</td>
<td>18.5</td>
</tr>
<tr>
<td>Forest Area</td>
<td>590,500</td>
<td>0.6</td>
</tr>
<tr>
<td>Undetermined Area</td>
<td>88,540</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>96,213,120</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: GOZ, 2003

The process of land alienation continued until mid-1940s. As more and more indigenous people were forced from their homes, the native reserves became increasingly overcrowded and overstocked to a state where rehabilitation appeared impossible (Moyana, 1984 cited in Dore,
In 1944, the Godlonton Commission estimated that 24 native reserves were more than five percent overpopulated; 19 were 50 to 100 percent overpopulated and 19 were overpopulated by 100 percent or more (Dore, 2001). The administration became convinced that only a major sustained effort to improve African husbandry practices could avert rural poverty and further ecological decline (ibid).

The Native Land Husbandry Act (1951) limited the number of cattle owned by blacks and introduced compulsory soil and water conservation methods such as terracing. The Act upheld male rights to land (Cheater, 1986; Gaidzanwa, 1994) but curtailed rights to land among peasant wives as well as those of widows and divorcees with dependents (Gaidzanwa, 1981 cited in Cheater, 1986). According to Gaidzanwa (1994), the use rights for all categories of women for arable and grazing land were not registerable. In similar fashion, by the practice of issuing only one dipping card for each family or household, the livestock holdings of subordinate members of the family were regarded as falling under the jurisdiction of the household head (Cheater, 1986). These practices continued into independent Zimbabwe and in some cases still continue to impede women’s access and control over land and other agricultural assets.

1.1.2 Objectives of the Land Reform Programme in Zimbabwe

At independence in 1980, Zimbabwe had a dual agricultural sector (Deininger, Hoogeveen and Kinsey, 2002) and a racially skewed land distribution system (UNDP, 2002; Weiner, 1988 cited in Chaumba, Scoones and Wolmer, 2003). The commercial agricultural sector was dominated by whites and foreign owned companies while the indigenous blacks constituted the small-scale agricultural subsector. All land in the communal areas belonged to the state and usufruct rights
were given to the head of the household, usually male, by the local chief. About 6,034 white commercial farmers (or less than one percent of the population) owned 15.5 million hectares of land (or 45 percent of all agricultural land, of which 75 percent was found in the most agriculturally productive areas) while 840,000 communal farmers controlled 16.4 million hectares (Palmer, 1990; Moyo, 1995a, 2004; Hart-Broekhuis and Huisman, 2001; Shaw 2003). Given the rapidly rising population growth rates (of about 3 per cent per annum) and the decreasing opportunities for non-farm employment over the years, many rural dwellers were thrown into increasing poverty as a result of inadequate and poor-quality land for subsistence farming and unemployment (UNDP, 2002).

Among the arable land in the large scale commercial farms, only 21 percent was utilised while the rest was underutilised or was allowed to lie fallow (GOZ, 1982 cited in Auret, 1990). The existence of unutilised and underutilised land in the large-scale commercial farms made it possible for the government to achieve its objective of a fairer distribution of land without sacrificing growth and development through the purchase of land for resettlement (Auret, 1990).

The primary goal of the land reform programme was to address the imbalances in land access while alleviating population pressure in the communal areas, extend and improve the base for productive agriculture in the smallholder farming sector and bring idle or underutilised land into full production (Kinsey, 1999). Besides redistributing land, the first phase of the land reform programme also focused on developing rural areas through the provision of infrastructure and other socio-economic services so as to ameliorate the plight of the people negatively affected during the war of liberation (Zuwarimwe, 1999 cited in Masiiwa and Chipungu, 2004).
The need to achieve the above objectives dictated the criterion that was used to select the beneficiaries of the land reform and resettlement programme (Masiiwa and Chipungu, 2004). The beneficiaries included landless people (families); unemployed and poor families with dependants between the age of 18 and 55 years, and prepared to forego all land rights in communal areas; returned Zimbabwean refugees displaced by the 1970-79 liberation war; experienced communal farmers prepared to forego communal land rights and give-up any paid employment; communal farmers with Master Farmer certificates; liberation war veterans and commercial farm workers (ibid). The proportions in which the above groups were to benefit were not outlined. The number of married women to be resettled in their own right was not specified among the land beneficiaries.

1.1.3 First Phase of Land Reform and Resettlement Programme, 1980-1997

The First Phase of the Land Reform and Resettlement Programme (Phase I) was launched in September 1980. The aim of the government was to resettle 162,000 families and acquire 8.3 million hectares of land from white commercial farmers for the purpose (GOZ, 1998b). Two methods of land acquisition were used during Phase I, namely, land acquisition through the market (willing seller-willing buyer principle) and compulsory land acquisition.

Land Acquisition through the Market

This method of land acquisition was first used in 1980 in accordance with the Lancaster House Constitution (1979) which governed the country for the first ten years from 1980. The government was expected to purchase land on offer from white commercial farmers on a willing
seller, willing buyer basis and to pay adequate and prompt compensation. Britain provided £47 million for land reform: £20 million as a specific Land Resettlement Grant and £27 million in the form of budgetary support to meet the government of Zimbabwe’s own contribution to the programme (DFID, 2000).

The Land Acquisition Act (1985) gave the government the first right to purchase excess land for redistribution and provided for compulsory acquisition of underutilised land. According to Lebert (2003), the Act was motivated by the drying-up of land on offer for sale to the government. This assertion is refuted by Palmer (1990) who argues that throughout the 1980s, there was a consistent oversupply of land available to the State. Instead, according to Palmer (1990), the government did not have money to pay adequate compensation to the white commercial farmers as stipulated in the Lancaster House Constitution.

**Compulsory Land Acquisition**

The scale and pace at which the government used compulsory methods to acquire land from white commercial farmers had been minimal (Lebert, 2003). This was largely due to weaknesses in the laws governing land acquisition (Moyo, 2000). In 1990 the willing seller, willing buyer clause in the Lancaster House Constitution expired. The government amended the Constitution (Zimbabwe Amendment Act No. 11) and all land, not just under-utilised land was subject to compulsory acquisition. In addition, all land for sale was to be offered to the government first before being sold to a third party. The Government was expected to pay “fair compensation” within a “reasonable time” as opposed to “prompt and adequate compensation” as previously stipulated by the Lancaster House Constitution. The new constitutional framework was followed
by The Land Acquisition Act (1992), which implemented the principles set out in the amended constitution. The constitution was further amended twice in 1993 (Zimbabwe Amendment Act Nos. 12 & 13). Despite these amendments, not much progress was made in terms of resettling the needy people.

In 1990, the government embarked on a commercial resettlement programme. The new group of large-scale black commercial farmers was represented by the Indigenous Commercial Farmers Union (ICFU). In 1994 the government acquired about 400 farms but the bulk of those farms went to senior ZANU-PF party officials and members of the ICFU (Moyo, 2000; Masiiwa and Chipungu, 2004). By 1998 ICFU members owned over 3.3 percent of agricultural land and there was an apparent stagnation in the government’s drive to resettle people from overcrowded communal areas (Moyo, 2000). In 1997 compulsory land acquisition was attempted on 1,471 farms and out of these only 109 were eventually purchased on offer while the rest were delisted by the government on appeal or the government failed to file papers on time or were successfully contested in the courts by the white commercial farmers (GOZ, 1998; Moyo, 2000).

When the Land Resettlement Grant officially expired in 1996 with £3 million undisbursed, Britain refused to extend the grant alleging lack of transparency in the commercial resettlement programme (DFID, 2000). About 71,000 families (against a target of 162,000 families) were resettled on 3.4 million hectares when the First Phase of Land Reform and Resettlement Programme came to an end in 1997 (GOZ, 1998c; Walker, 2002). Despite falling short of the set targets due to a number of challenges facing Phase I, the number of resettled families (43 percent) was quite significant.
The slow progress in land reform during Phase I can be attributed to a number of factors. First, the constitutional constraint of willing seller, willing buyer denied the government the right to buy large tracts of land for large scale resettlement schemes in one block. Second, most of the land offered by the white commercial farmers was in marginal areas of the country. About 81 percent of the land acquired for resettlement during Phase I was in the drier agro-economic regions of the country (GOZ, 1993). Third, land prices shot up drastically from $15.67 per hectare in 1980/81 to $91.24 per hectare in 1987/88 (Palmer, 1990). Lastly, recurring droughts meant that the government could not raise enough funds to purchase land as it had to meet immediate needs of drought relief, health and education. Despite the above problems, Phase I was modest but in many ways successful (Scoones et al., 2010).

According to Masiiwa and Chipungu, (2004) the fundamental reasons for the slow progress in the implementation of Phase I included government complacency and lethargy, class interests (as shown by the introduction of the commercial resettlement and creation of ICFU) and lack of political will to implement agreed policies (ibid). Government complacency and lethargy was demonstrated by the insignificant budget allocations (an average of 0.39 percent of budget) during 1980-1993 for the purpose of land acquisition and redistribution (Auret, 1990; Human Rights Watch, 2002; Mhishi 1995 cited in Masiiwa and Chipungu, 2004). Although donors showed great interest in supporting the land reform programme, the actual contributions remained minimal (Masiiwa and Chipungu, 2004). For example, of the US$1-1.5 billion promised to ZANU and ZAPU in 1976 by the USA to “facilitate economic transition” including land transfers as part of the agreement to end guerrilla warfare never materialised (Thompson, 2003). British funding (£47 million) of Zimbabwe’s land reform made an interesting contrast of its £500 million resettlement grant for Kenya (Moyo, 2000).
Women’s Land Rights under Phase I of Land Reform and Resettlement Programme

Phase I of the land reform programme was gender-blind (Gaidzanwa, 1988) and ignored the needs of women. The selection criteria of beneficiaries during that period targeted household heads who, in the majority of cases were male, without proper investigation of equity and economic rights of women. A survey of couples who benefited from Phase I showed that 98 percent of resettlement permits given for crop and grazing land on Model A schemes were held by husbands against a mere two percent by wives (Gaidzanwa, 1988; Peters and Peters, 1998; COHRE, 2004). By registering the farm holding in the name of the male head of the household, Phase I of the land reform ignored women’s land rights and well-being in the event of marriage dissolution through death, divorce, widowhood or abandonment.

1.1.4 Second Phase of Land Reform and Resettlement Programme, 1998-2002

The Second Phase of Land Reform and Resettlement Programme (Phase II) was characterised by spontaneous land occupations (seizures). Land occupations first emerged immediately after 1980 when communities mostly in Mashonaland Central and Manicaland Provinces led land identification through occupation of abandoned and underutilised farms with the government purchasing that land at market prices (Lebert, 2003; Marongwe, 2000; Moyo, 2001). In 1986, the government outlawed farm occupations and police and white commercial farmers ruthlessly evicted the squatters whenever they occupied commercial farms (Moyo, 2001; Human Rights Watch, 2002; Lebert, 2003; Masiiwa and Chipungu, 2004). There was a dramatic slowdown of farm occupations until towards the end of 1997 (Lebert, 2003). In 1998 villagers in Svosve, Goromonzi and Murehwa in Mashonaland East; Nyamadhlovu in Matabeleland North; Insiza in Matabeland South; Nyamajura in Manicaland and Nemamwa in Masvingo invaded and occupied
white-owned commercial farms abutting their villages but were driven off the farms by the police (GOZ, 2003; Moyo, 2004).

**Land Donor Conference**

In September 1998 the Government organised a Land Donor Conference in order to raise US$1.9 billion for Phase II (GOZ, 2001). According to the Government document presented at the conference, the land for acquisition was to be identified according to a specific identification criteria which included, land that was underutilised; land belonging to absent landlords; land belonging to commercial farmers and/or companies with more than one farm; oversized farms exceeding 1,500 hectares and land adjacent to communal areas (GOZ, 1998c). The beneficiaries were to include the landless poor, overcrowded families; graduates from agricultural colleges and other people with experience (ibid). The proportions in which the above groups were to benefit were not outlined. Neither did the government indicate how the land was to be allocated between males and females.

At the conference, the donors pledged a meagre US$38 million (or 0.02 percent of the total amount required) to finance Phase II (Masiwa and Chipungu, 2004). According to Masiwa and Chipungu (2004) the Land Donor Conference failed because it was not clear how the US$1.9 billion was going to be used and the donors favoured a market-oriented approach and wanted the land reform to be financed from credit facilities instead of the fiscus. Despite the lack of funding from international donors, Phase II of the land reform was launched in 1999 and its aim was to acquire five million hectares of land and resettle 150,000 families (GOZ, 2001).
Referendum on Draft Constitution

In 1999 the Government created a commission to write a new constitution. A referendum on the draft constitution was held in February 2000. Land acquisition and redistribution were handled in Sections 56 and 57 of the draft constitution. The two Sections allowed the Government to compulsorily acquire white-owned agricultural land for resettlement. The Government would pay for improvements on the farms (buildings and equipment) while Britain (former coloniser) would pay farmers for the lost land. The draft constitution was rejected 53:47 percent (Human Rights Watch, 2002). The voters rejected the draft constitution’s attempts to entrench further the power of the executive despite repeated demands for the opposite during the consultation process (Chaumba et al., 2003). The rejection of the draft constitution became a precursor to land occupations (Marongwe, 2008) and the subsequent launch of the fast track land reform programme.

Fast Track Land Reform Programme, 2000-2002

The scale and intensity of farm invasions and occupations increased after the rejection of the draft constitution (Sachikonye, 2003, Marongwe, 2008). The commercial farmers were alleged to have campaigned for a no vote against the draft constitution (Masiiwa and Chipungu, 2004). There were further motivations for the farm occupations ranging from desire for restitution of ancestral land to opportunist poaching (Chaumba et al., 2003). The farm invasions and occupations were spearheaded by District War Veterans Associations who mobilised people from neighbouring communal areas (Chaumba et al., 2003; Scoones et al., 2010). According to Scoones et al. (2010), prior to 2000, most war veterans were farming in the communal areas, a few were living in towns while some were civil servants, business people and employees in the
security services. The reasons why the government condoned farm invasions after the referendum included declining popularity of the ZANU-PF government; the question of allocation of multiple farms to the elite; lack of financial reserves to implement the land reform programme; rising pressure for land from landless people (Moyo 1998 cited in Sithole et al., 2003) and rising popularity of the Movement for Democratic Change in the face of impending elections in June 2000 (Chaumba et al., 2003; Madhuku, 2004; Masiiwa and Chipungu, 2004). It is important to note that the land occupations were not unique to Zimbabwe. Similar programmes have been implemented in countries such as Brazil where land reforms are a response to land occupations (Marongwe, 2002a).

According to Moyo (2000), the question of who was involved in the farm occupations has been a subject of cynical debate whose primary aim is to minimise the importance of both the leadership of war veterans and their capacity to organise and hold widespread occupations. Instead, the leadership of farm occupations is attributed to the army and the government while children, youth and women are said to have been cajoled, paid or even forced to join farm occupations (ibid). This view according to Moyo (2000) underestimates the organic and deep-seated local pressures for land reform and even anger from past injustices and deprivation.

The Fast Track Land Reform Programme was officially launched on 15 July 2000 in order to formalise and regularise the haphazard farm occupations and encourage further land appropriation and redistribution (Goebel, 2005). The Government enacted the Rural Land Occupiers (Protection from Eviction) Act (2001) in order to legalise all land occupations which took place from 16 February 2000 to March 2001 (Madhuku, 2004; Masiiwa and Chipungu, 2004). This was confirmed by the Supreme Court in December 2001 which ruled that the
Government had put in place a land reform programme which sufficiently complied with Section 16A of the then Constitution of Zimbabwe (Marongwe, 2002a).

The Fast Track Land Reform Programme (FTLRP) involved surveying and pegging the already invaded farms (Chaumba et al., 2003). It was designed to be undertaken in an accelerated manner and was a fundamental departure from previous philosophy, practices and procedures of acquiring land and resettling people (GOZ, 2003). The norm elements of the FTLRP included speeding up the identification for compulsory acquisition of not less than five million hectares of land for resettlement; accelerating the planning and demarcation of acquired land and settler emplacement on this land; the provision of limited basic infrastructure (such as boreholes, dip tanks and access roads) and farmer support services (such as tillage and agricultural inputs); simultaneous resettlement in all provinces to ensure that the reform programme was comprehensive and evenly implemented and the provision of secondary infrastructure such as schools, clinics and rural service centres as soon as resources became available (GOZ, 2003; Moyo, 2006). Compulsory land acquisition was targeted at derelict and under-utilised land, land under multiple ownership, foreign owned land and land contiguous to communal areas (GOZ, 2003). On the ground this policy was not observed because even productive and single ownership farms were designated and allocated to indigenous black farmers.

**Land distribution after the FTLRP**

Table 1.2 shows national land distribution before and after the FTLRP. Before the launch of the FTLRP, a total of 11.8 million hectares was occupied by the large scale commercial farms while the communal areas occupied 16.4 million hectares. The FTLRP drastically reduced the land
within the large-scale commercial sector from 30 percent to 12 percent and expanded the small scale agricultural sector from 54 percent to 71 percent.

Table 1.2: National land distribution, 1980-2002

<table>
<thead>
<tr>
<th>Category</th>
<th>1980</th>
<th></th>
<th>2000</th>
<th></th>
<th>2003</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Area,</td>
<td>%</td>
<td>Area,</td>
<td>%</td>
<td>Area,</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>million</td>
<td></td>
<td>million</td>
<td></td>
<td>million</td>
<td></td>
</tr>
<tr>
<td>Large scale commercial area</td>
<td>15.5</td>
<td>39</td>
<td>11.8</td>
<td>30</td>
<td>2.6</td>
<td>6</td>
</tr>
<tr>
<td>Small scale commercial area</td>
<td>1.4</td>
<td>4</td>
<td>1.4</td>
<td>4</td>
<td>1.4</td>
<td>4</td>
</tr>
<tr>
<td>Old resettlement area</td>
<td>0.0</td>
<td>0</td>
<td>3.7</td>
<td>9</td>
<td>3.7</td>
<td>9</td>
</tr>
<tr>
<td>Communal area</td>
<td>16.4</td>
<td>41</td>
<td>16.4</td>
<td>41</td>
<td>16.4</td>
<td>41</td>
</tr>
<tr>
<td>A1 Model</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4.2</td>
<td>11</td>
</tr>
<tr>
<td>A2 Model</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2.2</td>
<td>6</td>
</tr>
<tr>
<td>National Parks and Urban</td>
<td>6.0</td>
<td>15</td>
<td>6.0</td>
<td>15</td>
<td>6.0</td>
<td>15</td>
</tr>
<tr>
<td>State land</td>
<td>0.3</td>
<td>1</td>
<td>0.3</td>
<td>1</td>
<td>0.3</td>
<td>1</td>
</tr>
<tr>
<td>Other (unallocated)</td>
<td>0.0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2.8</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39.6</strong></td>
<td><strong>100</strong></td>
<td><strong>39.6</strong></td>
<td><strong>100</strong></td>
<td><strong>39.6</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Source:** GOZ, 2003; Moyo, 2004; GOZ, 2001 cited in UNDP, 2002

*Other refers to land that had been acquired for resettlement under model A1 and A2 but had not been taken up by those allocated.

The role played by women during farm invasions

Another area that requires particular mention is the role played by women during the farm seizures and occupations. In Zimbabwe, the land question is a highly emotive and sensitive issue for both men and women. The late Pamela Tungamirai, a female ex-combatant, explains women’s demand for land in resettlement areas that this is;
“...the time we [ex-combatants] had been waiting for to be rewarded for our contribution during the war. Land is the reason why we all left our homes to join the liberation struggle.” (quoted in Peters and Peters, 1998)

Peters and Peters (1998) assert that women who joined the liberation struggle as combatants as well as those who remained in support of combatants demanded access to land in their own right.

Women were directly involved in farm invasions and occupations. According to Sadomba (2008), of the eight zone commanders all of whom were war veterans spearheading farm occupations in the Mazowe area, three of them were women. Of the ten war veterans that occupied Muk farm near Chiweshe communal areas, six were women (Sadomba, 2008). Women were important players during the farm invasions, providing support to base camps in the form of food, washing and other necessities (Chaumba et al., 2003; Scoones et al., 2010). It was this level of contribution by women that was often ignored by researchers and as a result treated women as passive beneficiaries of the FTLRP. On occupied farms, Chingarande (2008) observed that there were balanced numbers of males and females. She states that in some cases, occupiers were young couples where both the wife and the husband participated in the farm occupations. These separate observations by Chingarande (2008), Sadomba (2008) and Scoones et al. (2010) greatly undermined an earlier observation by a UK-based scholar, Cecile Jackson (quoted in Agarwal, 2003):

“I have also worked in Zimbabwe, where I was surprised at how few women expressed a demand for land and were in fact much more interested in employment....”
Resettlement Models under the Fast Track Land Reform Programme

There are two models for resettlement under the FTLRP, namely model A1 and model A2. Model A1 aimed at decongesting communal areas and was meant for the generality of the landless people (GOZ, 2003). There are two variants of this model: A1 villagised model and A1 self-contained variant. For the village model, an individual family farm is six hectares plus a common grazing land (GOZ, 2001). The homesteads are in villages while crop fields are at designated areas much like in the communal areas. In A1 self-contained units, farmers settle in self-contained plots (or farms) that can be used for crops and livestock. Model A2 was based on full cost recovery from the beneficiary and was aimed at creating a cadre of 51,000 small-medium and large scale black indigenous commercial farmers (GOZ, 2003) and de-racialise the commercial agricultural subsector (UNDP, 2002). The resettlement areas changed the distribution of land and the construction of land tenure regimes. Although both A1 and A2 schemes are untitled, farmers have offer letters as evidence and a guarantee of security for their access to land (UNDP, 2002). Through these land tenure regimes the unequal access to and control over land remained the major problem confronting married women in the resettlement areas. What are the effects of the FTLRP on women’s land rights? This was the overarching question addressed in the study.

A total of 127,192 households were settled under the A1 model while 7,260 households were settled under the A2 model (GOZ, 2003). Table 1.3 shows land allocation patterns by sex per province under the A1 model. The statistics in Table 1.3 indicate that the number of female beneficiaries under the A1 model was very low for all the provinces. The number of female-headed households who benefited under this model was a mere 18 percent and this should be an area of concern as was the case when a minority white commercial famers owned 45 percent of
the agricultural land in 1980. This study identified and critically evaluated the factors that inhibited equal access to and control over land between males and females in A1 resettlement areas. These factors were then used to develop an economic household portfolio model on land acquisition and utilisation in the A1 schemes.

Table 1.3: Land allocation patterns by sex per province under A1 model

<table>
<thead>
<tr>
<th>Province</th>
<th>Number of households</th>
<th>Number of males</th>
<th>Percentage</th>
<th>Number of females</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midlands</td>
<td>16,169</td>
<td>14,800</td>
<td>82</td>
<td>3,198</td>
<td>18</td>
</tr>
<tr>
<td>Masvingo</td>
<td>22,670</td>
<td>19,026</td>
<td>84</td>
<td>3,644</td>
<td>16</td>
</tr>
<tr>
<td>Mashonaland Central</td>
<td>14,756</td>
<td>12,986</td>
<td>88</td>
<td>1,770</td>
<td>12</td>
</tr>
<tr>
<td>Mashonaland West</td>
<td>27,052</td>
<td>21,782</td>
<td>81</td>
<td>5,270</td>
<td>19</td>
</tr>
<tr>
<td>Mashonaland East</td>
<td>16,702</td>
<td>12,967</td>
<td>76</td>
<td>3,992</td>
<td>24</td>
</tr>
<tr>
<td>Matabeland South</td>
<td>8,923</td>
<td>7,754</td>
<td>87</td>
<td>1,169</td>
<td>13</td>
</tr>
<tr>
<td>Matabeland North</td>
<td>9,901</td>
<td>7,919</td>
<td>84</td>
<td>1,490</td>
<td>16</td>
</tr>
<tr>
<td>Manicaland</td>
<td>11,019</td>
<td>9,572</td>
<td>82</td>
<td>2,190</td>
<td>18</td>
</tr>
<tr>
<td>*Total</td>
<td>127,192</td>
<td>106,986</td>
<td>n/a</td>
<td>22,723</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Source: GOZ, 2003

*The totals of males and females exceed the total number of households settled under the A1 model by 2,517 due to double counting by allocation authorities when categorising by sex.

1.2 Theoretical Framework of the Study

In economics, as in other sciences, theories are developed in order to explain and make predictions about observed phenomena in terms of a set of basic rules and assumptions (Pindyck and Rubinfeld, 2001). In this study, the household economic theory was used to analyse the distribution of land between men and women and in the process the relevance of women’s land
rights to rural development, household welfare and empowerment within the context of A1 resettlement areas.

What avenues are available for women to access land? The study used the framework presented by Agarwal (2003) and extended by Deere and Leon (2003). In Zimbabwe, land can be accessed through three avenues: the family, the market and the state. In this study, focus was on family and state as these avenues are the most relevant to the distribution of land rights in A1 schemes. All resettlement land belongs to the state and is non-marketable (Moyo and Yeros, 2004). The family contributed to land access through inheritance. This was supported by empirical evidence (Jacobs, 2000) and by evidence from the fieldwork in Goromonzi District. In Latin America, family is the main contributor to women’s land ownership through inheritance (Deere and Leon, 2001, 2003). The state avenue consisted solely of the land reform programme. As noted by Deininger (2003) often too little attention is put to protecting women’s land rights during land reform programmes. The focus in this study was the FTLRP, 2000-2002 where a gender approach was used to analyse the distribution of land between men and women in A1 schemes using statistical tests and econometric analysis.

The land reform programme in Zimbabwe was gender blind (Gaidzanwa, 1988, 1994; UNDP, 2002). The lack of gender focus can have negative consequences for women in the event of marriage dissolution through divorce or widowhood. In Latin America, joint-titling has been adopted as a means of increasing the security of women’s land rights in the event of separation, divorce, widowhood or abandonment (Fuentes and Wiig, 2009). Given that agriculture has become more feminised, it was only appropriate that the debate on women’s land rights was
brought to the fore. As explained in subsection 1.3, although the focus was on women beneficiaries of the FTLRP, the study adopted a gender approach in assessing the allocation and utilisation of land in A1 resettlement areas to study both men and women.

The following subsections present the importance of land rights, the relevance of women’s land rights to rural development and household welfare and empowerment.

1.2.1 Importance of Land Rights

The formalisation of land rights through land titling is attributed to economist Hernando de Soto (Fuentes and Wiig, 2009). The benefits of land titling include: tenure security; increased access to credit as landowners can use their land as collateral; incentive effect where landowners will care more and invest more in their land (ibid) and production efficiency (Agarwal, 2003). But will tenure security result in the same security of land rights for women? Some authors (Deere and Leon, 2001, 2003; Meizen-Dick et al., 2011; Lastarria-Cornhiel, 1997 cited in Fuentes and Wiig, 2009) have shown that there could be negative distributional effects if the tenure reforms are not gender sensitive. In Zimbabwe, resettlement land was untitled but land beneficiaries had offer letters as a form of security (UNDP, 2002).

1.2.2 Women Empowerment through Land Ownership

According to Agarwal (1994) women empowerment through land ownership can give them a strengthened status and ability to challenge structures of patriarchy within households and rural communities. In Rajasthan (India), (Agarwal, 1994) found that land ownership provided widows with greater respect and consideration while Allendorf (2007) observed that women who owned land had final say in household decisions in Nepal.
Agarwal’s (1994, 2003) empowerment argument was based on the collective intra-household model. The intra-household models depart from the aggregate household models’ assumptions of joint and uniform household utility functions and altruism and replaced them with bargaining, conflict and unequal power relations between married partners (Haddad, Hoddinott and Alderman, 1997). The unitary (or aggregate) household model which has been dominant in development economics assumes that family members pool all their resources (including labour, food and information) and incomes and share common interests and preferences (Samuelson, 1956 cited in Haddad et al., 1997; Agarwal, 2003) or an altruistic head ensures equitable allocations of goods and tasks (Becker, 1981 cited in Agarwal, 2003) in order to maximise household utility. There is mounting empirical evidence that refutes the altruistic assumption (Agarwal, 1997, 2003; Cohen, 1996; Haddad et al., 1997; Strauss and Thomas, 1995 and Behrman, 1997 cited in Meinzen-Dick et al., 2011; Quisumbing, 2003; Kooreman and Kapteyn, 1990, Bourguignon et al., 1993, Browning et al., 1994, Lundberg et al., 1997, Browning and Chiappori 1998, Tiefenthaler 1999 and Attanasio and Lechene 2000, all cited in Stowhase, 2009). A complete discussion on household models is presented in Chapter Two. Agarwal’s (1994, 2003) empowerment argument has received acceptance within the international development community (Deere and Doss, 2006; World Bank, 2001) and has been adopted in South Africa’s land reform programme (Walker, 2002).

1.2.3 Rural Development and Household Welfare

Land underpins the economic, social and political lives of the majority of people in Zimbabwe who depend on agriculture and natural resources for their social reproduction (Moyo, 1995a, 1995b). About 67 percent of the population derives direct livelihoods from agriculture (CSO,
These observations demonstrate the importance of land to household welfare in Zimbabwe. But, how are the land rights distributed between males and females? The distribution of land rights is important because it influences the bargaining power within households which in turn has distributional effects on the accruing benefits. From the historical approach, women have been marginalised from access to and control over land in Zimbabwe. This is despite the fact that a majority of women (86 percent) lives in the rural areas where they constitute 61 percent of the farmers and provide over 70 percent of the agricultural labour force (GOZ, 2000; FAO, 2010a).

There has been a growing interest on women’s role in rural households due to an increase in the number of female-headed households (both de jure and de facto) caused by migration and abandonment (World Bank, 1998 cited in Ashby, 1999; FAO, 2003; Lastarria and Cornhiel, 2001 cited in Fuentes and Wiig, 2009; Saito et al., 1990). Subsection 1.2.3 provided an elaborate account of women’s increasing role in agriculture in Southern Africa. Empirical evidence has shown that women tend to use wealth in a different manner than their partners (Deininger, 2003). Quisumbing and Maluccio (2000) have shown in a four country case study that assets controlled by women have a positive and significant effect on expenditure allocations on education and children’s clothing of the next generations. In Honduras and Nicaragua, Katz and Chamorro (2002) cited in Fuentes and Wiig (2009) found that female land rights led to small but positive and significant increases on expenditures on food and education. Lastarria and Cornhiel, 2001 cited in (Fuentes and Wiig, 2009) found that resources controlled by women were more likely to be used to improve consumption and welfare, reduce child malnutrition and increase overall well-being. In Nepal, Allendorf (2007) found that mothers who owned land were significantly less likely to have children that were severely malnourished. Deere et al., (2004) cited in Fuentes
and Wiig (2009) found a strong and positive relationship between female land rights and net household income in Peru and Paraguay. In Peru, they noted that this was only significant in dual-headed households. Other studies (Agarwal, 2003; Goldstein and Udry, 2006 cited in Fuentes and Wiig, 2009) emphasized the potential productivity gains of securing women’s land rights. Despite their significant contribution to household well-being, rules governing intra-household asset sharing, decision making and income pooling were likely to prohibit women from fully participating in these benefits if property rights on land were not shared equally.

The FTLRP adopted the household as the beneficiary unit. Although this approach could provide female members of the household with access to land, it could undermine their bargaining power (FAO, 2007). Various authors (Haddad and Kanbur, 1990, Duflo and Udry, 2004 and Sen, 1990 cited in Doss, Grown and Deere, 2008; Haddad et al., 1997) have shown that household welfare is not equivalent to the welfare of the individuals within it. In this study, an economic model portraying the household as a circular flow of portfolios was used to analyse the behaviour of the household in the acquisition and use of resettlement land. The model was used to trace the shift from the aggregate view of the household to the disaggregate view of intra-household decision making.

1.3 Rationale for the Study

Does the distribution of assets (including land) by sex matter to Zimbabwe? Were women neglected under the FTLRP? How secure are women’s land rights in A1 resettlement areas? Do women have the same land rights as men in A1 resettlement areas? These were the overarching issues investigated in this study using the gender approach.
First, it was important to examine the distribution of assets and in particular land by gender because gender is one dimension along which inequality still exists. There are several branches of feminism that seek to explain the sources of inequality between men and women and how to empower women. Whereas liberal feminists focus on the workplace and legal changes, radical feminists focus on the patriarchal family as the key site of domination and oppression (Shelton and Agger, 1993). Radical feminism recommends the uprooting and reconstruction of society (Frazier, 2008). Marxist feminism links women subordination to class-based capitalism and its alignment with patriarchal family in capitalistic societies (Shelton and Agger, 1993). Feminism is a fluid discipline and more variants continue to develop. For example, global feminism contends that no woman is free until the conditions that oppress women worldwide are eliminated (Bunch, 1993) while ecofeminism connects the degradation and oppression of women with the degradation of the ecosystem (Shelton and Agger, 1993). This study would identify and analyse sources of discrimination in the allocation of land between men and women during the fast track land reform programme.

Second, gender is a developmental issue such that gender inequalities will prevent the country from realising its full potential in economic, social and political dimensions of development. Gender analysis would help to understand ensuing intra-household relations and expose gender specific barriers which could prevent women and girls from benefiting from socio-economic development programmes. Unless these barriers are identified and addressed during the design and planning process of the development programmes, the benefits are likely to be missed by a significant section of the population which will not augur well for sustainable development.
Third, government socio-economic programmes such as the land reform may alter the bargaining power of men and women by opening or closing sources of income. Bargaining power is measured as income or wealth (Quisumbing and Maluccio, 2000) which suggests that the gender patterns of wealth ownership are important, even within households. Empirical evidence suggests that when women have more bargaining power within the household, the outcomes of household decisions are different (Deere and Doss, 2006). Lack of secure property rights on land may contribute to women’s low social status while women with secure land rights are better positioned to improve their lives, the lives of their children and to cope with external shocks (Quisumbing and Maluccio, 2000; Deininger, 2003; Allendorf, 2007) and reduce production inefficiency (Agarwal, 2003).

Women and men may not only have different access to land, but the use of the income generated from that land as well. The decisions on the harvested crops and/or incomes from the sale of those crops may have strong consequences on household welfare and food security. The gendered pattern of asset ownership has implications on household and individual well-being (Quisumbing, 2003; Deere and Doss, 2006) and will help policy makers to find ways that ensure equal access and control over assets between men and women.

Finally, gender analysis helped to answer the following questions. Who produced what goods and services within the household? What resources were available? Who had access to and control over resources within the household? Who benefitted from household agricultural enterprise? This meant that gender analysis helped to understand intra-household relations and decision making processes. Using gender analysis, information could be collected on division of
labour, level of access to and control over resources, benefits and deprivation for both men and women as imposed by society and the effect this differentiation had on food security and nutrition (Feldstein, Poats and Cloud cited in Feldstein and Poats, 1989; Alderman et al cited in Quisumbing, 2003).

In this section, the justification for the study is discussed under the following sub-headings; international and regional conventions related to gender and access to land; gender asset gap; the role of women in agriculture in developing countries; asset ownership-poverty nexus; measures of gender equality and the role of civil society in land advocacy in Zimbabwe.

1.3.1 **International and Regional Conventions Related to Gender and Access to Land**

Zimbabwe acceded to and ratified the SADC Protocol on Gender and Development, 2008. The Protocol seeks to promote women’s full access to, and control over productive resources such as land, livestock, markets, credit, modern technology, formal employment and a good quality of life in order to reduce the level of poverty among women. In 2000, Zimbabwe acceded to the United Nations Millennium Declaration and adopted its main Millennium Development Goals. Millennium Development Goal number three seeks to promote gender equality and women’s empowerment.

Zimbabwe is bound by the express provisions of the above international and regional conventions to protect and promote women’s rights to property. This can be achieved through legislation and the institution of relevant support services. The government of Zimbabwe has tried to resolve gender inequalities to access to assets through a combination of legislation (Legal Age Majority Act, Sexual Discrimination Removal Act, Amendment of the Deeds Registries Act and Amendment of the Administration of Deceased Persons Estates Act, 2001) and policy (National Gender Policy). The National Gender Policy’s primary goal is to mainstream gender in all sectoral policies and programmes and to eliminate all negative economic, social and political policies, cultural and religious practices that impede equality of sexes. Although some countries have passed laws to support the above gender-related international legal instruments, gender disparities still exist in education, health, labour markets and access to and control over resources (such as land, water, earnings), poverty, governance and human rights (UNDP, 2010; Wach and Reeves, 2000).
1.3.2. Gender -Asset Gap

Access to, control over and ownership of assets are critical components of well-being (Agarwal, 1994, 2003; Sherraden, 1991, Carter and Barret, 2006 cited in Meinzen-Dick et al., 2011). According to Agarwal (1994), the gender gap in the ownership and control of property is the single most critical contributor to gender inequalities in terms of economic well being, social status and empowerment. Although data on the distribution of wealth by gender is scant (Strickland, 2004; Deere and Doss, 2006), assets are unequally distributed between men and women, nationally as well as within communities and households (Deere and Doss 2006; Swaminathan, Suchitra and Lahoti 2011 cited in Meinzen-Dick et al. 2011). Increasing women’s access to assets, including land, has positive effects on important development outcomes for the household including food security, child nutrition and education as well as for women’s well being and empowerment (Agarwal, 2003; Quisumbing, 2003; Kabeer, 2010, Smith, 2003, World Bank, 2001 all cited in Meinzen Dick et al., 2011).

Households and individuals hold and invest in different types of assets, including tangible assets such as land, livestock, and machinery, as well as intangible assets such as education and social relationships (Meinzen-Dick et al., 2011). In developing countries, land still remains the most important component of wealth (Doss, Grown and Deere, 2008) especially in rural areas. Land is a source of food and income and can be mortgaged in order to obtain credit from financial institutions. When assessing the gender asset gap, data on land holdings are more attractive than income because in contrast to income, the measurement of which is often associated with large errors, the distribution of land can easily be ascertained and does not require assumptions regarding the mapping from income flows into stocks of assets (Deininger, 2000). The possession of land could be a major determinant of individuals’ productive capacity and their
ability to invest, especially in agrarian economies where land is a major asset (ibid). Table 1.4 shows that gender gap in land ownership in Africa is quite substantial and this should be an area of concern as was the case when land ownership was heavily skewed in favour of the white commercial farmers. There are however, some women who own more land than men. Women’s rights to land are often restricted by local customs and laws (Wach and Reeves, 2000; Mgugu and Chimonyo, 2004; Chingarande, 2008). In Burkina Faso, Kenya, Nigeria and Zambia women smallholders dominate agricultural sector, work for longer hours and account for over three-quarters of food produced (Saito et al., 1994). Despite working for longer hours, women’s land rights have worsened due to population pressure and deteriorating land with the effect of reducing plot size compared to men (Saito et al., 1994). In Kenya, women-headed households cultivated two-thirds of hectares that men cultivated while in Nigeria, holdings of male-headed households were over three times that of women headed households (Saito et al., 1994).

Table 1.4: Women’s share of land ownership in selected African countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Women’s Landholding (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>11</td>
</tr>
<tr>
<td>Cameroon</td>
<td>10</td>
</tr>
<tr>
<td>Ghana</td>
<td>10</td>
</tr>
<tr>
<td>Democratic Republic of Congo</td>
<td>25</td>
</tr>
<tr>
<td>Egypt</td>
<td>3</td>
</tr>
<tr>
<td>Kenya</td>
<td>5</td>
</tr>
<tr>
<td>Morocco</td>
<td>14</td>
</tr>
<tr>
<td>Tanzania</td>
<td>25</td>
</tr>
<tr>
<td>Uganda</td>
<td>7</td>
</tr>
<tr>
<td>Zambia</td>
<td>11</td>
</tr>
<tr>
<td>Zimbabwe:</td>
<td></td>
</tr>
<tr>
<td>SSCF</td>
<td>3</td>
</tr>
<tr>
<td>LSCF</td>
<td>10</td>
</tr>
</tbody>
</table>

Sources: FAO, 2007; Deere and Doss, 2006; Kanyenze, 2006; Doss, Grown and Deere, 2008
How are gender relations affected or were affected by differential access to and control over land? What are the constraints to access to and control over land for women in Zimbabwe during the land reform programme? There is need to understand the constraints women encountered to owning land so as to design redistribution programmes that would assist in achieving equitable allocation between men and women.

1.3.3 The Role of Women in Agriculture in Developing Countries

Agriculture is the dominant sector in Southern Africa in terms of gross domestic product, employment and export earnings (Kanyenze, 2006). The dependence on agriculture varies among countries. Table 1.5 shows that with the exception of South Africa and Botswana, the majority of people in Southern Africa lives in rural areas and derives direct livelihoods from agriculture. In Zimbabwe 67 percent of the population derived direct livelihoods from agriculture, in the old resettlement areas (four percent), small-scale commercial sector (one percent), communal areas (49 percent) and A1 and A2 resettlement areas (13 percent) (CSO, 2002).

**Table 1.5: Proportion of population depending on agriculture**

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage of population dependent on agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesotho</td>
<td>80</td>
</tr>
<tr>
<td>Namibia</td>
<td>69</td>
</tr>
<tr>
<td>Mozambique</td>
<td>67</td>
</tr>
<tr>
<td>Angola</td>
<td>65</td>
</tr>
<tr>
<td>Swaziland</td>
<td>61</td>
</tr>
<tr>
<td>South Africa</td>
<td>14</td>
</tr>
<tr>
<td>Botswana</td>
<td>17</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>67</td>
</tr>
<tr>
<td><strong>Africa average</strong></td>
<td><strong>45</strong></td>
</tr>
</tbody>
</table>

**Sources:** UNECA 2003 cited in Kanyenze 2006; CSO, 2002; Strickland, 2004
In Africa, 70 percent of the staple food was produced by women farmers as more men migrated from rural areas in search of work (Saito et al. 1990; World Bank, 1998 cited in Ashby, 1999). Women were also involved in other important activities including food processing and marketing, cash cropping and animal husbandry (Saito et al., 1990). According to FAO (2003) about 31 percent of rural households were headed by women in Sub-Saharan Africa; in Latin America and the Caribbean only 17 percent of rural households were headed by women and in Asia 14 percent. This made women *de facto* heads of households (Rukuni and Eicher, 1994 cited in Doss, 1999; Agarwal, 2003). In India, Agarwal (2003) observed that rural households were *de facto* female-headed due to widowhood, marital breakdown or male outmigration. In Zimbabwe, 86 percent of women lived in the rural areas where they constituted 61 percent of the farmers and provided over 70 percent of the agricultural labour force (GOZ, 2000; FAO, 2010a). In addition, rural women worked 16 to 18 hours a day, spending at least 49 percent of their time on agricultural activities and about 25 percent on domestic activities such as child care and general care of the household (Chingarande, 2008). Women in Chiduku communal area of Zimbabwe were responsible for fetching water and firewood, laundering and travelling to the local and regional markets in addition to agricultural activities (Mehretu and Mutambirwa, 1992 cited in Peters and Peters, 1998). In a four country-study of Burkina Faso, Kenya, Nigeria and Zambia, women worked 50 percent more hours per day than men (Saito, Mekonnen and Spurling, 1994).

Despite their substantial role in agriculture, women have less access to the means of production, such as land, capital, credit and technology than men and are marginalised in production (Nzioki, 2001 cited in Walker, 2002; FAO, 2003). Where women own land, the landholding tends to be smaller and located in more marginal areas (FAO, 2003). Secure land ownership increases women’s incentives for agricultural investments, leading to higher productivity (Jacoby, Guo,
and Scott, 2002). In addition, secure land rights for women will mean that women cannot be dispossessed of their land in the event of widowhood, divorce and abandonment. In rural Zimbabwe, where traditional authorities have greater influence over land allocation, research showed that widows and divorcees were denied access to land (ZWRCN, 1998).

If women were so important in agriculture, how come they appeared to be subordinated to men in the process of articulation of cross-gender relations? Were women really marginalised during the FTLRP? Are women’s rights to land secure in A1 schemes? These questions were addressed in this study using statistical tests and econometric estimation on baseline survey data collected by the African Institute of Agrarian Studies and supplemented by qualitative data from Goromonzi District in Mashonaland East Province.

1.3.4 Asset Ownership-Poverty Nexus

One reason why the distribution of land by sex was important is the growing evidence between asset accumulation and declining levels of poverty (Ashby 1999; Carter 2003). In particular, there is a negative relationship between the risk of rural poverty and land access (Ali et al. 1981, Lipton, 1985, Besley and Burgess, 1998 and IFAD, 2001 all cited in Agarwal, 2003; Deere and Doss, 2006). This is because land has both direct benefits (from growing crops, or fodder or trees) and indirect benefits (land can serve as collateral for credit or can be sold during crisis). Land access by men alone cannot be assumed to benefit women and children equitably (Agarwal, 2003). According to Agarwal (1994), empirical evidence shows systematic gender inequalities in access to basic necessities within households. Initially, there was a tendency to ignore gender and other aspects of vulnerability and to treat the poor as a homogenous and
passive category (Baden, 1997). The relationship between gender and poverty remains a complex and controversial one because of the different shapes and forms gender inequalities and poverty take depending on the economic, social and ideological context (Cagatay, 1998) and the scarcity of sex-disaggregated data. The nature and scope of poverty in developing countries depends on the different roles, rights and resources that men and women have in society (Ashby, 1999).

Women are overrepresented among the poor in Southern Africa where 70 percent of the total number of the poor are women (Kanyenze, 2006). More specifically, in Zambia, 50 percent of the female-headed households are classified as “very poor” compared to only 27 percent of male-headed households (Kanyenze, 2006); in Botswana, female-headed households make-up 41 percent of those living in poverty as opposed to 34 percent for male-headed households (Kanyenze, 2006) and 57 percent of female-headed households in Zimbabwe are poor compared to 40 percent of male-headed households (Mbaya, 2002). This shows that poverty has a woman face and has become more feminised. The major factors contributing to the feminisation of poverty are shown in Figure 1.1.
Socio-economic programmes such as the land reform should recognise the root causes of poverty along gender lines so that appropriate poverty eradication policies can be developed. For the poor, assets that represent wealth such as land, houses, livestock, small businesses or consumer durables have an important impact on household well-being (Deere and Doss, 2006) and may assist them to move out of poverty. Land provides rural households with the basic means for subsistence and commercial production and can be used as collateral and a means of holding
savings for the future (FAO, 2010b). Land is a social asset that is crucial for cultural identity, political power and participation in decision making (SIDA, 2008). Empirical evidence shows that increasing women’s land rights would increase both agricultural production and food security (SIDA, 2008) and also reduce domestic violence (COHRE, 2006 cited in SIDA, 2008).

1.3.5 Measures of Gender Inequality

Table 1.6 summarises some of the key economic and human development indicators for selected Southern African countries. The data show serious problems of poverty and underdevelopment. The disadvantages facing women and girls are the major source of inequality (UNDP, 2010). Women and girls are often discriminated against in health, education and labour market with negative repercussions for their freedoms (ibid). The data further show that women have less access to social services when compared with their male counterparts. With the exception of Namibia, South Africa and Botswana, the majority of the countries fared badly in terms of Gender Inequality Index indicating a large disparity in the distribution of achievements between men and women in terms of reproductive health, empowerment and labour markets. Losses in HDI and the Gender Inequality Index are highly correlated (0.87), indicating that unequal distribution of human development is strongly associated with gender inequality (UNDP, 2010).
Table 1.6: Demographic and economic data for selected Southern African countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Area, Hectares</th>
<th>Population</th>
<th>Urban Population%</th>
<th>GNI per capita, $ 2010</th>
<th>HDI global ranking</th>
<th>GII global ranking</th>
<th>% workforce in agric.</th>
<th>GDP growth, % 1970-2008</th>
<th>Agric as % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Namibia</td>
<td>82,429,300</td>
<td>1,648,000</td>
<td>27</td>
<td>6,323</td>
<td>105</td>
<td>75</td>
<td>44</td>
<td>0.5</td>
<td>12.2</td>
</tr>
<tr>
<td>S. Africa</td>
<td>121,909,000</td>
<td>43,054,000</td>
<td>54</td>
<td>9,812</td>
<td>110</td>
<td>82</td>
<td>13</td>
<td>0.6</td>
<td>4</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>39,058,000</td>
<td>11,163,000</td>
<td>31</td>
<td>176</td>
<td>169</td>
<td>105</td>
<td>67</td>
<td>-0.5</td>
<td>16.3</td>
</tr>
<tr>
<td>Botswana</td>
<td>60,037,200</td>
<td>1,597,000</td>
<td>50</td>
<td>13,204</td>
<td>98</td>
<td>91</td>
<td>44.8</td>
<td>5.9</td>
<td>2.9</td>
</tr>
<tr>
<td>Lesotho</td>
<td>3,035,500</td>
<td>2,129,000</td>
<td>16</td>
<td>2,021</td>
<td>141</td>
<td>102</td>
<td>39</td>
<td>2.8</td>
<td>17.3</td>
</tr>
<tr>
<td>Mozambique</td>
<td>79,938,000</td>
<td>19,124,000</td>
<td>28</td>
<td>854</td>
<td>165</td>
<td>111</td>
<td>81</td>
<td>2.2</td>
<td>32.3</td>
</tr>
<tr>
<td>Swaziland</td>
<td>1,736,400</td>
<td>985,000</td>
<td>22</td>
<td>5,132</td>
<td>120</td>
<td>93</td>
<td>32</td>
<td>3.7</td>
<td>18.2</td>
</tr>
<tr>
<td>Tanzania</td>
<td>94,509,700</td>
<td>31,271,000</td>
<td>24</td>
<td>1,344</td>
<td>148</td>
<td>No data</td>
<td>82</td>
<td>0.9</td>
<td>45</td>
</tr>
<tr>
<td>Malawi</td>
<td>11,848,400</td>
<td>10,500,000</td>
<td>20</td>
<td>911</td>
<td>153</td>
<td>126</td>
<td>86</td>
<td>1.9</td>
<td>35.3</td>
</tr>
<tr>
<td>(9,398,721, land)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zambia</td>
<td>75261400</td>
<td>9664000</td>
<td>50</td>
<td>1359</td>
<td>150</td>
<td>124</td>
<td>50</td>
<td>-1.1</td>
<td>17.3</td>
</tr>
</tbody>
</table>

Notes on sources:

(1) National Geographic 1999 in Chalker (2001) for area and population

(2) Europa Publications 200 in Chalker (2001) for urban population, percentage workforce in agriculture and agriculture as percentage for GDP.

(3) UNDP (2010) for gross national income (GNI) per capita and gross domestic product (GDP) growth rate.

(4) UNDP (2010) for human development index (HDI) and gender inequality index (GII). Countries ranked below 127 fall within the “low human development” category. Zimbabwe has the lowest HDI at number 169. Countries ranked between 86 and 126 are classified as “medium human development” in the UNDP index.

1.3.6 Civil Society and Land Advocacy

Prior to 1980, the need for land redistribution was led by liberation movements (Moyo, 2004a). In the immediate independence period chiefs, spirit mediums, isolated rural communities and war veterans and “dissidents” led scattered land occupations, fence breaking and poaching
(Alexander, 1991, Moyo, 1993, Sadomba, 2002, Shiku, 2002 all cited in Moyo 2004a). During that period, civil society’s land policy advocacy was constrained by their predominantly middle class values which were shaped by international donors whose emphasis was on environmental conservation and farmer support in communal and newly established resettlement areas (Moyo, 1993 cited in Moyo 2004a). Gender balance in the land reform process was not an issue then. Prior to 1998, there was no consultation and participation by non-government stakeholders such as beneficiaries and non-government organisations (NGOs) in the land reform process (Masiiwa and Chipungu, 2004). The central government and the ruling party (ZANU-PF) were the key actors during the First Phase of the Land Reform and Resettlement Programme (ibid).

In the early 1990s, due to increasing concerns about abuse of human rights and poor governance, civil society focus shifted to civil and political rights and at the same time neglected the fundamental social and economic rights on access to land (Moyo, 2004a). NGOs such as Zimbabwe Environmental Research Organisation, Women’s Coalition and Women and Land in Zimbabwe (formerly Women and Land Lobby Group) started to advocate for land reform from 1997 when the government started to push for a more radical land acquisition (Moyo, 2004a). These organisations lobbied for a quota of the acquired land to be designated for women and not equitable allocation of land between men and women. This confirmed the observation made by Chari (1999) that the NGOs lacked vision and a clear agenda to effectively lobby for gender equality during the land reform process.
1.4 Statement of the Problem

Although much has been documented about the FTLRP (Chaumba et al., 2003; Deininger, 2003; Moyo, 2000, 2001; Scoones et al., 2010), the gender aspect has not received the attention it deserved. Female land beneficiaries are less than 20 percent in Al schemes (GOZ, 2003). Married women are missing from these land allotments. The FTLRP was expected to deliver household incomes, food security and empowerment and promote agricultural growth but very little was known about how it affected or was affected by differential access to and control over land between men and women. Access to and control over land for the household does not imply the same for the different individuals inside the household, especially women. Women do not only have less access to land than men, but they also risk losing that land in the event of divorce, widowhood, abandonment or migration by their husbands. The exclusion of women from access to and control over land extended to agricultural credits, inputs, irrigation and extension services. Where women have land rights, they often cultivate smaller fields and usually of marginal quality than men.

What was established in the literature was that the FTLRP was gender selective (UNDP, 2002). However, the extent to which this was the case as well as to why this varied in certain areas had not been thoroughly investigated. Previous studies blamed customary law as the main reason for the exclusion of women from the FTLRP (Chingarande, 2008; Gaidzanwa, 2011; Goebel, 2005; Mgugu and Chimonyo, 2004; Sachikonye, 2004; UNDP, 2002) without looking at the gender dynamics and power relations within households. The previous studies did not ascertain the relative importance of the factors that perpetuated discrimination in land access, use and control between men and women and also failed to measure the gender-land gap in the resettlement areas. This study made a contribution to filling this lacuna.
Not much was known about female resettled farmers particularly married women relative to their male counterparts. The bias was probably due to the fact that women were looked upon as non-farmers or were treated as associational beneficiaries of the land reform programme and therefore not interesting enough to be researched upon. The gendered outcomes of the FTLRP, especially the consequences on different categories of women had remained an unresearched area. Whereas women in single-headed households could obtain land in their own right, the security of land rights for married women had not been adequately investigated. Is there a gender asset gap between men and women in access to and control over land in A1 resettlement areas? What factors influence the security of married women’s land rights in A1 schemes? What then is the economic household portfolio model on acquisition and utilisation of land that can ensure gender balance in land distribution between men and women in A1 schemes? How can this model be constructed? Although the focus was on women beneficiaries of the FTLRP, the study adopted a gender approach in assessing the allocation and utilisation of land in A1 schemes to study both men and women using statistical tests and econometric modelling.

1.5 Aim of the Study

The primary aim of the study was to make a systematic and critical evaluation of the distribution of land between men and women in A1 resettlement areas to establish if there was any discrimination against women using a gender approach.

1.6 Objectives of the Study

The specific objectives of the study included the following:
1.6.1 To characterise land access and control in terms of sex, marital status and landholding in A1 resettlement areas to establish if there was any discrimination against women.

1.6.2 To identify intra-household and extra-household factors that determined the security of women’s land rights in A1 schemes.

1.6.3 To assess if women have the same land rights as men in terms of farm size, soil type (or quality) and availability of agricultural infrastructure in A1 resettlement areas.

1.6.4 To construct an intra-household and extra-household economic portfolio model on acquisition and utilisation of land in A1 resettlement areas.

1.7 Research Questions

The following were the research questions for the study:

1.7.1 How can land access and control be characterised to establish if there was any discrimination against women in A1 resettlement areas?

1.7.2 What are the intra-household and extra-household factors that determined the security of women’s land rights in A1 resettlement areas?

1.7.3 Do women have the same land rights as men in A1 resettlement areas in terms of farm size, soil type (or quality) and availability of agricultural infrastructure?

1.7.4 How can an intra-household and extra-household economic portfolio model on acquisition and utilisation of land in A1 resettlement areas be constructed?

Hypotheses of the Study

Taking the research problem and the formulated research questions that directly flow from this into consideration, the study specifically addressed the hypothesis that access to and control over
land was gendered in A1 resettlement areas. The first research question was operationalised by comparing rights to land in four landholding categories: offer letter in the name of the household head; offer letter in the name of spouse; joint registration of offer letter and offer letter in the name of a child or relative. Some factors are involved if the relative distribution of land rights is statistically the same between the above landholding constellations. The second research question was operationalised using a multinomial logistic regression model to identify intra-household and extra-household factors that influenced the security of women’s land rights in A1 schemes. The third research question was operationalised by conducting an independent t-test on the mean arable area cultivated by men and women as well as comparing the predominant type of soil on men and women’s plots using chi-squared test of independence.

After making the above observations, the following hypotheses (H1-H5) derived from the model and relevant literature were tested using statistical tests and regression analysis.

**H1:** Women’s access to and control over land were neglected during the implementation of the fast track land reform programme.

This hypothesis was tested using statistics on the distribution of land between men and women. This was possible because A1 farmers have some form of documentation like offer letters that confirmed their access to and control over land. The test was done by comparing landholding in the following categories: household head; spouse; joint-registration and other(s). The hypothesis would be rejected if there is a statistical difference between the relative distributions of offer letters in the four categories.

**H2:** Married women obtain rights to land through joint-registration of offer letters.
H3: Higher levels of education increase women’s propensity to obtain land rights.

Hypotheses 2 and 3 determined the security of women’s rights to land. Marital status of women mattered as far as their access to and control over land was concerned. The researcher expected married women to obtain rights to land through joint-registration of the offer letters. Women married under Chapter 5:11 and those married under customary law are co-owners of the A1 farms at law. In Latin America, joint titles were put forward as a means to secure women’s land rights (Deere and Leon, 2003). The level of education is a property of individuals (Deere and Doss, 2006). The level of education is important because women would know which laws to use to protect their land rights. In this regard, the researcher expected education to equip women with the knowledge on how to claim and defend their land rights. Hypotheses 2 and 3 were tested using a multinomial logit model. The dependent variable is a categorical variable of the name in which the offer letter was issued. The significance of explanatory variables was tested with different probabilities of obtaining varied outcomes the dependent variable could take.

Another dimension tested in the study was whether or not women had the same rights to land as men and in the process measured the gender-asset gap in A1 resettlement areas. This was done by examining land use patterns with regards to the size and type (or quality) of the land cultivated by women and men. More specifically, the study investigated whether or not the arable area cultivated by women was smaller and of less quality than that owned by men. This necessitated two further hypotheses.

H4: Women tend to have smaller arable plots than men.
H5: Women tend to have land rights to farm holdings with worse soil type (or quality) than men and without irrigation infrastructure.

Hypothesis 4 was based on the assumption that Zimbabwe is a patriarchal society and men were likely to get larger arable plots than women. The hypothesis sought to determine the magnitude of the gender-asset gap in access to and control over land. The differences in the sizes of fields was tested with t-test for mean sizes for arable land cultivated by men and women. Hypothesis 5 derived from hypothesis 4. If women were given smaller arable plots than men, then the researcher expected those plots to be of marginal quality and with no irrigation infrastructure. Hypothesis 5 was tested using chi-square test which tested the independence or otherwise of the land type (or quality) and sex of the farm holder.

1.8 Assumptions of the Study

The key assumption of the study was that the land reform programme was necessary for broad based access to and control over land and diversified land use by smallholder farmers. It was assumed that A1 farmers were aware of the goals of the land reform programme and appreciated the significance of land access and control and the multiplier benefits derived from the land. Married partners in A1 farms were expected to disaggregate their assets. It was assumed that critical household survey data on the FTLRP would be made available for the study and that the data set would be kept as such. Related to this assumption, the survey data set was expected to be of good quality and to contain the key variables necessary to answer the research questions. It was also assumed that the District Administrator of Goromonzi District would grant permission for the research to be undertaken in the A1 resettlement areas as part of the case study. In this study, it was assumed that each household had access to one A1 farm holding. This assumption was necessary because the household was the unit of analysis. Where households own more than
one farm or plot, Deere and Leon (2003) recommend that the distribution of land between men and women should be measured by taking into account each plot and the ownership to it.

1.9 Significance of the Study

A proposed economic household portfolio model on land acquisition and utilisation in Zimbabwe would help the government and aid organisations to identify structural inequalities and factors that constrain equal access to and control over land between men and women. Gender analysis in the distribution of land between men and women could help to understand the ensuing intra-household relations and expose gender-specific barriers which may prevent women and men from benefiting from the land reform programme equally. Unless these barriers are identified and addressed during the design and planning process of the development programmes, the benefits may not be shared equally between men and women. This may not augur well for the country’s sustainable development since gender is a developmental issue.

The proposed economic household portfolio model on land acquisition and utilisation would form the basis for structural analysis and policy evaluation of asset redistribution programmes such as land reform, privatisation and economic empowerment. The policy relevant report would help the government to mainstream gender in the planning, design, implementation and evaluation of asset redistribution programmes. The research’s findings could contribute to the debate on how to mainstream gender on the proposed land tenure and land use policy reforms.

Given the importance of women in agriculture and the government’s commitment to gender equality, it is important to understand how women’s access to land was addressed during the land reform process and how institutional reforms have benefited or disadvantaged women. This
means that the thesis could assist NGOs involved in women empowerment and advocacy to influence policy in the planning and design of socio-economic programmes that would benefit men and women, boys and girls equally. The study could contribute to the discourse on the FTLRP and, therefore, enhance the nation’s knowledge about the programme’s impact on gender relations, household welfare and women empowerment. Lastly, the study identified areas where further research may be required on equal access to and control over land between men and women.

1.10 Delimitation of the Study

In Zimbabwe, there are three sources of arable land, namely, the state, the family and the market. The study considered how the state distributed arable land as part of the land reform process. Land reform in this study referred specifically to government policies that intended to redistribute the whole or part of the bundle of property rights on land from white commercial farmers to indigenous black Zimbabweans during the period 2000-2002. The nature and content of land rights vary across and within countries. These can be individual freehold property rights, use rights in state owned land and legally recognised customary rights. In this study, the focus was on use rights in state-owned land (resettlement land) and a critical evaluation on whether these rights were differentiated and distributed on the basis of sex in A1 resettlement areas. The study used both survey data (from six provinces) and case study data from Goromonzi District in Mashonaland East Province. The study was largely confined to household gender analysis on A1 farms in relation to access to and control over land. The analysis was based on farms acquired by the Government under the FTLRP, 2000-2002. The findings of the study were interpreted within the context of smallholder farmers in Zimbabwe. Comparative analysis among the provinces was made where necessary in order to enrich the study.
1.11 Limitations of the Study

The major limitation of the study was the non-availability of sex-disaggregated data at central government and district levels to precisely determine the magnitude of gender-asset gap in access to and control over land. Very few surveys collect data on individual ownership of land, houses, livestock (Deere and Doss, 2006; Doss et al., 2008) and other productive assets used on the farms (Doss et al., 2008). Most data on assets are aggregated at the household level and do not tell much about the individual members within households who were the ultimate object of the study. Aggregate data give a misleading and partial picture of assets owned by men and women, how such assets were acquired and how they are used to influence decisions within households and beyond.

There are some conceptual issues in disentangling assets between married couples (Deere and Doss, 2006). According to Deere and Doss (2006), marital property regimes which define the legal ownership of assets brought to and acquired during marriage differ across and within countries. This difficulty limited the effectiveness of the study in analysing the land rights actually enjoyed by married women. Also for reasons of a political and financial nature, it was not possible to develop more case studies on A1 settlements. Since the launch of the FTLRP in 2000, Zimbabwe’s land reform has been based on party politics and patronage (Marongwe, 2008). Resettlement areas are dominated by ZANU-PF party supporters and any “foreigners” are viewed with great suspicion. This meant that conducting fieldwork in such an area was putting one’s life at “great danger”. The researcher used his social networks to gain access to the study area. The researcher applied for permission from the Goromonzi District Administrator to carry out fieldwork in the two A1 schemes in the District.
The other limitation of the study was that survey data are non-experimental in that the collecting agency (in this case the African Institute of Agrarian Studies) did not have direct control over the data (Gujarati, 1988, 1999) and are likely to contain errors of measurement. Gujarati (1988) advises that because of the non-experimental nature of the data used in social sciences, researchers very often have no choice but to depend on the available data.

The findings of the study on the relationship between sex and access to and control over land in A1 schemes were interpreted within the context of the six provinces and hence we can infer the same for the other two provinces. It is the submission of this study that data on the identity, selection and allocation of land beneficiaries is generalisable in Zimbabwe. The study was based on a nation-wide baseline survey by AIAS (2006). Surveys by their nature are extensive and generalisable (Blaikie, 1993; Muranda, 2004; Saunders et al., 2009).

Despite the above limitations, the study produced credible information that could be of tremendous value to researchers and policy makers. The study would contribute to the national discourse on the FTLRP and how to mainstream gender in the proposed land policy reforms.

1.12 Review of Related Literature

Literature review on land and gender relations was used to address the research problem. According to Saunders et al., (2009), this is meant to include key academic theories within the area of inquiry; to demonstrate the researcher’s understanding of the research area; to show how the research area relates to previous published research; to assess the strengths and weaknesses of previous work including omissions or bias and to justify the researcher’s arguments by referencing previous research.
A growing body of evidence shows that women have been overlooked and neglected in land reform programmes in different countries: Deere and Leon (2001, 2003) for various Latin American countries; Deere and Doss (2006) for Honduras and Nicaragua; FAO, 1997 cited in Doss et al. (2008) for a number of countries in Africa and Latin America; Saito et al.,(1994) for Kenya, Burkina Faso, Nigeria and Zambia; UNECA (2003) for Lesotho, Zambia, Malawi, Botswana, Mozambique and South Africa; Agarwal (1994, 2003) for India and Malla, 2000 cited in Doss et al. (2008) for Nepal. In Africa, the gender gap in land ownership is quite substantial (FAO, 2005; Deere and Doss, 2006; Kanyenze, 2006; Doss et al. 2008). This lack of gender focus in land ownership may have negative consequences for married women as they are not considered for land redistribution and/or titling programmes and may consequently lose the land they jointly own with their spouses in the event of separation, divorce, widowhood and abandonment.

In the case of Zimbabwe, what has been established in the literature is that the land reform programme was gender selective (Chingarande, 2008; Gaidzanwa, 1988, 1994, 1995, 2011; Mgugu and Chiponyo, 2004; UNDP, 2002) but the extent to which this was the case as well as to why this varied in certain areas had not been thoroughly investigated. The available literature blamed discriminatory customary law and practices as the main reasons for the exclusion of women from the land reform programme (Chingarande, 2008; Gaidzanwa, 1988, 1994; Goebel, 2005; Jacobs, 2000; Peters and Peters, 1998; Mgugu and Chimonyo, 2004; Pasura, 2010; Sachikonye, 2004; UNDP, 2002; ZWRCN, 2008); laws governing land (Chingarande, 2008; Mgugu and Chimonyo, 2004; Ncube et al., 1997); workings of marriage, women’s rights and gender norms in pre-colonial times (Jacobs, 2000) without looking at the gender dynamics and power relations within households. Power relations exist within the household and economy and
therefore must be considered in all economic models. Understanding power and patriarchy will assist to analyse how male-dominant institutions actually function and why women are often at a disadvantage in such institutions (Moyo, 1995b). Other factors identified as constraining equal land rights between men and women included education and agricultural training (Ncube et al., 1997; ZWRCN, 2008), institutional effects of colonial rule in Zimbabwe (Moyo, 1995b; Peters and Peters, 1998) and lack of basic infrastructure such as access roads, clinics, service centres, clean water and schools (Chingarande, 2008). Women in resettlement areas were also denied access to credit and loans because they did not own the land (Chingarande, 2008; Peters and Peters, 1998). From the available literature, no effort was made to measure the gender asset gap and to determine the relative importance of the factors that perpetuated discrimination in land access, use and control between men and women in the resettlement areas. A quantitative analysis is needed to confirm the relative importance of the factors identified as influencing the distribution of land rights between men and women. Also how do intra-household and extra-household factors interact to influence the distribution of land between men and women? The exclusion of extra-household factors erroneously assumed that a household was a bounded unit which existed outside social networks and processes. This approach was refuted in this study.

1.13 Research Methodology and Design to be used

Saunders, Lewis and Thornhill (2009) distinguish between three philosophical views of developing knowledge namely, positivism, interpretivism and realism. These help to understand the researcher’s pursuits and how research objectives would be achieved. Social science research constructs reality by harmonising both the positivist and interpretivist approaches (Roth and Mehta, 2002). The realist approach recommends that people should be allowed to interpret the world the way they see it (ibid) implying that rules or principles can be applied to further social
life and can also be discarded if they become impediments to knowledge and decision making. Realism recognises that people’s opinions change with situational factors, hence there is need to take the middle ground of a balance between positivism and interpretivism (Perry, 2001).

The choice to use deductive or inductive approach depends on epistemological and theoretical concerns and the research question to be addressed. In this study, a description of the historical pattern of land ownership and its impact on gender relations and the current situation and needs were provided (Cavaye, 1996; Brannen, 2005). The factors that influence the distribution of land between men and women were identified, evaluated and analytically judged. Descriptive and analytical methods of research were used to find a systematic explanation for the gendered pattern in the distribution of land between men and women. This entailed the use of both the deductive and inductive approaches to collect and process data. This is supported by (Cavaye, 1996; Brannen, 2005; Perry, 2001) who contend that research frequently involves both approaches. Perry (2001) advocates taking a middle ground of a balance of the two, striking the position of what he calls theory “confirming/disconfirming” approach.

In this study, the researcher avoided methodological monism (Dusek, 2008). This should not be construed as an inability to decide between quantitative and qualitative approaches. It is the researcher’s conviction that both approaches are valuable and can be combined in the same study if the research problem and research questions so require and the two approaches are managed properly. The researcher adopted a pragmatic perspective (Bryman, 2001; Creswell, 2009; Johnson and Onwuegbuzie, 2004) which considers the merits and demerits of qualitative and quantitative approaches in addressing the research questions. The pragmatic approach provides an opportunity for multiple methods, different worldviews and different assumptions as well as
different forms of data collection and analysis in the mixed methods study (Creswell, 2009). A number of authors (Brannen, 2005; Bryman, 2001; Creswell, 2009; Evans, Coon and Ume, 2011; Johnson and Onwuegbuzie, 2004; Myers, 1997; Tashakkori and Teddlie, 1998; Teddlie and Tashakkori, 2008; Sale, Lohfeld and Brazil, 2002; Tillman, Clemence and Stevens, 2011) advocate for a combination of the two research methods in order to improve the quality of research. This approach was in line with the conceptual and theoretical framework of the study. In development economics, there is an emerging consensus that combined approaches and mixed methods offer substantial benefits in terms of data quality, depth of understanding and policy analysis (Kanbur, 2003 and White, 2002 cited in Hulme, 2007; Olsen, 2007).

Data collection is a fundamental requirement when conducting research. Data should be collected in a way that is suitable for fulfilling the research purpose and conforms to the planned research approach or strategy (Saunders et al., 2009). Given the nature of the research problem and that the research questions embed both quantitative and qualitative research questions (Onwuegbuzie and Leech, 2006) the researcher settled for the survey and case study research design alternatives. The case study data were collected through observations, document analysis, interviews and household questionnaire. The baseline survey undertaken by the African Institute of Agrarian Studies in A1 and A2 resettlement areas constituted the survey data. In this study a mixed methods design was used where the case data occupied a secondary role to the variable-oriented survey data. These two approaches were integrated throughout the analytic and interpretive phases of the study.
1.14 Ethical and Legal Considerations

The study considered participants as worthy partners. The rights of participants to privacy and confidentiality both on ethical grounds and in terms of the protection of their personal and sensitive data were respected throughout the study. Fictitious names were used to refer to participants in order to maintain their confidentiality and privacy. In addition, the researcher neither nor appeared to use all or part of the information collected in the study for his personal advantage or for the advantage of a third party. In this study, participants were not coerced or obliged to disclose or provide data under any circumstances, time or extent except on their own will after making reasonable judgments to do so (Saunders et al., 2009). Participants were fully informed about the research’s intentions and the procedures and risks (if any) involved in the research before they took part. In addition, participants had the right to withdraw from the study. Since the case study involved obtaining personal data from respondents, research respondents’ informed consent was sought. Lastly, research findings of the study were reported in a complete and honest way without misrepresentation.

1.15 Reference Technique

Throughout this thesis, the American Psychological Association reference method was used. A comprehensive bibliography of all the sources cited is presented in alphabetical order by author at the end of the thesis.

1.16 Organisation of the Thesis

The thesis is divided into five chapters. Chapter One provides the general introduction to the study. The background section comprises an introduction to land alienation under colonialism and Zimbabwe’s land reform programme. These are important in understanding the current
distribution of land in the country. The chapter includes an exposition of the justification for the study, statement of the research problem, the aim and the objectives of the study. Apart from this, research questions and hypotheses underlying the study, basic assumptions underlying the study, the significance and delimitations of the study are outlined and discussed. The theoretical framework of the study, research methodology, limitations of the study, literature review and ethical issues are explained to complete the parameters within which the study would be conducted and to provide an overall framework for the rest of the study.

Chapter Two provides literature survey on land redistribution between men and women and identifies the research gap filled by the study. It contains the conceptualisation of the study and covers relevant information on the distribution of land between men and women in Zimbabwe and other countries.

Chapter Three provides the research methodology and design. The chapter explains how the study was undertaken in order to answer the research problem. This involves a discussion on research design, research process, data collection instruments, the actual administration of the instrument, data processing procedures, validity and reliability of mixed method research as well as ethical conduct during the study.

Chapter Four deals with the prerequisites of an economic household portfolio model on acquisition and utilisation of land in A1 resettlement areas. This includes data presentation and analysis and an exposition of the research findings.
Chapter Five contains critical evaluation of the findings and a general summary of the study. Flowing from the critical evaluation and analysis of the findings is an extensive conclusion. The study’s contribution to existing knowledge, specific policy recommendations and future research directions are presented in this chapter.

Lastly, references and appendices follow to complete the thesis.

1.17 Definition of Terms

**Assets** are stocks of financial, human, natural or social resources that can be acquired, developed, improved and transferred across generations (Doss, Grown and Deere, 2008).

**Consumption** refers to the final purchase of goods and services by individuals.

**Econometrics** is a social science in which the tools of economic theory, mathematics and statistical inference are applied to the analysis of economic phenomena (Gujarati, 1988).

**Economic development** is a branch of economics that deals with the study of macroeconomic causes of long-term economic growth and microeconomics and involves a mixture of quantitative and qualitative methods.

**Economic model** is a theoretical framework that represents economic processes by a set of variables and a set of logical and/or quantitative relationships (equations) between them.

**Feminism** refers to worldwide movements aimed at establishing and defending equal political, economic and social rights and equal opportunities for women. The main themes explored in feminism include discrimination, stereotyping, sex objectification, oppression and patriarchy.

**Gender** refers to socio-cultural and historical characteristics that determine how men and women interact and apportion roles (FAO, 2007).
**Gender approach** focuses on the social, economic, political and cultural forces that determine how men and women, boys and girls participate and benefit from development programme outcomes (Reeves and Baden, 2000).

**Gender asset gap** refers to the lack of productive assets such as land and other resources that women suffer from (Deere and Doss, 2006; Deere and Leon, 2003).

**Gender Inequality Index** is a composite measure reflecting inequality in achievements between women and men in three dimensions: reproductive health, empowerment and the labour market.

**Gender mainstreaming** is a process of identifying gender gaps and women’s, men’s, girls’ and boys’ concerns and experiences integral to the design, implementation, monitoring and evaluation of policies and programmes in all spheres so that they benefit equally.

**Household** is a basic economic unit where one or more persons voluntarily live together, have meals prepared together and benefit from housekeeping shared in common.

**Household economics** is a branch of modern economics which incorporates market and non-market components of the household (Ironmonger, 2001).

**Intra-household resource distribution** refers to dynamics of how different resources that are generated within or which come into the household are accessed and controlled by its members (Reeves and Baden, 2000).

**Land** in this study refers to arable land including other natural resources such as water and trees.

**Land reform** in this study refers specifically to government policies that intend to redistribute the whole, or part of the bundle of property rights on land from white commercial farmers to indigenous black Zimbabweans.

**Land rights** are claims that are legally and socially recognised and enforceable by an external legitimised authority from village level to higher level bodies of the State (Agarwal, 1994).
**Resettlement land** refers to redistributed land which has passed into state ownership though allocated to beneficiaries (Walker, 2002).

**Pareto optimality** is an economically efficient allocation of goods in which no one can be made better-off without making someone else worse-off (Pindyck and Rubinfeld, 2001).

**Production function** indicates the highest output that a firm can produce for every specified combination of inputs, usually labour and capital (Pindyck and Rubinfeld, 2001)

**Sex** refers to the congenital and universal biological characteristics distinguishing males and females (Reeves and Baden, 2000).

**Theory of the firm** posits that the aim of the firm is to maximise profit through the selection of optimal levels and combinations of inputs and outputs (Pindyck and Rubinfeld, 2001)

**Utility** refers to some ranking, on some specified scale, of the subjective welfare or change in subjective welfare that an agent derives from an object or an event (Don, 2011).

**Women** refers to married women who are engaged directly or indirectly in farming as their source of livelihood whether paid or unpaid, regular or seasonal or in food preparation, managing the household, caring for children or other similar activities.

### 1.18 Chapter Summary

This chapter provided the justification for the study and discussed the reasons for the development of an economic household portfolio model on land acquisition and utilisation. Under the background to the study, the colonial legacy of land alienation and expropriation and the two phases of the land reform and resettlement programme were discussed first so as to lay the foundation on which the study was based. An exposition of the research problem, the aim and the objectives of the study were presented. Apart from that, research questions, hypotheses and the assumptions underlying the study, the significance and delimitations of the study were
outlined and discussed. The theoretical framework of the study, research methodology, limitations of the study, literature review on the distribution of land between men and women and ethical and legal issues were explained to complete the parameters within which the study was conducted and to provide an overall framework for the rest of the study.

Chapter Two provides literature review on the distribution of land between men and women and identifies the research gap filled by the study.
CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter is divided into seven parts of which this introduction is the first section. Section 2.1 provides the methodological approaches to gender relations on land by other researchers. Section 2.2 discusses the historical perspective of gender dimensions in land ownership in the pre-colonial and colonial periods in Zimbabwe. Section 2.3 examines the theory and objectives of land reform and its implications on gender relations in Zimbabwe. Section 2.4 provides a literature survey on the distribution of land between men and women in resettlement areas. The research gap filled by the study is identified in section 2.5. In this section, a conceptual framework of the economic household portfolio model on land acquisition and utilisation in A1 resettlement areas is presented. In this section 2.6, two polar economic models of aggregate household and intra-household decision-making are described. Section 2.7 provides a summary to the chapter.

2.1 Selected Works on Landownership between Men and Women

The literature on unequal access to and ownership of land between men and women in developing countries has been growing (Agarwal, 1994, 2003; Deere and Doss, 2006; Deer and Leon, 2001, 2003; Doss et al., 2008; FAO, 2007; Saito et al., 1994; Walker, 2002; UNECA, 2003). In this section a review of the literature on the distribution of land between men and women in Asia, Latin America and Sub-Saharan Africa is presented. This was meant to provide
a regional comparative analysis of gender asset gap in land and the determinants of land rights and how different scholars have approached the topic. The section identified a number of conceptual aspects of the distribution of land between men and women with a deliberate bias to ensure gender balance. The selection of the literature reviewed was based on their availability to me rather than on any deliberate preference of some works over those which are not mentioned in this section.

When making a regional comparison of land rights between men and women, the researcher was aware that the nature and content of these rights could vary across countries (for example, individual freehold property, use rights in state-owned land and land legally recognised customary rights). In this section, the focus is on whether these rights are differentiated on the basis of sex (whatever their nature and content) in the three regions of Asia, Latin America and Sub-Saharan Africa. In order to make this comparative analysis, data on landholdings were essential. The major challenge was that sex-disaggregated data on landholdings are rarely collected in some countries. This section therefore, referred to field studies which provided insights on the distribution of land rights between men and women in the different regions.

2.1.1 Regional Overview of Landownership between Men and Women in Asia

Land rights in Asia are extremely diverse and include state ownership (Vietnam), ownership by peasant collectives (post 1978 China), private ownership (Philippines) and owner cultivation and tenancy (or share cropping) (FAO, 2007). This diversity is reflected in a great intra-regional variation in the distribution of land between men and women. FAO (2007) observed that the enforcement of statutory legislation was scarce in rural areas while customary and religious laws were applied. The customary law systems are also diverse. Entrenched customary norms and
patriarchal culture prevented women from gaining direct land rights in Punjab, (Pakistan) and Vietnam, while in matrilineal and bilateral systems in Thailand and the Philippines women owned, inherited, acquired and disposed of property in their own right (FAO, 2007). In Uzbekistan and Kyrgyz, women had access to land only through their husbands and/or male relatives (Giovarelli and Duncan, 1999 cited in FAO, 2007). In predominantly Muslim countries like Pakistan and Bangladesh, *Sharia* norms limited women’s inheritance rights (usually to half of men’s share).

The Philippines has a long history of agrarian reform programmes. The Comprehensive Agrarian Reform Law (1988) provided for a comprehensive land redistribution programme where women rural labourers have equal rights to own land and to participate in advisory and decision making bodies (Hayami et al., 1990 cited in Hayami, 1998). However, the selection of beneficiaries indirectly disadvantaged women. At the top of the priority list were agricultural lessees and share tenants while permanent farm workers (who were mostly men) ranked second and seasonal farm workers (mostly women) ranked third (FAO, 2007). A 2001 household survey in Pakistan reflected that women owned less than three percent of the plots even though 67 percent of the sampled villages reported that women had a right to inherit land (Mason and Carlsson, 2004 cited in Doss et al., 2008). According to Malla (2000) cited in Doss et al., (2008) the 2001 population census in Nepal showed that only 11 percent of women owned land and among these, around 90 percent owned less than one acre. A number of surveys in South Asia found that those women who owned land had greater say in household decision making than women without land (Agarwal, 1994; Mason, 1998 and Agarwal, 1998, 2002 cited in Doss et al., 2008; Allendorf, 2007).
In India, Agarwal (2003) found that the distribution of land was gender-biased as the government allotted land to male household heads and adult sons. According to Agarwal (2003), unmarried adult daughters were totally excluded as they were not counted as members of their natal families and being unmarried had no marital families from which to claim. She cited a study by Gupta (1993) of a village in Midnapur District where 98 percent of land holdings distributed went to men; land went to women’s sons in nine out of the ten female-headed households; eight of the 18 single women received land and none of the married women received joint titles. Agarwal (2003) identified four factors that underlined gender bias in land distribution in India. These factors included cultural perception which treated men as breadwinners and women as dependents; the social perception about women’s lessor capabilities and their appropriate roles; the assumption of the household as a unitary entity and the assumption of the household as a space of harmony that property considerations would shatter.

Agarwal (2003) observed that as more men shifted to non-farm livelihoods, agriculture became more feminised yet women seldom owned or controlled the land they cultivated. She observed that land access to men alone cannot be assumed to benefit women and children equitably. This is because of systematic gender inequalities in access to basic necessities within households (Agarwal, 1994). According to Agarwal (1994; 2003), women’s access to land led to improvements in welfare, agricultural productivity (efficiency), equality and empowerment. Agarwal (1994, 2003) further argued that while the welfare and efficiency arguments are concerned with women having some land in absolute terms, the empowerment and equality approaches are concerned with women’s position relative to men and particularly with women’s ability to challenge unequal gender relations within and outside the home.
On the welfare argument, Agarwal (1994, 2003) argued that women's access to land improved both their own and their households' poverty standing because of the perceived correlation between an improvement in women's position in relation to land and an improvement in household food security and child nutrition. There is a growing body of evidence of the links between assets in women’s hands and child welfare (Agarwal, 2003) and sometimes that of the whole household (Deere and Doss, 2006; Thomas, 1990). In rural India, children are more likely to attend school and receive medical care if the mother has assets (Strauss and Beegle, 1996 cited in Agarwal, 2003) and in Ghana, households where women have a higher share of asset ownership have better health and nutritional outcomes (Doss, 2005).

On the efficiency argument, Agarwal (2003) stated that enhancing women’s land rights would increase agricultural productivity because women will invest more in their land and the knowledge pool will be increased. She argued that secure land rights and control over its produce would motivate the farmer to put in greater effort and investment in the land. A study in Kenya found that where men and women cultivated both separate and joint plots, the introduction of weeding technology in maize production raised yields on women’s plots by 56 percent where women controlled the output and only by 15 percent on the men’s plots where women also weeded but men got the proceeds (Elson, 1995 cited in Agarwal, 2003).

The equality argument states that recognising women’s rights in land is necessary for justice for women while under the empowerment argument, land rights will empower women and strengthen their ability to fight for equality, dignity and additional economic rights (Agarwal, 1994; 2003). On empowerment and equality, Agarwal (1994), argued that land rights can make a notable difference to women’s bargaining power within the home and community, enhance their
confidence and sense of self-worth, enable them to negotiate better deals in the wage labour market, increase respect they command within the community and facilitate their participation in village decision-making bodies. According to Agarwal (2003), the four arguments are best served by programmes that extend independent rights to women rather than programmes that continue to locate women within restrictive and repressive family and household structures.

In India, 86 percent of the land is in private ownership mostly in the form of small family plots of less than six hectares each (Walker, 2002 citing Agarwal, 2001) and thus communal tenure systems, unlike in Sub-Saharan Africa are not that significant (Walker, 2002). The major form of property transmission according to Agarwal (1994; 2003) is not through the market and government, but through inheritance within families. Agarwal’s tenure model is one of private title though she draws on African data to suggest a wider application including some land reform projects in South Africa (Walker, 2002). Agarwal’s (2003) proposition has gained resonance among the international development community (World Bank, 2001) and has been incorporated into gender policy documents and training materials by the Department of Land Affairs of South Africa (Walker, 2002).

2.1.2 Regional Overview of Landownership between Men and Women in Latin America

Although countries in Latin America have a long history of agrarian reform aimed at eliminating the great land concentration and the dualistic *latifundio-minifundio* land tenure structure, women rarely own and administer land due to legal and socio-cultural obstacles (FAO, 2007). A majority of the agrarian reforms targeted household heads and permanent agricultural workers in formal employment (groups which predominantly consist of men). Katz, (1999) cited in FAO (2007) observed that while sex-disaggregated data on land reform beneficiaries was scarce, the available
evidence indicates that only a very small percentage of women benefitted from land redistribution programmes (between four and fifteen percent in Chile, Colombia, Costa Rica, El Salvador, Honduras, Mexico, Nicaragua and Peru). According to FAO (2007), only a few countries (for example Cuba and Nicaragua) have women as direct beneficiaries of the land reform programmes. In Nicaragua, the Agrarian Reform Act (1981) does not apply the household head criterion for land allocation and specifically recognises women as direct beneficiaries of the land reform programme regardless of their family status (ibid).

In Brazil, land reform programmes still register land mainly with the husband (FAO, 2007). According to Guivant (2001) cited in FAO (2007), joint registration is rare because a substantial number of rural women lacked the necessary documents (such as identity cards, tax registration number and marriage certificates) required in order to obtain land titles. An Agrarian Reform Census of 1996 revealed that only 12.6 percent of land reform beneficiaries were women due to socio-cultural factors concerning gender division of roles within the family which in rural areas are widespread and internalised by women themselves (Barsted, 2002 cited in FAO, 2007).

In a 12-country study in Latin America, Deere and Leon (2003) found that gender asset gap in land ownership was substantial. According to their study, the share of female landowners ranged from 11 percent in Brazil to a high of 27 percent in Paraguay. Deere and Leon (2003) observed that gender inequality in land ownership was related to male preference in inheritance, male privilege in marriage, male bias in community and state programmes of land redistribution and gender bias in the land market, with women less likely than men to buy land. Their study showed that women were not only less likely to own land than men, but female landowners tended to
own less land than men. In household surveys for eight Latin American countries, Deere and Leon (2003) found that the mean amount of land owned by women was always less than that of men although only in Chile and Paraguay was the gender difference statistically significant. Their study showed that inheritance was the principal means for land acquisition for a larger share of women than men (although sons were the preferred heirs). The implication, according to Deere and Leon was that other forms of land acquisition such as market purchases, allocations through land reform or redistribution by peasant or indigenous communities were even more biased against women. However getting an accurate figure on gender asset gap in Latin America is made more difficult by the absence of good data (Deere and Leon, 2003). They argue that it has been and continues to be the norm to consider agriculture as a male activity and that this is confirmed by agricultural censuses when women rarely declare themselves as agriculturalists unless where they are landowners. Deere and Leon (2003) also blame the design of agricultural surveys which did not include the variable “sex” in the questionnaire to indicate who controls or owns the plot.

Deere and Leon (2003) however, observe that the pattern is reversing in a number of Latin American countries as female inheritance is becoming more and more common and state-led land reforms become more gender-sensitive. More gender equality in land inheritance is attributed to rising literacy including legal literacy of national laws favouring equality of inheritance shares among children and/or property rights of widows, partible inheritance practices, greater emigration from rural areas by children of both sexes and growing land scarcity and/or decline in peasant agriculture which is associated with a decreasing reliance by households on farming as their primary income generating activity (Deere and Leon, 2003).
Deere et al., (2005) cited in Deere and Doss (2006) hypothesised that female land ownership was positively associated with whether a woman’s parents were land owners; the amount of land they owned; the gender composition of women’s siblings (with those without brothers being more likely to inherit land); age; widowhood; household headship and education. Women with higher education were assumed to be able to defend their land rights more successfully. Also, education served as a proxy for labour market opportunities and hence the possibility of purchasing land independently. Deere and Doss (2006) argued that in countries with full or partial community property marital regime, marriage also increased the likelihood of women acquiring land through the market because if a couple bought land, it pertained to both husband and wife. Deere et al., (2005) cited in Deere and Doss (2006) estimated a logit model of the above determinants of female land rights and found that for both Paraguay and Peru, whether the adult woman in the household had land rights was positively and significantly associated with female headship and a woman’s age. Katz and Chamorro (2003) cited in Deere and Doss (2006) explored the determinants of the total amount of land owned by women in Honduras and Nicaragua and found that a woman’s age, education and headship were all positively and significantly related to the amount of land owned. Their results showed that land area owned by the parents of the woman or her husband was not significant in explaining women’s land ownership.

In Peru, Fuentes and Wiig (2009) analysed the effects of a Rural Land Titling Project on women’s rights to land. They hypothesised that women’s rights on land were neglected during a national rural land titling project. Using statistical and regression analysis on secondary survey data set which was supplemented with qualitative data, Fuentes and Wiig (2009) did not find evidence of discrimination of women in the land titling process. The study showed that there were geographical differences with respect to the prevalence of joint titles with coastal areas
registering lower numbers of joint titles while the highlands had more. The study revealed that although women had gained rights both individually and together with their partners as joint titles, there was still a significant gender gap in land titles as men owned more and larger plots than women. According to Fuentes and Wiig (2009), educated and married women had higher probabilities of getting land rights as joint titles, but not as individual titles. The ability to use land for productive purposes depended on the characteristics of the land as much as having a title or other kind of property document. Fuentes and Wiig (2009) found that if the land was of poor quality or lying in hilly areas with more problems with erosion and salinisation, the right in itself was not as valuable. The same applied to the access to water for irrigation which was often interlinked with land rights. There was a higher probability for men to have irrigation than women. The study did not find any evidence of differences in women’s and men’s land with respect to soil quality, erosion or salinisation.

Deere and Doss (2006) claimed that there was emerging recognition of the dual-headed households among some Latin American countries. FAO (2007) concurred and asserted that joint titling programmes had led to a considerable increase of women landowners in Latin America. The rise in the number of female-headed households and feminisation of agriculture (due to male-urban migration) were some of the factors pushing some governments in Latin America to focus on women’s land rights during land reforms (Deere, 2005, Katz, 2003 and Lastarria-Cornhiel, 2008 cited in Fuentes and Wiig, 2009).
2.1.3 Regional Overview of Landownership between Men and Women in Sub-Saharan Africa

Land ownership in Africa is more difficult to interpret because much of the land is held collectively and/or is untitled (Doss et al., 2008) and there are overlapping rights to land in different categories of land ownership (private, communal and state-owned) (Adams, Sibanda and Turner, 1999; Doss et al., 2008). In Southern Africa, the amount of rural land that was privately owned ranged from five percent in Lesotho to 67.5 percent in South Africa (Walker, 2002). Table 1.4 shows that a sizeable gender asset gap in land exists in Africa. A study by FAO (1997) cited in Doss et al., (2008) showed that for a number of countries in Africa, women were less likely to have any landholdings and when they did had land, the mean value of men’s holdings was almost three times the mean value of women’s holdings.

In Burkina Faso, Kenya, Nigeria and Zambia women smallholders dominated the agricultural sector and accounted for over three-quarters of food produced (Saito et al., 1994). According to Saito et al., (1994) although women worked for longer hours (combining their reproductive and household maintenance duties with agricultural work), their land rights had worsened due to population pressure and deteriorating land with the effect of reducing plot size compared to men. Their study found that in Kenya, women-headed households cultivated two thirds of hectares that men cultivated while in Nigeria, holdings of male-headed households were over three times that of women-headed households. The average size of women’s landholdings was 0.98 hectares compared to 1.76 for men in Benin; 0.53 hectares compared to 0.73 for men in Tanzania and 1.86 hectares compared to 2.73 for men in Zimbabwe (FAO, 1995 cited in FAO, 2007). Women’s rights to land were often restricted by local customs and statutory laws (Chingarande, 2008; Mgugu and Chimonyo, 2004; UNECA, 2003; Wach and Reeves, 2000) and needed to rely
on male partners or kin for access to land (FAO, 2010c; Makura-Paradza, 2010; Wach and Reeves, 2000; Walker, 2002). In the Kilimanjaro and Bukoba regions, 98 percent of the economically active women were small-scale farmers on other people’s land (McCall, 1987 cited in Peters and Peters, 1998). UNECA (2003) observed that socio-economic constraints such as lack of resources to claim land rights, high female illiteracy rates, limited participation in decision-making bodies on land tenure issues and internalised discrimination prevented women from owning land in Southern Africa. On internalised discrimination experienced by women in land ownership, UNECA (2003) observed: “ironically, society has made women the custodians of the very cultural values that lead to their oppression”. This means that women tend to accept that men are better leaders than they are.

2.2 A historical Perspective of Gender and Landownership in Zimbabwe

The complexity of gender dimensions in land ownership needs to be understood historically taking into account the long term changes in the pre-colonial and colonial periods as well as the immediate history of the FTLRP. This helped to bring into sharp focus the nature of gender relations over land in the past and how they have evolved over time.

2.2.1 Pre-colonial Gender Relations and Landownership in Zimbabwe

There are methodological problems concerning pre-colonial gender relations not only in Zimbabwe but the whole of Africa. The significance and status of women in Africa before the advent of colonialism has not been sufficiently analysed due to the dearth of source materials (Okpeh Jnr, 2007). Western literature reflects a deep-seated prejudice against African women in particular and the continent and its modus vivendi generally (Talbot, 1969; Cass, 1969; Meek,
In pre-colonial Zimbabwe, the economy hinged on agriculture (Cheater, 1986; Masiiwa and Chipungu, 2004) and was supplemented by trade, hunting and craft production (Beach, 1980 cited in Cheater, 1986). The nature of agricultural practices had serious consequences on gender relations and division of labour within and among households. The land tenure system was communal and the land was vested in the chief (Jacobs, 1990, Peters and Peters, 1998). The chief allocated land to the headmen who in turn held all village lands in the family name and distributed land as necessary to male members of the lineage and perhaps with the consent of the chief to male non-lineage members (Peters and Peters, 1998). Cheater (1986) claims that there were female chiefs in Manicaland Province, Mashonaland West Province (Makonde District) and Mashonaland East Province (Mutoko District).

Although women were economically active in agriculture and craft production, had control over grain stores, could own livestock and provided labour, they were excluded from access to land in their own right (Mackenzie, 1975 and Beach, 1980 cited in Cheater, 1986). Men had primary rights to land while women had secondary rights to land through their husbands or male relative(s) (Cheater, 1986; Gaidzanwa, 1994; Hilhorst, 2000; Kesby, 1999; Mvududu and McFadden, 2001; Berkvens, 1997 all cited in Makura-Paradza, 2010; Peters and Peters, 1998; Walker, 2002). Women were not allocated primary land rights because they were destined to marry and move to another community (Gaidzanwa, 1994; Kesby, 1999 and Anderson, 1999).
cited in Makura-Paradza, 2010). According to Cheater (1986) the payment of the bride wealth 
(*roora* in Shona and *lobola* in Ndebele) did not only transfer rights in a woman’s labour and 
reproductive capacity from her own family to that of her husband, but also indemnified her 
family for this loss. While the control of land was vested in men, Cheater (1986) observes that 
houses were controlled by women.

Secondary rights to land applied to family fields, common land and in some cases a plot of land 
women could use as “their own” and from which the benefits of the produce would be brought to 
the family group as a whole (Jacobs, 1990; Peters and Peters, 1998; Hilhorst, 2000). This view is 
corroborated by Adepelumi (2007) who argues that pre-colonial African women had the right to 
profit from their labour although the profit usually served as a contribution to the family income.
In Zimbabwe, women were expected to produce subsistence crops such as maize and women’s 
crops such as beans, groundnuts, potatoes and pumpkins on women’s plots or *tseu/isivande* 
(Peters and Peters, 1998). In the event of widowhood or divorce or husband taking on another 
wife, the wife continued to have access to land as a secondary right. A woman risked being 
forced off the land she had been allowed to use if she refused to be “inherited” by her late 
husband’s brother (Hilhorst, 2000).

The gendered pattern of access to and control over land was reflected in the division of labour 
between men and women (Cheater, 1986). Adult males cleared virgin lands for cultivation and 
planted crops, traded in specific commodities (like iron tools, gold and copper for cloth) and 
hunted wild animals (Mackenzie, 1975 and Beach, 1980 cited in Cheater, 1986). Gold mining 
was a seasonal activity. Citing Mackenzie (1975) and Beach (1980), Cheater (1986) claims that
Although women did not control the means of production in agriculture and metallurgy, they provided much of the labour required for these occupations. Adult women participated in hunting and environmental conservation in pre-colonial Chivi District in Zimbabwe (Mazarire, 2003).

If women played an important role in the pre-colonial society, why do they always appear to be subordinate to men in the articulation of cross gender relations? According to Mazarire (2003), the Shona society in general, and that of Chivi in particular, acknowledged women’s importance in sustaining human and agricultural fertility, but this importance was downplayed and subsumed under male hegemony. The pre-colonial society in Zimbabwe and the Shona community in particular was predominantly patriarchal where property and authority were and are still vested in the male head of the household (May, 1983, Folbre, 1988 and Muzvidziwa, 2002 cited in Makura-Paradza, 2010). There are very few cases where land was allocated directly to women in Africa (WLZ, 2000 cited in Mgugu and Chimonyo, 2004). It is evident from the literature that women’s status to land was not equal with that of men in pre-colonial Zimbabwe. Women’s access to land was based on their status within the family and involved rights of use and not ownership (FAO, 2010c). Customary law excluded women from ownership as the land was vested in man so that it could pass through the patrilineal group (FAO, 2010c). However, in practice, as long as the land was available, women seem not to have been entirely excluded from land use in pre-colonial Zimbabwe.

2.2.2 Gendered Patterns of Landownership during Colonial Period, 1890-1980

The European colonialism of 1890 did not only involve land alienation but a deliberate restructuring of customary land tenure system of the indigenous people (Tshuma, 1998). Pre-
colonial gender relations were destabilised through education, migration, urbanisation and religious conversion which saw some women exiting the patrilineal relationships (Cheater, 1986; Schmidt, 1992 and Kesby, 1999 both cited in Makura-Paradza, 2010). Gaidzanwa (1994) observes that in the colonial era, women who were orphaned, quarrelled or had weak ties with men were vulnerable and tended to migrate out of the communal areas to urban areas as they could not manage without agnatic or conjugal relationships to men. Labour migration patterns in Southern Africa and cash crop production in East and West Africa established new forms of sexual division of labour that had profound implications at the family level (Tsikita, 1994 cited in Mgugu and Chiponyo, 2004). In Zimbabwe, women were left in native reserves as subsistence farmers while their men were taken away to commercial centres as labourers (Auret, 1990; Raftopolous and Phimister, 1997). This male labour migration increased the burden of women in native reserves. According to Schmidt (1992) cited in Amanor-Wilks (1996), women remained in the native reserves in order to guarantee usufruct rights to land and to help maintain kinship ties. A combination of taxes (for example, hut tax, dog tax and dipping fees) and a range of administrative policies were used to cripple peasant production and force African farmers off their land into white-owned large scale commercial farms (Amanor-Wilks, 1996; Deininger et al., 2002). It was sometimes made a condition of employment that male workers recruited from native reserves should also make their wives available for unpaid agricultural work (Amanor-Wilks, 1996).

Legislation was another tool that was used by the white settlers to restructure the customary land tenure system. For example, despite an acute shortage of land in the native reserves, the land tenure resembled pre-colonial holdings where land was allocated patrilineally by male chiefs (Peters and Peters, 1998; Tshuma, 1998). According to Jacobs (1992) cited in Peters and Peters
(1998), while married women continued to receive usufruct rights to land through their husbands, land was allocated chiefly for subsistence and cash crops and women were seldom granted *tseu/isivande*. Meanwhile, unmarried women received land through their patrilineages while young and unwed women were seldom allocated land in the native reserves. Freehold land titles were created specifically for blacks in the Native Purchase Areas (Cheater, 1986; Madhuku, 2004) where according to Peters and Peters (1998), African elites could buy land. Moyo (1995b) argues that the Native Purchase Areas were intended to forestall Black Nationalism and women were not directly targeted in their own right—although some women benefitted only as housewives. The change in property relations required a corresponding legal adjustment to accommodate customary law with respect to inheritance. For example, the Native Wills Act (1933) permitted property to be devolved by will and explicitly stated that in the event of intestacy the heir at customary law should succeed in his individual capacity to immovable property (Cheater, 1986). According to Jacobs (1990) women were regarded as minors and were unable to enter into contracts or to represent themselves in court without permission of and representation by a male guardian. Tripp (2012) observes that by titling and registering land, colonial governments eliminated the importance of secondary rights of women to access land and men increased their control over land.

Under the Native Land Husbandry Act (1951) land was allocated and registered in the male heads of households (Cheater, 1986; Gaidzanwa, 1994) and until 1982 the colonial state used traditional governance structures (chiefs, headmen) as the basis for the local land management systems (Moyo, 1995b). According to Moyo (1995b), this was intended to replicate customary norms of land administration with the male-headed family as the centre-piece of land use and
distribution systems in communal areas in 1981. Whereas men over the age of 21, independent of marital status could receive farming rights and land tenure in the native reserves, female direct tenure was limited to widows, desertees whose husbands’ whereabouts were unknown or outside the country, divorcees with custody of children and spinsters over the age of 25 years (Mararike, 1996; Peters and Peters, 1998). According to Mararike (1996), unmarried women and women in polygamous marriages were not allocated land. The National Land Husbandry Act also dispossessed women of grazing rights for cattle (Peters and Peters, 1998) as women who owned livestock could not register them in their own right since they did not have registered land rights (Cheater, 1986).

The above discussion demonstrates that colonialism eroded and transformed customary land tenure systems in ways that were disadvantageous to women (Adepelumi, 2007; Auret, 1990 Jacobs, 1990; Peters and Peters, 1998; Tripp, 2004). Despite women’s centrality to agricultural production as de facto heads of households in the native reserves, they were denied primary land rights which continued to be vested in their emigrated husbands. The disempowerment of the African women was not only restricted to access to land (Adepelumi, 2007) but was extended to the labour market where they were paid at the bottom of the scale (Phimister, 1996). Did the FTLRP improve married women’s access to and control over land in Zimbabwe? Was there a disparity between the theory of land reform and the government’s own objectives of the land redistribution programme? The next section examines the theory of land reform and how the Government of Zimbabwe conceptualised the objectives of the FTLRP.
2.3 Theory of Land Reform and its Implications to Zimbabwe

The neoclassical theory of land reform looks at land reform as an integral part of the strategy and policy of economic development (Doner, 1972, Warriner, 1969, Zahir Ahmad, 1975 cited in Zarin and Bujang, 1994). The emergence of the human development paradigm and the concept of human poverty in the 1990s led to a shift from the emphasis on economic growth and efficiency as the goals and measures of “economic development”, to well-being, equity, dignity and fundamental human freedoms to develop and realise one’s human potential, or in other words a move away from market-based criteria for evaluating “development” to an approach in which the importance of social relations, institutions, norms and politics is emphasised (Elson and Çagatay, 2000). According to the human development perspective, the distinct areas central to development include life expectancy; maternal health and safety; health care in general; educational opportunities; gender equality; access to sanitation and safe drinking water and access to the political process. In this view of development, gender equality is a core objective in itself. If gender equality is an important component of economic development, was the distribution of land during the FTLRP executed in a gender sensitive manner? What factors influenced access to and control over land in A1 resettlement areas between men and women?

There are three motives of land reform; these are economic, social and political (Deininger et al. 2002; King, 1974 cited in Zarin and Bujang, 1994). The main economic rationale for land reform lies in the inverse relationship between farm size and productivity where for given technology levels, small farms are more efficient than large farms due to higher density of management coupled with motivated family labour available on a continuous basis (Deininger et al., 2002). The inverse-farm-size-productivity relationship estimates output per acre as a function of total
farm size. According to Deaton (1997) cited in Deininger et al., (2002), such an estimation is sensitive to measurement error and omitted variables like land quality. When data on land quality are available (Bhalla and Roy, 1988 cited in Deininger et al., 2002) or when quality and measurement error are controlled for by instrumental variable methods (Deininger et al., 2002 citing Benjamin 1993), there is little or no evidence of a negative relationship between farm size and productivity (Deininger et al., 2002). The social motive is concerned with social equality or social justice (Zarin and Bujang, 1994). Equity considerations create the need for land reform especially in countries like Zimbabwe, where agriculture is the main source of livelihoods and where a majority of the population have been denied access to and ownership of land. The available literature on poverty traps shows that under certain circumstances a redistribution of assets (including land) leads to both greater equity and higher production (Deininger et al., 2002). The political motive is often considered as the last resort but in most cases tends to be the most decisive (Zarin and Bujang, 1994). According to Zarin and Bujang (1994), many governments use land reform or the promise of it to gain or retain power. In Zimbabwe, the ZANU-PF Government used land reform to retain power in 1990 (Palmer, 1990; Madhuku, 2004) and in 2000 (Madhuku, 2004). According to Walker (2002), the political objective may be primary in order to reduce conflict or redress past injustices as with the land restitution programme in South Africa or to increase electoral support through programmes that target actual and potential party supporters during farm invasions and occupations in Zimbabwe.

But how did the Government of Zimbabwe view the land reform programme in general and the FTLRP in particular? Politically, the land reform programme was seen as a vehicle that would enable the Government to achieve peace and stability (Masiiwa and Chipungu, 2004). Socially, the land reform programme was intended to redress the historical injustices and imbalances in
the distribution of land between indigenous blacks and whites. Economically, the land reform programme was designed to improve agricultural productivity among the resettled families and bring unutilised land into production (Auret, 1990; Peters and Peters, 1998). In 1980, the distribution of land was not only extremely inequitable, but was characterised by dualism where a dynamic, modern large scale sub-sector (which received extensive state support) existed alongside a credit-starved traditional and densely populated small scale sub-sector (Deininger et al., 2002). While there was extensive underutilisation of large scale commercial farming land (Auret, 1990; Deininger et al., 2002; Mutuma et al., 1994 cited in Moyo, 1995b), there was growing agricultural productivity among small farmers (Mutuma et al., 1994 cited in Moyo, 1995b). According to Deininger et al., (2002), this unutilised land was not offered on the market such that in addition to the efficiency and growth with equity reasons, an additional economic rationale for land redistribution existed in Zimbabwe: to equalise the marginal product of land across the two subsectors.

The next section presents how different scholars have approached the issue of access to and control over land between men and women in Zimbabwe.

2.4 Access to and Control Over Land between Men and Women in Resettlement Areas

According to Mgugu and Chimonyo (2004), the legal framework governing access to, control and ownership of land has several inequities and allows for outright discrimination when applied to the realities of women’s lives. They cited the findings of the Rukuni Commission (1994) which established that under freehold, women owned 2.3 percent of the large scale commercial farms. In the communal areas, Mgugu and Chimonyo observed that the Communal Land Act and
Traditional Leaders Act impeded on gender mainstreaming in land ownership as women married and moved into the husband’s home. This means that married women are not governed by the two Acts. They further noted that married women’s access to land was determined or dependent on the subsistence of the marriage. According to Kunze et al., (1998) cited in Mgugu and Chimonyo (2004), the rights of married women’s access to land were compromised if the husband entered into a polygamous marriage as the same piece of land was shared between and amongst the co-wives. On national land policy governing land rights, Mgugu and Chimonyo (2004) observed that the selection of beneficiaries was not addressed in a gender-sensitive manner as women were lumped together with other beneficiaries of the land reform programme.

The findings by Mgugu and Chimonyo (2004) that women’s rights to land were constrained by local customs and laws are consistent with literature on the conditions of women in African agriculture (FAO, 2007; UNECA, 2007; Walker, 2002). Mgugu and Chimonyo use women in development approach to analyse both the legal and administrative policy framework governing women’s land rights during the FTLRP. The Women in Development (WID) approach evolved in the early 1970s from a liberal feminist framework and calls for greater attention to women in development policy and practice and emphases the need to integrate them into the development process (Reeves and Baden, 2000). Programmes informed by WID focus on women’s practical needs by, for example, creating employment and income-generating opportunities, improving access to credit and education (Reeves and Baden, 2000; World Bank, 2011). However, WID is inadequate as it focuses on women only and does not address the unequal gender and power relations between women and men in society (Molokomme, 1997; World Bank, 2011). Whereas women’s significant productive contribution is made visible under WID, their reproductive contribution is downplayed (Reeves and Baden, 2000). The failure to make an explicit link to
women’s reproductive work has often added to women’s workload in addition to wage work (World Bank, 2011) and worsened their condition through unrecorded and unpaid domestic work. By focusing on women’s roles as producers, WID left out men, yet men are part of the debate of gender relations. According to FAO (2007), social science and development programmes have moved away from WID towards gender and development approach which looks at the broader issues concerning the socially determined roles and relations between men and women. The gender and development approach focuses on social, economic, political and cultural factors that determine how men and women participate in, benefit from and control resources and their use (Reeves and Baden, 2000).

Chingarande’s (2008) study on land and gender under the FTLRP involved literature survey of documents and reports (from the government and NGOs) on gender and land as well as in-depth interviews with key informants in women’s organisations. She observed that both men and women benefited, albeit at different levels. In the A2 resettlement schemes, female-headed households constituted eleven percent, male-headed households 86 percent and joint registration constituted three percent (GOZ, 2003 cited in Chingarande, 2008). Table 1.3 shows that despite variations in belief systems and practices in the country, the number of women allocated land in A1 resettlement schemes was very low throughout the country. Female-headed households who benefited under the A1 model are less than 20 percent for all the provinces (GOZ, 2003) and married women are missing from these land allotments.

According to Chingarande (2008), women’s marginalisation in both A1 and A2 models was due to a number of structural and market forces (for example, lack of access to credit for the purchase or leasing of land particularly in the A2 model) and legislative and discriminatory cultural (or
customary) practices as well as the discrepancy between policy and practice in government land programmes. This corroborated findings by Mgugu and Chimonyo (2004) that women’s rights to land were constrained by national administrative policies on land, local customs and laws governing land. Unlike Mgugu and Chimonyo (2004), Chingarande (2008) observes that lack of basic infrastructure such as access roads, clinics, service centres, clean water and schools affected women’s decisions on resettlement. Chingarande (2008) acknowledged that while lack of proper coordination among NGOs meant that they could not constitute a strong constituency to influence government land policy during Phase I, there was more structured and coordinated effort by women’s organisations in responding to gender issues in the land question from the mid-1990s. The politicised nature of beneficiary selection had significant gender implications especially considering the peripheral role of women in the political arena and male-dominance of land administration systems (Chingarande, 2008). In South Africa, female-headed households were not only included on project beneficiary lists and appointed to community land reform committees but a gender unit was specifically set up to advocate for independent land rights for women (Walker, 2002).

In a study on land and economic empowerment of women, Gaidzanwa (1995) differentiated the types of land into urban, residential, commercial and industrial land, resettlement, commercial farm land and communal land. In another study to examine the distribution of land between men and women during Phase I of the land reform programme, Gaidzanwa (1994) revealed that in Model B resettlement schemes, women’s individual rights as members of cooperatives were recognised and respected and women benefited directly. In Model A (family-based) resettlement schemes Gaidzanwa (1994, 1995) found that settlers held arable, residential and grazing land
through a government-controlled permit system. The permit was not time specific. A survey of couples on Model A resettlement schemes, showed that 98 percent of resettlement permits were held by husbands against a mere two percent held by wives (Gaidzanwa, 1994). This finding confirmed an earlier observation by Chimedza (1988) cited in Peters and Peters (1998) that although Section 6 of the Communal Land Act stipulates that the names of either or both spouses can appear on resettlement permits, in practice, few married women hold independent or joint farming and grazing permits with their husbands. Meanwhile, the male holders of permits are assured of tenure until they die after which the government will determine whether the window(s) and children of the holder can succeed to the land on the same terms as the original holders (Gaidzanwa, 1995). This implies that married women in Model A resettlement areas only become primary land holders in the event of their husbands’ deaths (Deere and Doss, 2006; Gaidzanwa, 1995; Peters and Peters, 1998). According to Gaidzanwa (1995) this aspect of tenure coupled with intra-household relationships compromised equity, productivity and sustainability on Model A farms. The problems of sustainability and efficiency of these farms are exacerbated by higher rates of polygamy which according to Gaidzanwa (1995) increased from 26 percent to 36 percent among the plot holders since the inception of the resettlement programme in 1981. According to Chenaux-Repond (1994) cited in Gaidzanwa (1995), the higher incidence of polygamy was attributed to the desire to expand farm labour. Gaidzanwa (1995) observed that equity between the male plot holder and his wives and among female spouses had been left out of the public debate especially among black policy makers. She recommended that the land debate should grapple with the issue of polygamous marriages and devolution of land, inheritance and succession. However, in the case of divorce, Gaidzanwa’s (1994, 1995) study showed that a married female settler lost the right to stay on a Model A farm. This finding was corroborated by Ncube et al., (1997), Jacobs (2000) and Chingarande (2008).
In A1 resettlement areas, Gaidzanwa (2011) observed that the allocation of farms was by a user permit issued by the District Administrator on the recommendations of the village head or local councillor who were mostly men and adherents of patrilineal culture and the dominant party, ZANU-PF. Apart from patriarchy, Gaidzanwa (2011) claimed that women were marginalised in the allocation of land in A1 resettlement areas because of domestic division of labour. That is, married peasant women assumed that they would share their husbands’ land as per custom so they stayed at home (in the communal areas) and looked after the fields, children and livestock while the men settled on occupied farms awaiting official designation, surveying and subsequent allocation to them. According to Gaidzanwa, the FTLRP made no effort to separate customary and statutory law and to identify the sources of women’s oppression due to the application of each of these laws. Gaidzanwa (2011) observed that due to the dominance of men in the land reform processes and in the positions where the major decisions were made and in the implementing structures, customary law prevailed.

Gaidzanwa (1988, 1994, 1995, 2011) approached the issue of women and land from an economic empowerment approach which calls for recognised gender implications in the land reform process. According to Agarwal (2003), the parameters of empowerment are complex and multi-dimensional. Agarwal (1994, 2003) argued forcefully that women’s ownership of land leads to improvements in women’s welfare, efficiency, equality and empowerment and that an appropriate approach should involve these principles. Moyo (1995b) criticises the women empowerment approach as it deals with the sex-based discriminatory nature of land redistribution at the expense of gender conceptualisation of the land problem. He calls for a critical theoretical framework within a multi-dimensional perspective of the interactions of
power, land and gender. According to Moyo (1995b), this approach will address the different variables of gender, class, race and ethnicity.

Critiques of Zimbabwean land studies argue that there is a neglect of the land rights and related interests of women (Roos and Spiernberg, 1994 cited in Moyo, 1995b) and that key writings on the land question lack an explicitly gendered conceptualisation of the land problem (Moyo, 1995b). Most gendered criticism of land reform in Zimbabwe is directed at the sex-based discriminatory nature and pattern of official land redistribution programmes (Gaidzanwa, 1988, 1994, 1995, 2011; Jacobs, 1985, Chimedza, 1987, Gwaunza, 1993 and Nyangulu, 1994 cited in Moyo 1995b). Moyo (1995b) observed that such a narrow critique of the land reform policy excluded the role of class, race and ethnic forces in determining both patriarchal and “secular” discriminatory land policy, legislation and control systems. Also neglected was the role of capital, land market processes and private institutional processes which govern the distribution of land (Moyo, 1995). These analytic biases according to Moyo (1995) were attributed to the voluntaristic approaches used in the study of state power and the resultant over-determining role attributed to bureaucrats within the post-colonial state in shaping land distribution and administration policy. Instead of advocating for joint titles (for husband and wife) in communal and resettlement areas, focus should be on challenging the wider power bases and institutional aspects such as chieftaincy, lobola, village development committee/ward development committee control and local council control and administration (Moyo, 1995b). Jirira and Halimana (2008) cited in Gaidzanwa (2011) concur and assert that underlying the land reform programme is the pervasive influence of patriarchy in the institutions and functionaries involved in the programme.
According to Moyo (1995b) specific demands for women’s land rights tended not to be clearly differentiated according to a variety of critical factors and processes which could open wider prospects for equitably based gender rights. Moyo (1995b) observed that the land demands of elite or urban based women appeared to be the most vocalised compared to the generalised and disorganised demands for the land rights of various categories of the rural and urban poor. This partly explained why a middle class women’s formulation of the gendered basis of the land problem did not succeeded in mobilising widespread rural support among the landless rural women. Moyo further observed that the collaboration of some middle class and elite wives in promoting a conservative land reform policy and the benefits of black elite families in procuring large farm estates at the expense of the rural and urban poor reflected a co-option dilemma confronting the women’s struggle for land. Moyo’s observation was corroborated by Jacobs (2000) who argued that feminist and women’s movements worldwide (with the exception of Indian women’s movements) had not seen land as an important focus perhaps because the movements themselves tended to be urban-based.

Chingarande (2008), Gaidzanwa (1988, 1994, 1995, 2011) and Mgugu and Chimonyo (2004) attributed women’s marginalisation in land redistribution to customary law and practices. Moyo (1995b) refuted this narrow culturalistic perspective focusing on the patriarchal influences of the African custom as inadequate in terms of understanding the gendered aspects of the land problem in Zimbabwe. In his study of land and gender, Moyo (1995b) advocated for a critical examination of the power relations within families and clan structures which might indicate how class differentiation among women legitimised and defended culturally constructed land tenure processes which in turn disadvantaged women. He also explored racially determined relations of power and control over resources and the influence of ethnicity and nationalism in fomenting
exclusive and parochial bidding strategies for land and natural resources control. Moyo (1995b) argued that the predominance of males as decision makers in institutions which influence land policy with regard to issues such as land markets, finance and local government has not been favourable to women’s land struggles. According to Moyo (1995b) the male-centred registration of land rights in resettlement areas is a colonial legacy inherited and continued by the post independence black government.

Jacobs (2000) considered the effects of land resettlement for married women in Model A resettlement areas. The research employed several methodologies including structured interviews, observations, key informant interviews and 25 group meetings held with members of Village Women’s Clubs in six resettlement areas. Structured interviews were conducted in eight villages of Mount Darwin and Hoyuyu Resettlement Areas in Mutoko. The survey was a multiple-stage one and included 207 settlers consisting of 99 married women, 66 men married to women in the sample and 42 widows and/or divorcees.

Jacobs (2000) noted both negative and positive changes brought about by the resettlement programme. The study identified five negative experiences of land resettlement in Model A. First, and perhaps the most important, which many wives interviewed saw as operating to women’s disadvantage, was the extent of polygamous marriages (of over 30 percent) within resettlement areas. This finding was consistent with Chenaux-Repond (1994) cited in Gaidzanwa (1995) who found a rate of up to 36 percent for polygamous marriages in the resettlement areas. Second, both men and women complained about living in crowded villages among “strangers” and living on ancestral land not their own. A third matter which caused dissatisfaction
concerned increased work loads due to allocation of greater amount of land to cultivate and associated work (such as construction of huts, fencing, herding cattle, ploughing, and hoeing/weeding). The fourth negative feature was lack of services (shops, schools, clinics, markets and sources of clean water). The fifth factor which caused anxiety among both men and women (married and widows) was the insecurity of tenure as they were aware that land was held via permits. Widows’ insecurity was compounded by poverty, lack of command over labour and a general feeling of social powerlessness while married women expressed the insecurity of their position not in terms of landholding but in terms of the lack of security in marriage.

Despite the above negative experiences of land resettlement, Jacobs (2000) found that Zimbabwe departed to some extent from the general and rather negative picture of land reform. First, the study found a shift in gender division of labour where husbands and wives shared the burden of agricultural labour more equally. In addition, a number of men were reported as assisting with “female” tasks such as fetching water and firewood. However, women were still responsible for nearly all domestic labour and child care in addition to agricultural labour meaning that their overall work burden typically remained much higher than men’s. Secondly, the study found that wives had improved access to property and income compared with their holdings before resettlement. For example, 37 percent of married women were allocated plots of “their own”. In earlier studies, Chimedza (1988) cited in Jacobs (2000) observed that nearly all wives had land while Goebel (1999) cited in Jacobs (2000) found that 65 percent of wives had “their own” plots. Jacobs (2000) attributed the differences to variations between sample populations or improvement overtime. In addition, about 25 percent of men and wives said that wives had been allowed to use and keep proceeds from specific crops such as cotton or groundnuts.
Thirdly, Jacobs (2000) found that 20 percent of wives had no income and most of their income sources consisted of sales from maize, cotton, handicrafts, beer, herbs and eggs. Wives’ average income amounted to one-quarter of mean reported household income representing a high degree of intra-household redistribution. The fourth positive aspect recorded was that resettled women were now advantaged over other women with respect to procedures over inheritance as they could inherit the plot rather than the husband’s brother(s). Goebel (1999) cited in Jacobs (2000) argued that the percentage of widows (30 percent in one village) was high because of the intervention of the Resettlement Officer who had stipulated that the widow should inherit the land. Even more startling to Goebel was that in some cases Resettlement Officers had decided to award land to married women. However, Jacobs (2000) observed that an unmarried woman had no claim on land and a wife’s access to land depended upon the marriage continuing since upon divorce it was she who left the resettlement area. This finding was confirmed by Ncube et al., (1997) in an earlier study in Matabeleland South Province.

A study in Matabeleland South in Nyozani Resettlement Scheme by Ncube et al., (1997) showed that out of the 60 families resettled, only three widows (five percent) were allocated land in their own right and no divorced or unmarried women were allocated land. In the case of divorce, Ncube et al., (1997) observed that it was the wife who lost access to land that she and her husband had jointly qualified for mainly because of the operation of the traditional patrilineal system. Besides patriarchy, Ncube et al., (1997) argued that the emphasis on secondary education and a Master Farmer certificate prejudiced a number of rural women who only had minimum primary school education and who did not have time to attend the training workshops to get a Master Farmer certificate. The study by Ncube et al., (1997) was a micro-level one which provided useful information about the distribution of land in a specific location and how
some variables like education and agricultural training influenced access to and control over land between men and women.

According to ZWRCN (2008), women have less access to land than men in both A1 and A2 models of resettlement and own fewer productive assets. The factors that inhibited women’s access to and control over land included lower levels of agricultural education and training, lower literacy levels, lower female representation in land redistribution structures, discrimination and HIV and AIDS. ZWRCN further observed that women spend more time doing care work than men. In the communal areas, ZWRCN established that women did not own land in their own right but through their husbands. ZWRCN argued that since land disputes were common in resettlement areas, women must be allocated land in their own right so that it is clear what they own and they cannot be dispossessed. The disputes arose from disentitlement of widows who became landless during inheritance wrangles.

A ten-year study (2000-2010) by Scoones et al., (2010) of 400 households from both A1 and A2 resettlement schemes in Masvingo Province revealed that land was allocated unevenly to men and women. They observed that despite women being important players in the land invasions and subsequently investing in the development of new homes and farms, only 12 percent of the households had a woman named as the land holder. According to Scoones et al.,(2010) the highest proportion of female-headed households was in the informal settlements as women often saw the land invasions as an opportunity to make a new independent life and thus escape abusive relationships. The study did not explain the reasons for the low number of women beneficiaries presumably because the main objective of Scoones et al., (2010) was to examine the changing
livelihoods of the resettled farmers after the FTLRP and not the gender dimensions of the programme.

The above discussion on other authors’ methodological approaches to land distribution between men and women in resettlement areas leads us to the next area of consideration which is the research gap filled by the study.

2.5 The Need for an Economic Model on Land Acquisition and Utilisation in Zimbabwe

The literature survey in the three regions of Asia, Sub-Saharan Africa and Latin America has shown that women are considered a marginalised social group in land ownership. This is supported by a growing body of evidence which showed that women had been overlooked and neglected in land reform programmes in the different regions: Deere and Leon (2001, 2003) for various Latin American countries; Deere and Doss (2006) for Honduras and Nicaragua; FAO, 1997 cited in Doss et al. (2008) for a number of countries in Africa and Latin America; Saito et al., (1994) for Kenya, Burkina Faso, Nigeria and Zambia; UNECA (2003) for Lesotho, Zambia, Malawi, Botswana, Mozambique and South Africa; Agarwal (1994, 2003) for India and Malla, 2000 cited in Doss et al. (2008) for Nepal. This lack of gender focus in land ownership has negative consequences for married women as they are not considered for land redistribution and/or titling programmes and consequently lose the land they jointly own with their spouses in the event of separation, divorce, widowhood and abandonment.

In the case of Zimbabwe, what was established in the literature was that the land reform programme was gender selective (Chingarande, 2008; Gaidzanwa, 1988, 1994, 1995, 2011;
Mgugu and Chiponyo, 2004; UNDP, 2002) but the extent to which this was the case as well as to why this varied in certain areas had not been thoroughly investigated. The available literature blamed discriminatory customary law (or practices) as the main reason for the exclusion of women from the land reform programme (Chingarande, 2008; Gaidzanwa, 1988, 1994; Goebel, 2005; Peters and Peters, 1998; Mgugu and Chimonyo, 2004; Pasura, 2010; Sachikonye, 2004; UNDP, 2002; ZWRCN, 2008); laws governing land (Chingarande, 2008; Mgugu and Chimonyo, 2004; Ncube et al., 1997); workings of marriage, women’s rights and gender norms in pre-colonial times (Jacobs, 2000) without looking at the gender dynamics and power relations within households. Power relations exist within the household and economy and therefore must be considered in all economic models. In the case of Zimbabwe, understanding power and patriarchy will assist to analyse how male-dominant institutions actually function and why women are often at a disadvantage in such institutions (Moyo, 1995b).

Other factors identified as constraining equal land rights between men and women included education and agricultural training (Ncube et al., 1997; ZWRCN, 2008), institutional effects of colonial rule in Zimbabwe (Moyo, 1995b; Peters and Peters, 1998) and lack of basic infrastructure such as access roads, clinics, service centres, clean water and schools (Chingarande, 2008). According to Peters and Peters (1998) women in resettlement areas were also denied access to credit and loans because they did not own land. For example, a survey in Nyamaropa, Mutema, Deure and Nyanyadzi established that in most cases if a household maintained credit, the husband as head of the household controlled the loan (Madondo, 1992 cited in Peters and Peters, 1998).
From the available literature, no effort was made to ascertain the relative importance of the factors that perpetuated discrimination in land access, use and control between men and women in the resettlement areas. A quantitative analysis was nonetheless needed to confirm the relative importance of the factors identified as constraining gender balance in the allocation of land between men and women. Also how did intra-household and extra-household factors interact to influence the distribution of land between men and women? The exclusion of extra-household factors erroneously assumed that a household was a bounded unit which existed outside social networks and processes. In this study, the household was treated as an unbounded entity that existed within a wider social network whose interaction and activities had influence on household decisions on land acquisition and utilisation in A1 resettlement areas.

Jacobs (2000) who claimed that her study was the first one to consider gender relations in resettlement areas, omitted important factors like irrigation and the role of social assets and did not endeavour to establish the relative importance of those factors she identified as influencing the gendered pattern of land distribution in Model A resettlement areas. Moyo’s (1995) approach involved a critical theoretical framework of land distribution within multi-dimensional perspectives covering the interaction of power, land and gender, but it failed to explain how intra-household and extra-household gender relations influenced access to and control over land in the resettlement areas. The approach also did not estimate the relative importance of the factors influencing access to and control over land in Zimbabwe. Although some authors (Gaidzanwa, 2011; ZWRCN, 2008) mentioned care work as one of the factors that contributed to women’s marginalisation in access to and control over land in resettlement areas, they did not adequately explain how care work influenced the distribution of assets within A1 households.
A review of the literature on land and gender showed a tendency to aggregate households where the land was held by the household head who in most cases was male. In the stipulation that land was held by the household head, Jacobs (2000) claimed that Zimbabwe was merely following international precedent. The aggregation of households and land users obscures the differential interests, inputs, rights and obligations relating to land use and control in rural Zimbabwe (Gaidzanwa, 1995). Apart from aggregating households and treating them as homogenous and bounded entities, the available literature failed to ascertain the gender asset gap in land access and control. Land distribution programmes affect men and women unequally (Deere and Leon, 2003). A growing body of evidence shows that household welfare is not equivalent to the welfare of individuals within it (Haddad and Kanbur, 1990, Sen, 1990, Duflo and Udry, 2004 and Folbre, 1997 cited in Doss et al., 2008; Haddad, et al., 1997). According to FAO (2011) cited in World Bank (2012), farms operated by women on average have lower yields than those operated by men even for men and women in the same households and for men and women cultivating the same crops.

In this study, the researcher adopted a gender approach to develop an economic household portfolio model on land acquisition and utilisation in A1 resettlement areas. The proposed model allowed a more satisfactory and nuanced analysis of land acquisition, use and disposition. Such an approach provided useful information for designing policies that promote women empowerment and gender equality and overall improvement in household welfare.

In Chapter Four the study used statistical methods and regression analysis to test the hypothesis that the distribution of land was gendered in A1 resettlement areas. More specifically, the t-test
was used to determine gender-asset gap in terms of access to and control over land while the chi-square tests were used to compare the distribution of land between men and women in different categories of landholding. Multiple regression analysis was used to determine variables that influenced landholding in A1 resettlement areas. This provided the necessary quantitative analysis to confirm the relative importance of these factors in determining the distribution of land rights between men and women. This approach is robust as it takes into account the socio-economic, cultural, political and legal factors that affected land rights between men and women. The approach provided a strong and multidimensional framework on the interactions of power and gender to address and analyse the effects of intra-household variables (sex, marital status and education) and extra-household variables (social assets and method used to make people aware of the FTLRP) on the distribution of land rights between men and women in A1 schemes.

After presenting the methodological approaches to gender relations on land by other researchers and the research gap filled by the study, the next section provides a conceptual framework of an economic household portfolio model on acquisition and utilisation of land in A1 schemes.

2.6 Conceptual Framework of Household Model on Land Acquisition and Utilisation

Gender is a complex phenomenon which requires a conceptual framework and a related methodological approach which will cover all the three levels of analysis of the economic behaviour of the household: the individual member of the household and the intra-household dynamics between and among members; the whole household at the aggregate level and the interaction between the household, its members and the external economic, social or political environment (the supra-household or social network) (Cohen, 1996). Such a conceptual
framework and methodological approach reside in development economics which involves a mixture of quantitative and qualitative methods. In this section, economic models of household decision-making will be identified and discussed as well as the conceptual framework of the economic household portfolio model on land acquisition and utilisation.

2.6.1 Economic Models of Household Decision Making

In this section, two polar economic models of household and intra-household decision-making are reviewed. The household model combines previously separate production and consumption models into a single model of a producer and consumer. On the other hand, the intra-household model disintegrates the household to reveal the role of individual preferences, resource sharing and bargaining power of marriage partners.

2.6.1.1 Aggregate Household Level Analysis

Neoclassical economic theory recognises two key units of analysis at the microeconomic level: consumers and firms (Pindyck and Rubinfeld, 2001) and treats them separately. All consumption activities are modelled in terms of the household (individual consumer) while all production activities are modelled in terms of the firm. According to the theory of consumer behaviour, the objective of the consumer is to maximise utility subject to an income constraint. The household’s income is determined by the amount of labour time it sells at going wage rate. On the other hand, the theory of the firm states that the objective of the firm is to maximise profit by selecting optimal levels and combination of inputs and outputs. Households in rural areas engage in both market and nonmarket production and it is not possible to completely separate the household’s consumption and production activities. Household level analysis is associated with the Chayanov model, new home economics model and the farm household model (Cohen, 1996).
The Chayanov model was the first attempt to integrate production and consumption decisions in the analysis of the peasant household (Cohen, 1996). According to the Chayanov model, the household seeks to maximise utility through the consumption of goods produced on the farm, goods purchased from the market and leisure. The new home economics model or unitary model is attributed to Samuelson’s (1956) consensus model and Becker’s (1974, 1981) altruist model (Ironmonger, 2001; Lundberg and Pollak, 1996). In the household economic theory, the household is regarded as a productive sector with household activities modelled as a series of industries (Ironmonger, 2001). The utility of the household is based on home-produced goods known as “Z-goods” (Cohen, 1996; Haddad et al., 1997). The Z-goods are for home consumption only and the household gets income solely through wage work. The unitary model assumes that family members pool all their resources (including labour, food and information) and incomes and share common interests and preferences (Samuelson, 1956 cited in Haddad et al., 1997; Agarwal, 2003) or an altruistic head ensures equitable allocations of goods and tasks (Becker, 1981 cited in Agarwal, 2003) in order to maximise household utility.

The farm household model provides a full model of the household as both a consumer and producer and can be applied to non-agricultural households (Cohen, 1996). It assumes that the household seeks to maximise utility which is derived from the consumption of home-produced goods, purchased goods and the time spent in leisure. The household’s efforts to maximise utility are constrained by the production function, the total time available to the household and the availability of wage work. According to Cohen (1996), the major contribution of the farm household model is that it provides a theoretical framework for analysing the interactions between the various activities of the household: production for the market, production for home consumption, wage work and consumption of purchased goods.
The aggregate household models emphasize sharing, altruism and cooperation. Feminist scholars disagree and instead conceptualise the household not only “as the site of women’s oppression but as the locus of conflicts of competing interests, rights, obligations and resources where household members are often involved in bargaining, negotiation and possibly even conflict” (Moore, 1994 cited in Cohen, 1996). There is mounting empirical evidence that refutes the altruistic assumption (Agarwal, 1997, 2003; Haddad et al., 1997; Strauss and Thomas, 1995 and Behrman, 1997 cited in Meinzen-Dick et al., 2011; Quisumbing, 2003; Kooreman and Kapteyn, 1990, Bourguignon et al., 1993, Browning et al., 1994, Lundberg et al., 1997, Browning and Chiappori 1998, Tiefenthaler 1999 and Attanasio and Lechene 2000, all cited in Stowhase, 2009). The unitary model posits Pareto efficiency as the sole mechanism through which household members achieve their individual and common family goals. Markets and in particular, land markets are imperfect in developing countries such that resource allocation based on such markets may not be Pareto efficient (Shultz, 2007). Apart from losing ground in rigorous tests, the unitary model has failed to explain systematic intra-household disparities in developing countries (Haddad et al., 1997). These empirical results have strengthened the standing of intra-household collective bargaining models (Agarwal, 2003; Quisumbing, 2003).

### 2.6.1.2 Intra-household Level Analysis

Intra-household models or collective models were pioneered by Manser and Brown (1980), McElroy and Horney (1981), Chiappori (1988, 1992) and Lundberg and Pollak (1993) (Haddad et al., 1997; Stowhase, 2009). The intra-household models depart from the aggregate household models’ assumptions of joint and uniform household utility functions and altruism and replace them with bargaining, conflict and unequal power relations between married partners (Haddad et al., 1997). There are two categories of collective models, namely cooperative and non-
cooperative types. Both models use game theory to specify the bargaining process (ibid). The cooperative models assume the attainment of Pareto optimality in household decisions, pooled income, enforceable and binding contracts and symmetrical positions between spouses in relation to the availability of information and the ability to bargain (Haddad et al., 1997). Household members bargain over the use of pooled income and the outcome of the bargaining process depends on the individual members’ bargaining power which is determined by their respective fall-back positions. If the spouses fail to reach agreement, both husband and wife receive the utilities associated with a default outcome described as the “threat point,” “disagreement point,” “breakdown position,” or “fallback position” (Pollack, 2002). The factors that influence the fall back positions include conditions in the labour market, conditions in marriage market, rules governing divorce and physical, financial, and human capital assets held by the individual marriage partners (Agarwal, 1997; Cohen, 1996; McElroy, 1990; Sen, 1987) as well as the perceived self-interest and self-worth (Sen, 1987). In Manser and Brown (1980) and McElroy and Horney (1981), the threat point is interpreted as divorce, while in the “separate spheres” model of Lundberg and Pollack (1993), the threat point is interpreted as a non-cooperative equilibrium within marriage (Pollack, 2002). The Nash bargaining model provides a conceptual solution in cooperative bargaining models of marriage. In the Nash bargaining solution, the utility received by husband or wife depends on the threat point; the higher a spouse’s utility at the threat point, the higher the utility that spouse will receive (Pollack, 2002). According to Pollack, the empirical implication of Nash bargaining model is that a couple’s expenditure pattern depends not only on prices and the couple’s total income, but also on determinants of the threat point.
The non-cooperative models assume separate utility and non-pooling of resources by the household members (Haddad et al., 1997). The assumptions of Pareto efficiency, income pooling and enforceable and binding contracts are relaxed. Instead, the models allow differing preferences between individuals, allow for individual production decisions and information asymmetry between parties with respect to the rules of the game (Wooley, 1988, Kanbur and Haddad, 1994 cited in Agarwal, 1997). In the non-cooperative models, the household is depicted as a site of largely separate gender-specific economies linked by reciprocal claims on members’ income, land, goods and labour (Haddad et al., 1997). According to these models, individuals act strategically within a household to maximise self-interest taking as given the behaviour of other members (Chen and Woolley 2001 cited in Shultz, 2007). The non-cooperative models use the concept of Cournot-Nash equilibrium to analyse how an individual will cooperate with other household members when the utility from cooperation would exceed that of his or her selfish behaviour within the household. A threshold level utility from strategic behaviour is modelled as a threat point to cooperation where the threat is about a return to a non-cooperative behaviour in a separate sphere of a household (Lundberg and Pollak 1993, 1996; Shultz, 2007) rather than about quitting the household as in the cooperative bargaining models of Manser and Brown (1980) and McElroy and Horney (1981) all cited in Shultz (2007). The non-cooperative model is more appealing if individual household members are assumed to intuitively know their personal utilities in separate spheres of the household and then use that information to change their bargaining power (Schulz, 2007).

While both the unitary and collective models allow public policy to change intra-household allocations of a good (or asset), only the collective model permits public policy to affect the rules of intra-household allocation (Quisumbig and Maluccio, 2000). Household bargaining models
provide a formal framework for incorporating the role and consequences of power into economic models of the household decision making processes (Cohen, 1996). The social norms and external institutional conditions that influence intra-household interactions can be explicitly incorporated into intra-household models (ibid) whereas under the household models (especially, the farm household model), the only external variables to enter into the analysis are market prices and wage rates. Unlike the aggregate household models, the intra-household models provide a theoretical framework for analysing observed differences between men and women in time allocation, expenditure patterns and resources (Haddad et al., 1997) as well as the choice of business enterprise (Cohen, 1996). Haddad et al., (1997) argue that apart from losing ground in rigorous tests, the unitary model has failed to persuasively explain systematic intra-household disparities in developing countries.

In this study, the researcher argued that the FTLRP altered the bargaining power of married partners and hence their land rights. The collective model was used to analyse the distribution of land and related assets within households in A1 resettlement areas. The justification was that the collective model focuses on an individual as a unit of analysis and thus is able to address interests, conflicts and cooperation (bargaining) among the household members. An individual’s bargaining power is determined by his or her control over economic resources (Quisumbig and Maluccio, 2000; Agarwal, 2003). The second reason for using the collective model was that the person controlling the resource(s) is identified in the model which allows an analysis of the direct effects of placing resource(s) in the hands of different household members. According to Strauss and Thomas (1995) cited in Shultz (2007), the unitary model relies on unrealistic assumptions. The unitary model assumes that unobservable factors such as “invisible hand” and
“love” account for the observed intra-household allocations while the collective models explain intra-household allocations using the concept of bargaining power (Shultz, 2007).

Although the bargaining models provide a useful framework for analysing gender relations and throwing light on how gender asymmetries are constructed and contested, they pay little attention to some critical aspects of intra-household gender dynamics such as the role of social norms and social perceptions in the bargaining process and how these factors themselves can be bargained over (Agarwal, 1997). Agarwal observed that bargaining models say little about gender relations beyond the household and about the links between intra-household and extra-household bargaining power. In light of this, in addition to using the collective model, the researcher used Agarwal’s (1997) analytical description approach in order to extend the bargaining approach beyond the household and therefore be able to capture the complexity and variability of both intra-household and extra-household gender relations on land. This allowed the use and analysis of both qualitative and quantitative factors that impinge on household decision outcomes. The approach addressed the different variables of gender, power and class and how they affected access to and control over assets (for example, land, education and social networks).

2.6.2 Economic Household Portfolio Model on Land Acquisition and Utilisation

In most studies, data on wealth are analysed by comparing the characteristics of household head (age, education, occupation and sometimes sex) rather than individuals within households (Deere and Doss, 2006). Analysis based on the sex of the household head does not tell the full story about gender dimensions of asset ownership (Deere and Doss, 2006) and may give misleading or partial picture of individual level ownership patterns (Doss et al., 2008). Doss (2006) cited in
Deere and Doss (2006), observed that in Ghana, using female-headed households underestimated the gender land gap in comparison with analysis using individual landholdings. It is important to note that there are some conceptual issues in disaggregating assets between married couples. Rather than disentangling complex legal issues to determine who owns different assets within the household, economists make the simplifying assumption that all assets are jointly owned (Deere and Doss, 2006). However, such an assumption does not show the welfare gains that accrue to individual members within the household. Assets are unequally distributed between men and women, nationally as well as within communities and households (Deere and Doss 2006; Swaminathan, Suchitra and Lahoti 2011 cited in Meinzen-Dick et al., 2011). Fuentes and Wiig (2009) citing Meinzen-Dick et al., (1997), Feder and Nishio (1998) and Lastarria-Cornhiel (1997, 2003); Deere and Leon (2001) have demonstrated the negative distributional repercussions of land tenure reforms that are not sensitive to gender issues. In this study, the researcher argued that intra-household distribution of assets including land, credit and technology influenced the participation of men and women in smallholder agricultural development in A1 schemes.

2.6.2.1 Conceptual Framework of the Model

The conceptual model on land acquisition and utilisation in A1 schemes borrowed from anthropology, economics and feminism so as to enrich the analysis of household decision-making. This was in line with the advice of Olsen (2006) who claims that a successful economic research programme is one that incorporates various ways of understanding the decision making process of individuals in the society and should include sociology, historical analysis of theories, philosophy and law. Anthropologists define a household as a unit which organises the consumption of a collective fund of material goods (Cohen, 1996). However Goody (1996) cited
in Cohen (1996) argues that those who share a kitchen or even a hearth may not share food. According to anthropologists, there are variations in household structures (polygamous, monogamous, female-headed, nuclear and extended) and that different household structures are likely to operate from different resource bases and face different incentives and constraints. Economists are relatively silent on the composition and structure of the household (Cohen, 1996) and instead focus on the behaviour of the household using the theory of consumer behaviour (Pindyck and Rubinfeld, 2001). Feminists, straddling both economics and anthropology, look at the household through the additional lens of gender. In this study, an economic model portraying the household as a circular flow of portfolios was used to analyse the behaviour of the household in the acquisition and use of agricultural land in A1 resettlement areas. The model was used to trace the shift from the aggregate view of the household to the disaggregate view of intra-household decision making. The supra-household sphere represents social norms and external institutional conditions that influence intra-household interactions (Cohen, 1996).

2.6.2.2 Underlying Assumptions of the Model

The conceptual model on land acquisition and utilisation is based on five basic assumptions of intra-household behaviour (Cohen, 1996; Haddad et al., 1997; Lundberg and Pollack, 1993, 1996). First, there are different intra-household arrangements which include pooled versus non-pooled income; cooperation versus non-cooperation; negotiation and bargaining versus outright conflict and joint versus separate allocation of resources (time, labour, land, capital) between married partners. Sometimes both conflict and cooperation may co-exist within the same household (Sen, 1987). Second, there are different divisions within the household which include market and non-market activities of consumption and production and male and female domains.
of resources, activities and power. Third, household decisions regarding production, consumption and investment are influenced by individuals within the household, intra-household relations, the aggregate household and supra-household relations. The recognition that supra-household (or extra-household) factors influence household decisions acknowledges the view that household is a permeable unit which is embedded in social networks and processes. Fourth, households are heterogeneous in terms of composition, structure and functions. Lastly, the model assumes that individual members within the household may have separate preferences, constraints and resources and therefore may make individual or collective decisions.

2.6.2.3 Household Portfolio System and Land Acquisition and Utilisation

In order to conceptualise the role of agricultural activity in household decision making and the household economic portfolio system, we need to incorporate ideas from the neoclassical economic theories of the consumer and that of the firm. The model was designed to analyse the economic behaviour of the household with regards to demand for and use of land in A1 resettlement areas. Land generates a wide range of use-values and exchange values. According to Moyo (1995b) research on land needs to pursue a dynamic assessment of the wide range of these use-values and exchange values and how these represent a complex arena in the gendered struggles for land. For example, in the communal areas, land represents values such as spiritual space, political territory and a host of material market values (such as agricultural use, biotechnological resources, energy sources, building materials, medicines and water-related resources) and non-market values. Given that the focus of the study was the distribution of arable land in A1 resettlement areas between men and women, the model viewed land as a source of material market values that generated income for the household (agricultural enterprise). The model viewed the household as a portfolio or system made up of household resources, household
activities and a circular flow of the interaction between household resources and household activities. The systems perspective was adopted in this study in order to show the interactions between individuals and their corresponding activities and preferences within the household. These individual and household activities take place in a social environment which has direct and indirect effects on how these activities are performed and the people who perform them.

There are five types of household resources (or assets) which include human (time, labour and skills of household members); physical (buildings, equipment and machinery, livestock and personal items like jewellery); financial (cash, savings and fixed accounts, unit trusts); natural (land) and social assets. Social assets include kinship networks and social and political groups. Household resources can be held jointly or separately by the household members. It was assumed that the distribution of household resources influenced bargaining power between married partners (Quisumbing, 2003).

Household agricultural activities include production, consumption, marketing and investment. Household activities can be performed jointly or separately by the household members. A typical agricultural household is engaged in both market and non-market production and it is not possible to completely separate the household’s consumption and production activities. In classical economics, the theory of the consumer is based on the household as the unit of analysis. Classical economics is silent on the household’s production activities (Ironmonger, 2001). In order to conceptualise the role of farming in household decision making and the household economic portfolio system, the researcher incorporated ideas from the classical economic theory of the firm. The objective of the firm is to maximise profit through the selection of optimal levels
and combinations of inputs and outputs (Pindyck and Rubinfeld, 2001). In this model, the household as a unit of consumption wished to maximise its utility while as a unit of production, the household wished to maximise profit from the agricultural enterprise (A1 plot). A proposed economic household portfolio model on land acquisition and utilisation in A1 schemes is presented in Chapter Four.

2.7 Chapter Summary

Selected works on the ownership of land between men and women in Asia, Latin America and Sub-Saharan Africa reflected that land is unequally distributed between men and women. However, the extent to which intra-household and extra-household variables affected access to and control over land and land ownership has not been extensively studied as different studies concentrated on customary, religious and statutory laws. In the literature, no effort was made to estimate the relative importance of these variables in explaining the gendered pattern of land distribution. Based on the conceptual framework of economic models of household decision-making the researcher was able to collect survey data and case study data and to make the subsequent analyses of the findings.

Chapter Three provides the research methodology and design for the study.
CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

3.0 Introduction

This chapter presents the research paradigm, research approach (es), research methods and research design used to address the research problem as outlined in Chapter One. A discussion and rationale for the selection of a particular research paradigm for the thesis is explained. There are five main sections in this chapter of which this introduction is the first section. Section 3.1 provides the research paradigm. The research approach (es) and research design are presented and discussed in sections 3.2 and 3.3 respectively. Ethical conduct during the research is discussed in section 3.4. A summary to the chapter is provided in section 3.5.

3.1 Research Paradigm

A research paradigm is a set of beliefs, values and assumptions that a community of researchers has in common regarding the nature and conduct of research (Guba and Lincoln, 1994; Johnson and Onwuegbuzie, 2004). These beliefs include the nature of reality (ontology), how we gain knowledge about what we know (epistemology), the role of values (axiology) and the process of research (methodology), aesthetic beliefs as well as the language of research (rhetoric) (Cohen, Manion and Morrison, 2011; Creswell, 2009; Creswell and Clark-Plano, 2007; Guba, 1990; Guba and Lincoln, 1994; Johnson and Onwuegbuzie, 2004; Patton, 2002). Blaikie (1993) argues that these aspects are highly relevant to social science since the humanistic element introduces a component of free will that adds a complexity beyond that seen in the natural sciences. He
further states that an understanding of these parameters is important to ensure that approaches appropriate to the nature and aims of a particular inquiry are adopted and that the researcher’s biases are understood, exposed and minimised. Blaikie (1993) contends that these aspects are part of a series of choices that the researcher must consider and link to the original research problem. If this is not achieved, Blaikie (1993) argues that methods incompatible with the researcher’s stance may be adopted with the result that the final work will be undermined through lack of coherence.

In this section, three major ways of thinking about research paradigm namely, ontology, epistemology and axiology will be discussed to demonstrate awareness and understanding. Three research paradigms, namely, positivist, interpretivist and realist are discussed thereafter. The section concludes by describing the research philosophy adopted in this study as a prelude to the research design.

3.1.1 Ontology

Ontology describes our view on the nature of reality (Guba, 1990; Johnson and Onwuegbuzie, 2004) and the interaction between social structures and individuals (Bryman, 2001). Blaikie (1993) develops this description for the social sciences to encompass claims or assumptions about what exists, what it looks like, what units make it up and how these units interact with each other. According to Blaikie (1993), the researcher may be blinded to certain aspects of the inquiry if these underlying assumptions are not identified and considered.
There are two aspects of ontology, namely, objectivism and subjectivism. Objectivism describes the position that social phenomena (entities) and their meanings have an existence that is independent of social actors (Bryman, 2001). This ontological position is closely related to the positivist paradigm and natural science and seeks not only to describe situations but tries to identify and link causal variables. In contrast, subjectivism, which is linked to the interpretivist paradigm, holds that social phenomena are created from perceptions and consequent actions of those social actors concerned with their existence (Bryman, 2001). Economic development presents an economic ontology that renders interrelationships between social, economic and political variables (Dusek, 2008). In order for economic research to inform policy, these interrelationships should be studied from various dimensions.

While it is possible to discern two distinct belief systems, Silverman (2001) argues that such a clear dichotomy rarely exists in practice and much research combines elements of both approaches. This was the approach adopted in this study. This was because the thesis did not only seek to describe the situation of landholding and identify and link causal variables of gendered land distribution but it also sought to understand the effect of people’s perceptions, cultural beliefs and statutory laws on equal access to and control over land between men and women in A1 schemes. The study involved disaggregation of assets within households so as to determine how the gendered asset holding influenced landholding. For the researcher to do that without being involved was impossible. This leads us to the next area of consideration which deals with the researcher’s values (axiology) during the study.
3.1.2 Axiology

Axiology is a branch of philosophy that examines values of the researcher and the extent to which such values enter into the research process (Cohen et al., 2011). According to Heron (1996), researchers demonstrate their axiological skill by being able to articulate their values as a basis for making judgements about what research they are conducting and how they go about doing it. Cohen et al. (2011) argue that whereas the positivist paradigm strives to be value-free, there is no research that is value-free. They hold that researchers create their own values through their own experiences and conventions. In this study, the researcher sought to understand people’s perceptions and belief systems on equal land rights between men and women and to disaggregate assets within households. This made it difficult to remove the researcher’s involvement. In order to ensure self-reflection during data collection, the researcher identified and wrote down any feelings, preconceptions and assumptions or beliefs he had about the phenomenon under study.

When considering that different views exist regarding what constitutes reality and the role of values in shaping our reality, another question is how that reality is measured and what constitutes knowledge of that reality. This leads us to the discussion of epistemology.

3.1.3 Epistemology

While ontology considers what constitutes reality, epistemology describes the nature, sources and limits of knowledge (Blaike, 1993; Easterby-Smith et al., 2008; Eriksson and Kovalainen, 2008). The researcher’s ontological assumptions influence the choice of the epistemology selected (Hitchcock and Hughes, 1995 cited in Cohen et al., 2011).
In view of the link between ontology and epistemology, the need to understand the position of the researcher becomes apparent. Eriksson and Kovalainen (2008) observe that as with ontology, both objective and subjective epistemological views exist. An objective epistemology presumes that a world exists that is external and theory neutral, whereas within a subjective epistemological view, no access to the external world beyond our own observations and interpretations is possible (ibid). Saunders et al., (2009) argue that data collected from objects that exist separate to the researcher is less open to bias and, therefore, more objective and that if social phenomena are studied, these must be presented in a statistical rather than narrative form in order to hold any authority. However, Blaikie (1993) disagrees and contends that since social science research involves many choices, the opportunity for researchers’ values and preferences to influence the process makes it difficult to ultimately achieve true objectivity.

The discussions of ontology, epistemology and axiology lead us to the next area of consideration which is described by Blaikie (2009) as the “research paradigm” and by others (Saunders et al., 2009) as the “research philosophy”. Denzin and Lincoln (2003) describe a research paradigm as “an interpretive framework” and in borrowing from Guba (1990), as ‘a basic set of beliefs that guides action’. Saunders et al., (2009) distinguish between three philosophical views of developing knowledge or epistemology namely; positivism, interpretivism and realism. While it was outside the scope of this thesis to provide an extensive critique of each paradigm, the central features of each approach were discussed because of their prevalence in social sciences and the fact that they form the basis from which other paradigms are developed.


3.1.4 Positivist Paradigm

The positivist paradigm is based on the philosophical ideas of French Philosopher August Comte. Positivism is based on the values of reason, truth and validity and there is focus on facts gathered through direct observation and experiment and measured empirically using quantitative methods and statistical analysis (Blaikie, 1993; Eriksson and Kovalainen, 2008; Easterby-Smith et al., 2008; Saunders et al., 2009). The paradigm reflects a deterministic philosophy in which causes probably determine effects or outcomes (Creswell, 2009). According to Easterby-Smith et al., (2008) positivist researcher looks for causality and fundamental laws. At ontological level, positivists assume that knowledge is objective and quantifiable. There is, however, debate whether the positivist paradigm is entirely suitable for social science research (Hirschheim, 1985). While the researcher did not elaborate on this debate, it was germane to this study since household economics (incorporating market and non-market components of the household) dealing as it does with the interaction of household members, is a social science.

3.1.5 Interpretivist Paradigm

The interpretivist or constructivist paradigm grew out of the philosophy of Edmund Husserl’s phenomenology and Wilhem Dilthey’s and other German philosophers’ study of interpretive understanding called hermeneutics (Mackenzie and Knipe, 2006 citing Meterns, 2005). The interpretivist paradigm seeks to understand the world of human experience (in their natural environment) (Cohen and Manion, 1996) suggesting that reality is socially constructed (Meterns, 2005 cited in Mackenzie and Knipe, 2006). For interpretivism, reality is subjective and its conception is dependent on observers and their interpretation of the meaning of such observations (Guba and Lincoln, 1994).
The interpretivist paradigm is associated with qualitative approaches to data gathering because of its subjective nature and emphasis on language (Eriksson and Kovalainen, 2008). The focus of the researcher is on understanding the meanings and interpretations of “social actors” (those being researched) and to understand their world from their point of view is highly contextual and hence not widely generalisable (Saunders et al., 2009). The interpretivist researchers rely on the participants’ views of the situation being studied (Creswell, 2009; Easterby-Smith et al., 2008) and recognise the impact on the research of their own background and experiences (Mackenzie and Knipe, 2006). Given the close nature of the researcher and the researched, bracketing and self-reflection should be introduced as some of the steps to minimise bias (ibid).

3.1.6 Realist Paradigm

The realist paradigm takes aspects from both positivists and interpretivists (Healy and Perry, 2000). Interpretivists seek to understand human behaviour and the social world while positivists seek to explain the situation (Bryman, 2001). While positivism concerns a single, concrete reality and interpretivism multiple realities, realism concerns multiple perceptions about a single mind-independent reality (Healy and Perry, 2000). Rather than being value-free as in positivist research or value-laden as in interpretivist research (Lincoln and Guba, 1985 cited in Strauss, 2005), realist research is value-cognisant; conscious of the values of human systems and of the researcher’s (Strauss, 2005). Realism concurs with positivism that science must be empirically-based, rational and objective and argues that social objects may be studied scientifically as social objects not simply through language and discourse. On the other hand, in line with interpretivism, realism holds that natural sciences are different from social sciences and that social reality is pre-interpreted.
Realists contend that real structures exist independent of human consciousness, but that knowledge is socially created (Healy and Perry, 2000). Saunders et al., (2009) holds that our knowledge of reality is a result of social conditioning and thus cannot be understood independently of the social actors in the knowledge-driven process. Realists, however, disagree that the reality itself is a product of this knowledge derivation process. Strauss (2005) citing Outhawaite (1983) and Tsoukas (1989) assert that critical realists hold that “real objects are subject to value-laden observation”; the reality and the value-laden observation of reality operating in two different dimensions, one intransitive and relatively enduring and the other transitive and changing. While realism is concerned with what kinds of things there are and how these things behave, it accepts that reality may exist in spite of science or observation and so there is validity in recognising realities that are simply claimed to exist or act, whether proven or not (Blaikie, 1993). Within this framework, Strauss (2005) asserts that the aim of realism is discovery of observable and non-observable structures and mechanisms independent of the events they generate. Realists take the view that researching from different angles and at multiple angles contribute to understanding since reality can exist on multiple levels (Chia, 2002).

3.1.7 Research Paradigm for the Study

The research paradigm adopted in any inquiry contains important assumptions about the way the researcher views the world. The over-riding concern was that the research should be relevant to the research questions as set out in Chapter One and rigorous in its operationalisation. For this purpose, an interpretivist philosophy was required to understand human behaviour and how groups or households adopted and adapted to land acquisition and land use. The study produced qualitative data which was rich and subjective. The research involved disaggregating assets within households and for the researcher to do that without being involved was difficult. In
addition, the FTLRP evoked strong emotions among Zimbabweans and the researcher was inadvertently caught up in this web of value-laden programme. The location of the study was A1 resettlement areas which are natural rather than a laboratory setting. Although data reliability was low, this was countered by the use of triangulation where several data collection methods were used to compare results. Another method to establish credibility of the results was to apply consistency checks by examining the literature and comparing research findings with others for example, Jacobs (2000) and Deere and Leon (2003).

Meanwhile, the study sought to explain the gendered pattern of land distribution and the determinants of women’s land rights. This required the use of multiple regression analysis to determine the nature and strength of the relationship between landholding (as shown by the name on the offer letter) and explanatory variables (sex of the household head, marital status, level of education, size of farm holding, method of acquiring the farm holding, agricultural training and access to credit and technology) in A1 resettlement areas. This was after recognising the lack of objectivity sometimes associated with the interpretivist approach. From the research problem and in order to answer the research questions, the study produced both qualitative and quantitative data. This is supported by Saunders et al., (2009) who asserts that the research can benefit from the strengths of both the positivist and interpretivist positions.

Figure 3.1 gives a summary of the key aspects of the study. The primary aim of the study was to make a systematic and critical evaluation of the distribution of land between men and women in A1 resettlement areas using a gender approach. Both survey data and qualitative data were used to inform the study. The study was set out to test pre-existing theory through the use of
hypothesis as well as rely on qualitative data from interviews with A1 farmers and key informants on their perceptions and beliefs on land and gender relations. This meant that the study was both deductive and inductive with deductive approach predominating (Creswell, 2009; Hammersley, 1990; Healy and Perry, 2000; Silverman, 2001).

Figure 3.1: Key aspects of the study (Adapted from Partington, 2008)

Njihia (2011) observes that economic development is informed by applied sciences and their underlying philosophical paradigms. In Africa, countries have sought to advance economically and socially using theories of economic development such as modernisation, dependency and
Marxism (ibid). Njihia (2011) observes that modernisation has been the preferred approach by international development institutions that conceive development as a linear progress. Modernisation requires the use of mathematical and scientific methods in development planning. The positivist paradigm that calls for objectivity and deductive reasoning towards logical conclusions has been the default philosophy in the practice of development (ibid). Such an approach ignored the human values of emancipation, freedom, cooperation and equality between different groups including the distribution of assets between men and women. In development economics, there is an emerging consensus that combined approaches and mixed methods offer substantial benefits in terms of data quality, depth of understanding and policy analysis (Carvalho and White, 1997; Hulme and Toye, 2006; Kanbur, 2003; Kanbur and Shaffer, 2006; Marsland et al., 1998 and White, 2002 cited in Hulme, 2007; Olsen, 2007). However, the benefits need to be weighed up against additional costs in terms of finance, time and skills.

Section 3.2 presents research approaches and demonstrates that the realist paradigm is consistent with the mixed methods research.

3.2 Research Approaches

Research can have elements of empirical and non-empirical study, or a combination of the two. The non-empirical approach involves the use of a relevant pre-existing body of knowledge to study a particular phenomenon (Easterby-Smith et al., 2008). Some research entirely depends on this approach where the subject is of a historical nature. The empirical approach on the other hand, involves the use of empirical data based on observation or experience (ibid). In this study, both the non-empirical and empirical approaches were used. In Chapter Two, literature review was used to address the research problem. For the empirical approach, the primary dimensions of
3.2.1 Deductive/Inductive Approach

The link between theory and research is not straightforward (Bryman, 2001). Bryman describes a research with no obvious connection with theory as “naive empiricism”. The process of linking theory and research is achieved through either deduction or induction, or both. The choice between deductive and inductive approaches has been discussed by some authors (Bryman, 2001; Cavaye, 1996; Perry, 2001) and depends on the epistemological or theoretical concerns or the type of the research question(s) to be answered (Bryman, 2001). Easterby-Smith et al., (2008) describe deductive research as a study in which theory is tested (for confirmation or rejection) by empirical observation while inductive research, is a study in which theory is developed from observation of empirical reality and general inferences are induced from particular instances.

Both the deductive and inductive approaches can be used in the same study (Cavaye, 1996; Perry, 2001). Perry (2001) advocates taking a middle ground of a balance between the two, striking the position of what he calls “theory confirming/disconfirming” approach. In this thesis, a combination of deductive and inductive approaches was used because the study was focussed on identifying factors that influenced landholding in A1 resettlement areas and understanding people’s perceptions and belief system on equal land rights between men and women as well as disaggregating assets within households.
3.2.2 Objective/Subjective Approach

Another significant choice which exists in the research paradigm to be adopted is the extent to which the researcher is subjective or objective in the execution of the fieldwork. In natural science the researcher must maintain complete independence if there is to be any validity in the results produced while the use of a constructivist paradigm requires involvement of the researcher (Easterby-Smith et al., 2008). In this study, both paradigms were used in the conduct and interpretation of the research findings.

3.2.3 Qualitative/Quantitative Approach

The third choice was whether to adopt a qualitative or quantitative approach or a combination of the two. How then does one choose the research methodology to use? De Vos and Schulze (2002) cited in Schulze (2003) state that all scientific research is conducted within a specific paradigm and researchers must decide and clearly state the paradigm for their inquiry. Bryman (2001) and Schulze (2003) identify three factors that influence the researcher’s choice of a research paradigm in which to work: the epistemological stance of the researcher; the nature and type of the research question or problem to be addressed and the researcher’s skills and previous training as well as the resources (time, money and personnel) available to the researcher.

methods were originally developed in the natural sciences to study natural phenomena while qualitative research methods were developed in the social sciences to enable researchers to study social and cultural phenomena. Quantitative research usually adopts a deductive approach with emphasis on testing theories by the use of quantification in the collection and analysis of data while qualitative research takes an inductive approach with emphasis on the generation of theories (Bryman, 2001). Table 3.1 summarises concepts usually associated with quantitative and qualitative research methods.

Table 3.1: Concepts associated with quantitative and qualitative research methods

<table>
<thead>
<tr>
<th></th>
<th>Quantitative Method</th>
<th>Qualitative Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of reasoning</strong></td>
<td>Deduction</td>
<td>Induction</td>
</tr>
<tr>
<td></td>
<td>Objectivity</td>
<td>Subjectivity</td>
</tr>
<tr>
<td></td>
<td>Causation</td>
<td>Meaning</td>
</tr>
<tr>
<td><strong>Type of question</strong></td>
<td>Pre-specified</td>
<td>Open-ended</td>
</tr>
<tr>
<td></td>
<td>Outcome-oriented</td>
<td>Process-oriented</td>
</tr>
<tr>
<td><strong>Data collection</strong></td>
<td>Questionnaires,</td>
<td>Observation (unstructured, structured, participant).</td>
</tr>
<tr>
<td></td>
<td>standardised/structured interviews,</td>
<td>Interviews (in-depth non-standardised/unstructured,</td>
</tr>
<tr>
<td></td>
<td>tightly structured observation,</td>
<td>semi-structured, individual, focus group).</td>
</tr>
<tr>
<td></td>
<td>document/secondary analysis and</td>
<td>Documentary analysis, case study, action research,</td>
</tr>
<tr>
<td></td>
<td>official statistics</td>
<td>researcher’s impressions, photographs, videos</td>
</tr>
<tr>
<td><strong>Sample</strong></td>
<td>Respondents, participants.</td>
<td>Participants, informants.</td>
</tr>
<tr>
<td></td>
<td>Randomised sampling.</td>
<td>Sampling units such as place, time and concepts. Purposive and theoretical sampling. Flexible sampling that develops during research. Sample is small.</td>
</tr>
<tr>
<td></td>
<td>Sample frame fixed before research starts.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sample is large.</td>
<td></td>
</tr>
<tr>
<td><strong>Relationships</strong></td>
<td>Limited involvement of researcher.</td>
<td>Direct involvement of researcher. Research</td>
</tr>
<tr>
<td></td>
<td>Research relationship distant.</td>
<td>relationship close.</td>
</tr>
<tr>
<td><strong>Type of analysis</strong></td>
<td>Numerical estimation</td>
<td>Narrative description</td>
</tr>
<tr>
<td></td>
<td>Statistical inference</td>
<td>Constant comparison</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grounded theory</td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>Measurable results</td>
<td>A story, an ethnography, a theory</td>
</tr>
<tr>
<td><strong>Rhetoric</strong></td>
<td>Formal and neutral</td>
<td>Informal and detailed descriptions</td>
</tr>
<tr>
<td><strong>Rigour</strong></td>
<td>Internal/external validity, reliability.</td>
<td>Trustworthiness, authenticity. Typicality and transferability.</td>
</tr>
<tr>
<td></td>
<td>Generalisability</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Bryman, 2001; Johnson and Onwuegbuzie, 2004; Muranda, 2004; Myers, 1997; Sale et al., 2002;

How does one choose between quantitative and qualitative research methodologies? How can the two approaches be used in research? What are the merits and demerits of the two approaches?
Can the two approaches be combined? These were the overarching questions addressed in this subsection. The debate on quantitative and qualitative approaches began in the 1960s when social scientists began to have doubts as to whether quantitative approaches adopted from the natural sciences could provide critical perspectives on what was happening in society or solutions to the problems they wanted to solve (Hathaway, 1995 cited in Schulze, 2003). Some researchers reject a mix of the two approaches (Lincoln and Guba, 1985, Leininger, 1992, Denzin and Lincoln, 2000, Murphy and Digwall, 2001 all cited in Bryman, 2001; Higgs (2001) and De Vos (2002) cited in Schulze (2003) because the worldviews of quantitative and qualitative researchers are completely incompatible and mutually exclusive on the basis of their different epistemological and ontological traditions. Smith and Heshuis (1986) further argue that research questions are usually oriented towards quantitative or qualitative direction and as such these two methodologies should not go hand-in-hand.

However, Silverman (2001) disagrees and asserts that neither school is superior to the other and that an emphasis on the polarities does not result in a useful debate as both are valid approaches. Citing Atkinson (1995), Bryman (2001) warns that simplistic polarisation will not do because it restricts rather than extend knowledge. Because the two paradigms do not study the same phenomena, Sale et al., (2002) contend that quantitative and qualitative methods cannot be combined for cross-validation or triangulation purposes but can be combined for complementary purposes. In order to mix quantitative and qualitative research methods in an effective manner, researchers need to investigate the paradigms underlying each approach as well as the history of their development (Johnson and Onwuegbuzie, 2004; Sale et al., 2002; Schulze, 2003).
Two philosophical traditions have dominated the debate of mixed method research: positivism and interpretivism (Brannen, 2005; Johnson and Onwuegbuzie, 2004; Sale et al., 2002). Generally authors identify positivist paradigm as underlying quantitative research while interpretivist paradigm forms the basis for qualitative research (Brannen, 2005; Cohen and Manion, 1996; Johnson and Onwuegbuzie, 2004; Schulze, 2003; Mackenzie and Knipe, 2006; Sale et al., 2002). Table 3.2 summarises the paradigms underlying quantitative and qualitative research methods.

**Table 3.2: Paradigms underlying quantitative and qualitative research**

<table>
<thead>
<tr>
<th></th>
<th><strong>Positivism</strong></th>
<th><strong>Interpretivism</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reality</strong></td>
<td>Existence of an objective real world beyond the individual’s body. Conclusions about reality are based on empirical observations.</td>
<td>Although an objective world exists, researchers are influenced by their own subjective selves. Conclusions about reality reflect viewpoints of investigator and investigated.</td>
</tr>
<tr>
<td><strong>Research aim</strong></td>
<td>To collect evidence to formulate generalisations or laws that govern human behaviour.</td>
<td>To collect evidence to formulate generalisations on human behaviour. How and why individual differences between humans occur.</td>
</tr>
<tr>
<td><strong>Validity</strong></td>
<td>Researcher is an objective outsider. Large samples are representative of the population</td>
<td>Research should acknowledge influence of researcher; generalisable; tests theory; based on empirical logical evidence.</td>
</tr>
<tr>
<td><strong>Nature and function of results</strong></td>
<td>Portrayed by means of linguistic, mathematical and graphical presentations</td>
<td>Portrayed by means of linguistic, mathematical and graphical presentations. Individual differences should be noted. Researcher should acknowledge personal biases.</td>
</tr>
<tr>
<td><strong>Understanding reality</strong></td>
<td>Researcher’s empirical findings and their interpretations.</td>
<td>Researcher’s viewpoint</td>
</tr>
</tbody>
</table>

**Sources:** Sale et al., 2002; Schulze, 2003

Table 3.2 shows that there are opposing views on the aims and validity of scientific research between the two paradigms underlying quantitative and qualitative research. Sale et al., (2002) observe that the above inherent different assumptions of quantitative and qualitative paradigms are rarely discussed or acknowledged by some researchers who use mixed methods designs.
presumably because the positivist paradigm has become the predominant frame of reference in the physical and social sciences. While Guba and Lincoln (1994) argue that questions of method are secondary to questions of paradigms, Sale et al., (2002) hold that methods are shaped by and represent paradigms that reflect a particular belief about reality.

Despite the numerous paradigmatic differences between qualitative and quantitative research, Johnson and Onwuegbuzie (2004) identify four similarities that are sometimes overlooked. First, both qualitative and quantitative researchers use empirical observations to address research questions. However, when and how the collection, analysis and reporting of data are conducted is relative and specific to the type of research being conducted (Johnson, Onwuegbuzie and Turner, 2007). In quantitative research surveys are used to collect data while open-ended questionnaires, interviews or focus group discussions are used in qualitative studies. Second, both qualitative and quantitative methodologies “describe their data, construct explanatory arguments from their data and speculate about why the outcomes they observed happened as they did”. Third, both qualitative and quantitative researchers incorporate safeguards into their inquiries in order to minimise confirmation bias and other sources of invalidity (or lack of trustworthiness) that have the potential to exist in every research study. Fourth, the goal of research (be it qualitative or quantitative) in social sciences is to understand human beings (or specific groups of human beings) and the environments in which they live and evolve.

### 3.2.3.1 Strengths and Weaknesses of Qualitative and Quantitative Research

An evaluation of the strengths and weaknesses of qualitative and quantitative research methods would assist the researcher to use the fundamental principle of mixed research. The principle
states that researchers should collect multiple data using different strategies, approaches and methods in such a way that the resulting combination is likely to result in complementary strengths and non-overlapping weaknesses (Johnson and Onwuegbuzie, 2004) and enhance confidence in the results of the inquiry (Bryman, 2001). Johnson and Onwuegbuzie (2004) assert that the effective use of the fundamental principle of mixed research is a major source of justification for mixed methods research because the product will be superior to mono-method studies.

Among some of the weaknesses of quantitative research, Johnson and Onwuegbuzie (2004) observe that the knowledge produced may be too abstract and general for direct application to specific local situations, contexts and individuals. They observe that a quantitative researcher may miss out on phenomena occurring because of the focus on theory or hypothesis generation (called the confirmation bias). Cohen and Manion (1996) argue that quantitative studies restrict our views of human beings because they concentrate on repetitive and predictable aspects of human behaviour. They assert that quantitative approach overlooks critical aspects of human phenomena such as human actions, attitudes, perceptions, beliefs, the researcher’s interests and the historical and current contexts of the research. Bryman (2001) concurs by stating that quantitative data submerges people’s views under facts and figures. In this study, evidence of this was reflected by the notion that quantitative methods could not access some of the phenomena the researcher was interested in such as the lived experiences of A1 farmers, social interactions and women’s perspective of husband-wife interactions. On the other hand, qualitative research overcame these shortcomings as it provided an understanding and description of people’s lived experiences of the phenomena. Despite these weaknesses,
quantitative research was suited to theory testing and produced results that can be generalised (Johnson and Onwuegbuzie, 2004). Under quantitative research, data collection is quick and data analysis is relatively less time consuming while the research results are relatively independent of the researcher. In quantitative research, the researcher can credibly assess the cause-and-effect relationships by eliminating confounding influence of other variables (Johnson and Onwuegbuzie, 2004).

Qualitative research on the other hand is fraught with subjectivism and questionable precision, rigour or credibility (Schulze, 2003). Schulze argues that although behaviour patterns may be the result of meanings individuals attach to situations, these individuals may be falsely conscious and there may be an objective perspective which is different from that of the individuals themselves. Cohen and Manion (1996) contend that we should not restrict ourselves to the meanings attached to situations or phenomena by the participants themselves. Results from qualitative research can be easily influenced by the researcher’s personal biases and idiosyncrasies (Johnson and Onwuegbuzie, 2004) and cannot be generalised. In addition, unlike quantitative research, data collection and analysis are time consuming under qualitative research and it is difficult to make quantitative predictions. Despite the lack of objectivity in some perspectives, qualitative research is suited to exploring phenomena in depth in specific contexts and can articulate participants’ understandings and perceptions (Johnson and Onwuegbuzie, 2004). In this study qualitative research assisted to understand the lived experiences of A1 farmers in connection with the distribution of land rights between men and women. The other strengths of qualitative research were that data were collected in naturalistic settings and could describe complex phenomena. Data collected were based on the participants’ own categories of
meaning and provided an understanding and description of people’s personal experiences of the phenomena (Johnson and Onwuegbuzie, 2004).

The discussion on the strengths and weaknesses of quantitative and qualitative research shows that both approaches are necessary to advance our understanding of human phenomena. A single approach cannot succeed in encompassing human beings in their full complexity (Mouton and Marais, 1990 cited in Schulze, 2003). This leads us to the next area of consideration; the pragmatic paradigm which is the philosophical underpinning for mixed methods research (Patton, 1990 cited in Creswell, 2009; Creswell and Plano-Clark, 2007; Johnson and Onwuegbuzie 2004; Tashakkori and Teddlie, 1998; Teddlie and Tashakkori, 2008).

3.2.3.2 Pragmatic Paradigm

Pragmatism derives from the work of classical pragmatists (Charles Sanders Peirce, William James, George Herbert Mead and John Dewey) and is today expounded in the works of neo-pragmatists Rorty (1990, 2000), Murphy (1990), Patton (1990), Menand (1990), Rescher (2000) and Cherryholmes (1992) (Creswell, 2009; Johnson and Onwuegbuzie, 2004). The pragmatic rule or maxim states that the current meaning or instrumental or provisional truth value of an expression is to be determined by the experiences or practical consequences of belief in or use of the expression in the world (Murphy, 1990 cited in Johnson and Onwuegbuzie, 2004). The pragmatic maxim is translated in mixed methods research as “choose the combination or mixture of methods and procedures that works best for answering your research questions” (Johnson and Onwuegbuzie, 2004). In pragmatism, the problem is more important than method and researchers use multiple approaches to understand the problem in its social and historical context.
and multiple relevant forms of data collection are used to answer the research question(s) (Rossman and Wilson, 1985 cited in Creswell, 2009; Creswell and Plano-Clark, 2007; Tashakkori and Teddlie, 1998).

The logic of inquiry for pragmatism includes the use of induction (discovery of patterns), deduction (testing of theories and hypotheses) and abduction (uncovering and relying on the best of a set of explanations for understanding one’s results) (Johnson and Onwuegbuzie, 2004). Under pragmatism, reasoning moves back and forth between induction/deduction and subjectivity/objectivity (Morgan, 2007 cited in Evans, Coon and Ume, 2011). Table 3.3 summarises the general characteristics of the philosophy of pragmatism.

**Table 3.3: Characteristics of the pragmatic paradigm**

- Knowledge is viewed as being both constructed and based on the reality of the world we experience and live in.
- Rejects traditional dualisms (e.g. rationalism vs. empiricism, realism vs. antirealism, facts vs. value, subjectivism vs. objectivism) and generally prefers more moderate and common sense versions of philosophical dualisms based on how well they work in resolving problems.
- Endorses eclecticism and pluralism (for example, different, even conflicting theories and perspectives can be useful: observation, experience and experiments are all useful ways to gain an understanding of people and the world).
- Recognises the existence and importance of the natural or physical world as well as the emergent social and psychological world that includes language, culture, human institutions and subjective thoughts.
- Takes an explicitly value-oriented approach to research that is derived from cultural values. Pragmatism endorses shared values such as democracy, freedom, equality and progress.

**Source:** Johnson and Onwuegbuzie, 2004

### 3.2.3.3 Shortcomings of Pragmatism in Research

Although as a philosophy pragmatism can help build bridges between conflicting philosophies, it is not without shortcomings. For example, pragmatism may promote incremental change rather than more fundamental structural or revolutionary change in society (Johnson and Onwuegbuzie,
2004). According to Mertens (2003) cited in Johnson and Onwuegbuzie (2004) researchers from a transformative emancipatory framework argue that pragmatic researchers sometimes fail to provide a satisfactory answer to the question of whom the pragmatic solution is useful to. The other shortcoming is that what is meant by usefulness or workability can be vague unless explicitly addressed by the researcher (Johnson and Onwuegbuzie, 2004).

The following sub-section discusses mixed methods research, the rationale for mixing methods and the various approaches to combining quantitative and qualitative approaches.

### 3.2.3.4 Mixed Methods Research

Mixed methods research (Creswell, 2009); multi-methods research (Brannen, 1992 cited in Bryman, 2006); multi-strategy research (Bryman, 2001) or mixed methodology research (Tashakkori and Teddlie, 1998) originated in 1959 when Campbell and Fiske recommended that researchers should use “multitrait-multimethod” procedures to enhance the reliability and validity of research findings (Creswell, 2009; Johnson and Onwuegbuzie, 2004; Tashakkori and Teddlie, 1998; Tillman, Clemence and Stevens, 2011). Creswell (2009) describes mixed methods research (MMR) as one in which the researcher tends to base knowledge claims on pragmatic grounds and data collection involves gathering both numeric information (e.g. on instruments) as well as text information (e.g. on interviews) so that the final database represents both quantitative and qualitative information. Citing Tashakkori and Creswell (2007), Evans et al. (2011) provide a more elaborate and encompassing definition of mixed methods:
“Research in which the investigator collects and analyses data, integrates the findings and draws inferences using both qualitative and quantitative approaches (or methods) in a single study or programme of inquiry”.

The logic of inquiry for MMR includes the use of induction, deduction and abduction (Evans et al., 2011). MMR rejects dogmatism and advocates the use of multiple approaches in answering research questions (Johnson and Onwuegbuzie, 2004). The research question is the most fundamental (Brannen, 2005; Johnson and Onwuegbuzie, 2004) and many research questions and combinations of questions are best and most fully answered through mixed research solutions (Johnson and Onwuegbuzie, 2004). Table 3.4 summarises the strengths of MMR.

**Table 3.4: Strengths of Mixed Methods Research**

- A variety of information can be used to illuminate a particular problem from different angles e.g. words, pictures and narratives can be used to add meaning to numbers or numbers can be used to add precision to words, pictures and narrative.
- Can answer a broader and more complete range of research questions because the researcher is not confined to a single method or approach.
- Researcher can use the strengths of an additional method to overcome the weaknesses in another method by using both in a research study.
- Can provide stronger evidence for a conclusion through convergence and corroboration of findings.
- Can be used to increase the generalisability of results of the inquiry.
- Can serve a larger transformative purpose to change and advocate for marginalised groups such as women and ethnic/racial minorities.
- A combination of quantitative and qualitative research can produce complete knowledge necessary to inform theory and practice (policy analysis).

**Sources:** Brannen, 2005; Bryman, 2001; Creswell, 2009; Johnson and Onwuegbuzie, 2004

**3.2.3.5 Weaknesses of Mixed Methods Research**

Despite the above strengths, MMR is not without disadvantages. MMR carries disadvantages in terms of cost and time (Bryman, 2006). Methodological purists still contend that one should always work within either a qualitative or a quantitative paradigm (Buchanan, 1992, Pawson and...
Tilly, 1997 cited in Bryman, 2006; Johnson and Onwuegbuzie, 2004). MMR can present problems of interpretation especially when findings are inconsistent (Bryman, 2001), but the researcher’s preparedness to address such problems will enhance the credibility of the inquiry. MMR is still a new and developing paradigm (Creswell, 2009; Evans et al., 2011) and guidelines for mixed methods practice are needed. There is little conceptual or empirical work on the choice of design and no widely accepted set of ideas about how to integrate data analyses or establish validity (Greene, 2008 cited in Evans et al., 2011; Johnson and Onwuegbuzie, 2004). Onwuegbuzie and Leech’s (2006) framework for linking research questions to mixed methods data analysis techniques illustrates that the development of research questions and data analysis procedures should occur logically and sequentially.

3.2.3.6 Approaches to Combining Quantitative and Qualitative Research

A majority of MMR designs can be developed from two major types: mixed model and mixed method designs (Creswell, 2009; Johnson and Onwuegbuzie, 2004; Tashakkori and Teddlie, 1998). The mixed model design involves mixing qualitative and quantitative approaches within or across the stages of the research process while mixed (or multiple) method design includes a quantitative phase and a qualitative phase in an overall research study (Johnson and Onwuegbuzie, 2004).

After a decision had been made to use mixed methods design in MMR, the researcher had to determine whether the qualitative and quantitative approaches were to assume equal status or whether one approach was dominant (Johnson and Onwuegbuzie, 2004; Johnson et al., 2007) and whether the two phases were conducted concurrently or sequentially in the study (Johnson
and Onwuegbuzie, 2004). Borrowing from Morse (1991), Johnson and Onwuegbuzie (2004) identify nine mixed methods designs. The nine designs are presented in Figure 3.2. For notational purposes, QUAN and \textit{quan} or QUAL and \textit{qual} signify the priority given to each method, with all capital abbreviations indicating the dominant paradigm and italic lower case letters indicating secondary method. The priority for weighting is dependent on the aims of the researcher, what the researcher hopes to emphasise for the intended research audience and whether the researcher is primarily inductive or deductive (Creswell, 2009).

<table>
<thead>
<tr>
<th>Time order</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion</td>
<td></td>
</tr>
<tr>
<td><strong>Paradigm</strong></td>
<td><strong>Emphasis</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Decision</strong></td>
</tr>
<tr>
<td><strong>Equal Status</strong></td>
<td>QUAL + QUAN</td>
</tr>
<tr>
<td></td>
<td>QUAN → QUAL</td>
</tr>
<tr>
<td><strong>QUAL + quan</strong></td>
<td>QUAL qual → QUAN qual → QUAL</td>
</tr>
<tr>
<td><strong>QUAN + qual</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 3.2:** Mixed method design matrix with mixed method research designs in the four cells

**Source:** Johnson and Onwuegbuzie, 2004

Note: “qual” stands for qualitative; “quan” stands for quantitative; “+” stands for concurrent (or simultaneous); “→” stands for sequential; capital letters denote dominant paradigm and italic lower case letters denote secondary method.
A discussion on the rationale for the choice of the research approach used in this study is provided in the following subsection.

### 3.2.4 Discussion and Rationale for the Research Approach for the Study

In this study the researcher avoided methodological monism, the belief that a single methodology can produce scientific progress (Dusek, 2008). This should not be construed as an inability to decide between quantitative and qualitative approaches. It was the researcher’s contention that both approaches were valuable and could be combined in the same study if the research problem and research questions so required and the two approaches were managed properly. Dusek (2008) asserts that epistemological and methodological problems cannot be treated without referring to the substantive issues of the branch of science concerned. The researcher adopted a pragmatic approach because it provided an opportunity for multiple methods, different worldviews and different assumptions as well as different forms of data collection and analysis in the mixed methods study (Creswell, 2009). As explained above, the pragmatic paradigm considers the merits and demerits of qualitative and quantitative approaches in addressing the research questions (Bryman, 2001; Creswell, 2009; Johnson and Onwuegbuzie, 2004).

The realist paradigm which was chosen for the study is consistent with a combination of quantitative and qualitative research methods (Creswell, 2009; Hammersley, 1990; Healy and Perry, 2000; Silverman, 2001). The case study strategy and the use of semi-structured and unstructured in-depth interviews are acceptable and appropriate within the realist paradigm as are statistical analyses including regression (Bisman, 2002; Perry, Alizadeh and Riege, 1997 cited in Strauss, 2005). The choice of a mixed method design should be informed by a theoretical and conceptual orientation of the study (Bryman, 2006). As mentioned above, in development
economics, combined approaches and mixed methods offer substantial benefits in research and policy analysis (Olsen, 2007). According to Dusek (2008), economics is a multi-paradigmatic science and phenomena need to be studied from multiple levels and angles. Lipton (1970) and Lipton and Moore (1972) cited in Hulme (2007) articulated and demonstrated the potential advantages of combined approaches with the Village Studies Programme in India and West Africa. The programme provided a landmark database on rural households on such issues as labour market, risk management, assets and income. Hulme (2007) used MMR to study poverty analysis and poverty dynamics in Asia and Africa.

Some authors argue that in order to decide which method is best suited for a proposed study, the researcher must closely examine the research questions and relate them to the philosophical and methodological differences between quantitative and qualitative research methods (Blaikie (2000), de Vaus (2001), Mason (2002), Creswell (2003) cited in Brannen (2005); Onwuegbuzie and Leech, 2006)). Quantitative purists look at research from a positivist perspective (Ayer (1959), Maxwell and Delaney (2004), Popper (1959), Schrag (1995) cited in Johnson and Onwuegbuzie (2004)). The ontological position of this type of research is that there is only one truth and that truth is independent from the researcher’s perception (Sale et al., 2002). The goal is to measure and analyse causal relationships between variables within a value-free framework (Denzin and Lincoln (1994) cited in Sale et al. (2002)). This is achieved through techniques that include randomisation, blinding, highly structured protocols and written or orally administered questionnaires with limited range of predetermined responses (Sale et al., 2002). According to Carey, 1993 cited in Sale et al., 2002, sample sizes are much larger than those used in qualitative research so that statistical methods which ensure that samples are representative can be used. Quantitative researchers call for rhetorical neutrality involving a formal writing style using the
impersonal passive voice and technical terminology in which establishing and describing social laws is the major focus (Tashakkori and Teddlie, 1998).

On the other hand, interpretivism underpins the qualitative research paradigm (Guba, 1990; Guba and Lincoln, 1994; Guba and Lincoln (1989), Lincoln and Guba (2000), Schwandt (2000), Smith (1983, 1984) cited in Johnson and Onwuegbuzie (2004); Johnson (1994), Kuzel and Like (1991), Secker et al. (1995) cited in Sale et al. (2002)). Ontologically, constructivists believe that there are multiple realities or multiple truths relative to time and situation and it is impossible for the researcher to be independent of that (Guba, 1990). The goal of qualitative research is to identify processes and meanings using the techniques of in-depth and focus group interviews and participant observation. Qualitative purists are characterised by a dislike of a detached and passive style of writing preferring instead, detailed, rich (empathic) descriptions written directly and somewhat informally (Johnson and Onwuegbuzie, 2004). According to Howe (1988) cited in Johnson and Onwuegbuzie (2004), quantitative and qualitative purists advocate the incompatibility thesis which posits that qualitative and quantitative research paradigms including their associated methods cannot and should not be mixed.

Notwithstanding the above, an increasing number of authors advocate for a mix of the two approaches (Bryman (2001); Creswell (2009); Evans et al. (2011); Johnson and Onwuegbuzie, (2004); Tashakkori and Teddlie (1998); Teddlie and Tashakkori (2008); Tillman et al. (2011)). Onwuegbuzie and Leech (2006) argue that research questions are even more important in MMR because mixed method researchers make use of the pragmatic method and system of philosophy. In MMR, research questions drive the methods used (Tashakkori and Teddlie, 1998) and dictate
the type of research design used, the sample size and sampling scheme employed and the type of instruments administered as well as the data analysis techniques (statistical or qualitative) used (Onwuegbuzie and Leech, 2006). However, forming research questions is much more difficult in MMR than in monomethod research because it involves the formation of both quantitative and qualitative research questions within the same inquiry (Onwuegbuzie and Leech, 2006).

A mono-method design will suffice if the researcher determines that all research questions and/or hypotheses may be adequately addressed by either quantitative or qualitative method (Tillman et al., 2011). In this study, neither method alone was sufficient to develop multiple perspectives of the research problem and provide a comprehensive contextual understanding of the phenomenon investigated. As a result, research questions in the study embedded quantitative and qualitative research questions. According to Onwuegbuzie and Leech (2006), a MMR question necessitates that both quantitative and qualitative data be collected and analysed either concurrently, sequentially or iteratively before the question is addressed.

The study sought to make a systematic and critical evaluation of the distribution of land between men and women in order to assess the magnitude of the gender asset gap and to establish the determinants of the security of women’s land rights in A1 resettlement areas. Typically, a question composed of variables is measured in a systematic way and data are analysed with statistical procedures (Morse and Richards, 2002) and/or regression analysis. Recognising that the study sought to understand “people and the social and cultural contexts within which they lived...” (Myers, 1997), a qualitative approach was used. What were the process issues of the FTLRP? What were the lived experiences of A1 farmers with regard to the FTLRP? What was
the state of gender and power relations in A1 households? What were the perceptions of men and women regarding equal land rights? How were assets distributed within households? These questions could not be answered without inducing human belief systems and perceptions as well as the researcher’s own value judgement and thus required the use of qualitative research methods. Bryman (2001) describes the core elements of qualitative research as being: seeing through the eyes of the participants; description and content; processes; flexibility and concepts and theory as outcomes of the research process. Some of these core elements were applied in this study. For example, the assertion that social science research deals with people and their social world was achieved by seeking A1 farmers’ views and seeking to understand their context and experiences of the social world through in-depth interviews. Bryman (2001) asserts that qualitative research seeks to describe, understand and explain a situation in its context. This was achieved through rich descriptive detail to build up the context so that the people may be understood within their background (ibid). In this study, a rich description of a selected A1 resettlement scheme and brief accounts of A1 farmers in Goromonzi District are provided in Chapter Four in order to allow a deeper understanding of the context of A1 farmers.

Qualitative research, however, could not be used to identify the causal factors of a gendered pattern of access to and control over land in A1 resettlement areas. In this regard, quantitative methods were used as part of the empirical study to measure the gender asset gap in land access and identify the determinants of land rights in A1 schemes. Multiple regression analysis was used to confirm the relative importance of the determinants of women’s land rights while the independent t-test was used to establish if there was a gender asset gap. This is in line with economic theory which among other things seeks to establish cause and effect relationship between two or more economic events thereby provide the basis for predicting the future course
of economic events (Lipsey and Chrystal, 1995). Although economic predictions are important for planning future course of economic activities by individuals, business firms and the government, Lipsey and Chrystal (1995) observe that they may be conditional and inaccurate.

A household economic portfolio model on land acquisition and utilisation between men and women can be described as a qualitative study of the lived experiences of the distribution of land rights to inform a quantitative measure of land rights. Although the phenomenon of land rights may appear the same across the two research methods, the distinction between “lived experience” and “measure” reconciled the phenomenon to its respective method and paradigm. According to Sale et al., (2002) this solution differs from that of merely using the strengths of each method to bolster the weaknesses of the other or capturing the various aspects of the same phenomena. Creswell (2009) notes that quantitative and qualitative research is a complex continuum where the former covers the breadth of the study while the latter covers the depth of the inquiry as shown in Figure 3.3.

![Figure 3.3: Combination of qualitative and quantitative research methods to construct mixed methods research (Adapted from Galt, 2008)](image_url)
Given that the quantitative approach or qualitative approach by itself was inadequate to develop multiple perspectives and a complete understanding of the research problem, the researcher settled for a MMR as recommended by various authors (Bryman, 2001; Creswell, 2009; Evans et al., 2011; Johnson and Onwuegbuzie, 2004; Tashakkori and Teddlie, 1998; Teddlie and Tashakkori, 2008; Tillman et al., 2011). Combining qualitative and quantitative research methods was consistent with the realist paradigm and the thrust of research in development economics which advocates for multi-level analysis of the problem (Dusek, 2008; Hulme, 2007; Olsen, 2007).

In using MMR, a decision had to be made to determine whether the qualitative and quantitative approaches would assume equal status or whether one approach is dominant (Johnson et al., 2007) and to determine how each method was implemented: concurrently or sequentially in the study. Given that the conceptual process in this study was not one of discovery and that the aim and research questions and/or hypotheses were answered predominantly by quantitative data, the theoretical drive was deductive (QUAN+qual). The study used a mixed methods design where the case data occupied a secondary role to the variable-oriented survey data. These two approaches were integrated throughout the analytic and interpretive phases of the study. The researcher avoided the use of sequential designs because of their limitations in terms of greater amount of time needed to conduct the study and the subject attrition occasioned by the longer duration (Tillman et al., 2011).
3.3 Research Design

Research design is the technical framework or practice used to identify the research question, collect data and analyse the findings (Kothari, 2005). The research design also includes time and budget of the inquiry since research is undertaken under these two constraints. Figure A1 is a Gantt chart showing time scheduling during the study. The budget was excluded since the study was fully funded by the researcher. Considering that there are various alternatives of research design, the purpose of this section is to select the type of study undertaken to provide acceptable answers to the research problem and sub-problems. The section comprises a three-fold presentation of the research design used in this study. First, is a presentation and description of research design alternatives and selection of the alternative(s) used in the study. Second, is a presentation of data collection and sampling methods. The third part of the section provides data analysis procedures.

3.3.1 Research Design Alternatives

Research design alternatives include case study, experimentation, surveys, grounded theory, ethnography, action research, modelling and operational research (Cavaye, 1996; Miles and Huberman, 1994). Given the nature of the research problem and that the research questions embedded both quantitative and qualitative research questions (Onwuegbuzie and Leech, 2006) it was decided to select the survey and case study research design alternatives as being the most appropriate for the study. Case study and survey data were used to test the five hypotheses outlined in Chapter One. These research design alternatives are explored in detail in the following sub-sections.
3.3.1.1 Survey Data (Secondary Dataset)

Household survey data are secondary data sources (data set) already in existence (Boslaugh, 2007; Gujarati, 1988). The researcher may select variables to use in their analysis from one secondary data source or may combine data from across sources to create new data set (Boslaugh, 2007). In this thesis, household survey data collected by the African Institute for Agrarian Studies was used for the quantitative component of the study. Obtaining pre-existing data was quicker and cost effective. The household survey data contained considerable breadth (Boslaugh, 2007), was appropriate for the study’s unit of analysis (the household) and sampling and covered the key variables (and their values) required for statistical analysis and econometric modelling. However, the survey data could not be controlled directly as the researcher did not participate in either the research design or data collection processes.

3.3.1.2 Case Study

Some authors, (Cavaye, 1996; Miles and Huberman, 1994; Perry, 2001) have described the case study as an empirical inquiry that investigates a contemporary phenomenon with its real life context. There are five types of case studies which include snapshot, longitudinal, pre-post, comparative and patchwork (Miles and Huberman, 1994). The qualitative component of the study was undertaken as a snapshot type of case where the objective was on understanding in detail beliefs, feelings and perspectives of A1 farmers in Goromonzi District on the distribution of land rights between men and women. The case study was undertaken during the period December 2012 to March 2013 and involved a series of contacts and field trips to understand the nature of the distribution of land rights between men and women in A1 resettlement areas.
3.3.2 Presentation of Data Sources

Two sources of data were used in this study for the purposes of comparing and integrating key findings. The main source of data for the study was a baseline survey of the FTLRP undertaken by the African Institute of Agrarian Studies during the period November 2005 to December 2006. The African Institute of Agrarian Studies (AIAS) is a regional research organisation that focuses on influencing land and agrarian reform policies through multi-disciplinary social science research, policy dialogues, training and information dissemination. On technical support, AIAS has provided technical support to multilateral and regional agencies. AIAS provided technical support to the European Union and the World Bank to evaluate the outcomes of the FTLRP. In Africa, the AIAS assisted the African Union, Economic Commission for Africa and the African Development Bank to develop a framework for Africa’s land policy and provided technical back-up support to the Southern Africa Development Community in the development of a land policy.

The baseline survey of the FTLRP focused on the patterns of land allocations, land tenure, land use and production and labour relations from 2000 and the emergent pattern of socio-economic differentiation and social reproduction in the newly redistributed areas (AIAS, 2009). In this thesis, the raw data of the baseline survey was used as it captured the key variables required to estimate the gender asset gap and determine factors influencing the security of land rights in A1 resettlement areas. The use of pre-existing data was in line with the advice of a number of authors, (Deere and Doss (2006); Deere et al., (2005); Fuentes and Wiig (2009); Katz and Chamorro (2003)) who used secondary data sets from research institutions to estimate gender asset gap in land ownership using multiple regression analysis in various countries in Latin
America. In all the studies, the pre-existing data sets were supplemented with qualitative data collected through case studies. This was the approach adopted in this study.

The secondary source of data stemmed from the fieldwork undertaken by the researcher during the period, December 2012 to March 2013. The case data helped to better understand the survey data and gave insights into the FTLRP and the life of A1 farmers. The case data served as supplemental to the quantitative household survey data collected by AIAS. The self-collected data were two-fold. The first component of data was collected in Harare and consisted of document analysis and interviews with representatives from ZWRCN and the Ministry of Women Affairs, Gender and Community Development. The second component of data was collected in Goromonzi District and consisted of observations, document analysis and interviews with A1 farmers, District Administrator, District Lands Officer, the headwoman of Bains Hope, the headman of Ingwenya Farm, Committee of Seven and one farm worker.

3.3.2.1 Case Study Area

The case study area is Goromonzi District in Mashonaland East Province. Goromonzi District is one of the nine districts in the Province. The other districts are Chikomba, Hwedza, Marondera, Mudzi, Murehwa, Mutoko, Seke and Uzumba-Maramba-Pfungwe. Figure 3.4 is a map of Zimbabwe showing the geographical location of Goromonzi District. Prior to 2000, Mashonaland East Province had 1,135 commercial farms (GOZ, 2003). The districts of Mudzi and Uzumba-Maramba-Pfungwe did not have farms while Mutoko District had one farm.
Figure 3.4 Map of Zimbabwe showing location of Goromonzi District

Source: Surveyor General, 2013

Situational Analysis of Goromonzi District

Figure 3.5 shows a map of Goromonzi District illustrating geographical characteristics. On its flanks, Goromonzi District shares borders with Harare, the capital city of Zimbabwe to the west, Seke District to the south and Marondera, the provincial capital of Mashonaland East Province to the east. To the north, Goromonzi District shares borders with districts in Mashonaland Central Province, namely, Bindura, Mazowe and Shamva. Goromonzi District has a land area of 2,459 square kilometres and a population of 223,879 (ZIMSTAT, 2012).
Goromonzi District is mainly a rural district and agriculture forms the economic base. It lies in agro-ecological region IIA and receives an average rainfall of 900 to 1,200 millimetres per annum (GRDC, 1996). The soil types range from deep sandy soils, sand loamy to deep red clay soils (GRDC, 1996). Goromonzi District is suitable for intensive farming, beef, dairy, horticulture, tobacco, maize, sugar beans, potatoes, paprika, soya beans and small grains (sorghum, millet and rapoko). The other major economic activities in the district include gold mining and tourism (GRDC, 1996) and wildlife rearing (Moyo, 2000).
Figure 3.5 Map of Goromonzi District showing the two study sites

Source: Surveyor General, 2013
Table 3.5 shows land distribution in Goromonzi District before the launch of the FTLRP. The large scale commercial farms (LSCFs) occupied more than 50 percent of the total land area in Goromonzi District. In the 1990s, a majority of large scale commercial farmers changed land use patterns towards horticulture in conformity with the export-led growth of the structural adjustment programme, 1990-95 (Moyo, 2000). Murisa (2010) observes that the concentration on horticulture led to an actual decrease in the amount of land devoted to crop production. The LSCFs became the major source of resettlement land in the district. Table 3.5 shows that Goromonzi District did not have resettlement areas prior to 2000 because the government did not want to disrupt the production efficiency and effectiveness of LSCFs (Weiner et al., 1985 cited in Marongwe, 2008; Tshuma, 1997). This was despite the fact that Goromonzi commercial farmers were noted for underutilising productive land (Marongwe, 2008). For example, Marongwe (2008) notes that only 14.4 percent of the arable land was utilised in Goromonzi District during the 1981/82 agricultural season. Elsewhere in Zimbabwe, previous studies have demonstrated that there was significant underutilisation of land in the large scale commercial farming areas (Auret, 1990; Bruce, 1999, Chasi et al., 1994 and Roth, 1990 cited in AIAS, 2009).

Table 3.5 Distribution of land in Goromonzi District before the launch of FTLRP

<table>
<thead>
<tr>
<th>Category</th>
<th>Size (hectares)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communal areas</td>
<td>90,437</td>
<td>34</td>
</tr>
<tr>
<td>Large scale commercial farms</td>
<td>155,437</td>
<td>58</td>
</tr>
<tr>
<td>Small scale commercial farms</td>
<td>13,135</td>
<td>5</td>
</tr>
<tr>
<td>Recreational Parks</td>
<td>1,500</td>
<td>1</td>
</tr>
<tr>
<td>State land</td>
<td>5,812</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>266,321</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Ministry of Lands, Agriculture and Rural Resettlement, 1996
Different land tenure regimes applied to the different land categories and these were reflected in the land use patterns. The land tenure in LSCFs and small scale commercial farms is freehold while communal land belongs to the state and the holders have usufruct rights only. In the communal areas, land is allocated to the male head of the household while in the LSCFs anyone could buy the land on the market. However, very few women could afford to purchase commercial land. The average plot size in the communal areas is 1.5 hectares (GRDC, 1996). The main crops grown in the communal areas include maize, pumpkins and small grains such as rapoko and sorghum. Crop production is mainly for subsistence. On the other hand, land was abundant in LSCFs. The large scale commercial farming areas provided a critical source of land for redistribution to indigenous black men and women. Large scale commercial farms ranged from 50 hectares to 2000 hectares (ibid). Land use in LSCFs was highly diversified and included crop cultivation (maize, tobacco, soya beans, seed maize, paprika and horticulture produce); livestock rearing and eco-tourism (GRDC, 1996) and wildlife rearing (Moyo, 2000). State land comprises two percent of the total land area in Goromoni District. This land represents land held in trust by the Government for the preservation, conservation and development of natural resources (Moyo, 1995b). All State land is managed by parastatals and government departments.

**Problems of Land in Goromoni District**

The problems of land in Goromoni District can be understood in terms of the development of squatter settlements, settlement of people in fragile lands such as river banks and the sale of communal land (Marongwe, 2008). The development of squatter settlements was attributed to two underlying processes. As mentioned above, from 1980 to 2000, Goromoni District was the only district in Mashonaland East Province that did not have resettlement areas. This meant that people in overcrowded communal areas could not significantly benefit from the first phase of the
land reform programme and hence some people occupied grazing areas and other fragile lands like vleis and river banks. The second reason attributed to the development of squatter settlements is the proximity of Goromonzi District and in particular, the communal areas of Chikwakwa, Chinthamora, Chinyika and Rusike to Harare which enticed some people in Harare to seek residential stands in the district (GRDC, 2000 cited in Marongwe, 2008). Citing GRDC (2000), Marongwe (2008) notes that people from surrounding LSCFs and other districts in Mashonaland East Province also contributed to land pressure in Goromonzi District. Related to the problem of squatter settlements is the problem of illegal land sales in Goromonzi District. Records in the form of minutes at GRDC showed that chiefs, headmen and even individual peasants were involved in the sale of grazing land. The land was mostly sold to people from Harare who were seeking residential lodgings. The other problem related to land was widespread poaching of natural resources such as firewood, wild fruits especially *mazhanje*, river sand and pit sand. Frequent power outages experienced between 2000 and 2009 meant that illegal vending in firewood found a ready market in Harare. Wild fruits were mainly sold along the major highways passing through Goromonzi District. River sand and pit sand also had a lucrative market in Harare due to the construction boom of mainly residential lodgings.

Given the above widespread land pressures in Goromonzi District, it was therefore not surprising that peasants from the nearby communal areas were quick to participate in the land occupations of 2000. The new agrarian structure and gender composition of landholding in Goromonzi District after the FTLRP are presented in Chapter Four.
3.3.3 Sampling Design

A sample is a segment or a subset of the population that is selected for investigation (Bryman, 2001). In this study, A1 farmers constituted the population units. Given that there were two sources of data for the study, two sampling units were used: the baseline survey covered six districts from six different provinces while a list of A1 farmers in Goromonzi District made up the sampling frame for the case study.

A basic choice in formulating the approach to data sampling exists between probability sampling (simple random sampling, systematic sampling, stratified random sampling and cluster sampling) and non-probability sampling (accidental sampling, quota sampling, purposive sampling, self-selected sampling and incomplete sampling) (Miles and Huberman, 1994; Powell, 1997). Given the nature of the research problem outlined in Chapter One and the predominant quantitative nature of the study, both probability and non-probability sampling techniques were used and are further discussed in this section.

3.3.3.1 Sampling Survey Data

The baseline survey was undertaken between November 2005 and December 2006 and covered six districts in the provinces of Manicaland, Mashonaland East, Mashonaland West, Masvingo, Matabeleland South and Midlands (AIAS, 2009). In this study, the researcher used the raw data of the baseline survey.

3.3.3.2 Sampling Case Data

Sometimes the sample from survey data is too large to incorporate the qualitative component (Miles and Huberman, 1994). According to Morse and Richards (2002) the qualitative sample is
either purposefully selected from the quantitative sample or a separate qualitative sample is drawn (consistent with the principles of qualitative sampling). In this study, a separate purposive sample was selected in line with Miles and Huberman (1994) who argue that qualitative samples tend to be purposive rather than random because the universe is more limited and that much qualitative research examines single case, with some phenomenon embedded in a single social setting. According to Powell (1997), under purposive sampling, people or other units are chosen for a particular purpose implying the use of judgement on the part of the researcher. For the qualitative research component, this was the situation for this study with a focus on Goromonzi District in Mashonaland East Province.

A multi-stage stratified random sampling technique was used due to the expansive nature of the study area. First, Mashonaland East Province was conveniently and purposively selected out of the eight provinces with A1 farms due to its relative proximity to the researcher. In the second stage, Goromonzi District was selected on the basis that it was the only district without resettlement areas prior to the FTLRP (GOZ, 2003), good ecological characteristics and for budgetary and logistical reasons. The researcher acknowledges that although convenience sampling is easy and relatively cheaper, the sample selected may not be representative and could be biased. A situational analysis of Goromonzi District including its socio-economic activities was presented above. In the third stage, two study sites, Bains Hope and Ingwenya Farm were randomly selected from a list of former LSCFs that were partitioned into A1 farms under the FTLRP. Finally, households were selected at the sub-location (village) level. Households were divided into subpopulations called strata according to marital status: 19 women; 11 men (married to women in stratum one) and seven widows, widowers and divorcees. The rationale was that A1 farmers are not a homogenous group and hence a more representative sample could be obtained
through the stratified sampling technique. According to Boslaugh (2007), stratified sampling allows for intentional oversampling which permits greater statistical precision. Simple random sampling was used for the selection of households for the sample from each stratum.

### 3.3.4 Data Collection Procedures and Fieldwork

With a development economics perspective and a realist, deductive and inductive approaches and pragmatic paradigm pervading the research, what methods were appropriate for data collection? The primary research aim of seeking to critically evaluate the distribution of land between men and women in A1 resettlement areas meant that one had to be able to answer the question: “What intra-household and extra-household factors influenced landholding in A1 resettlement areas?” Once an understanding of these factors, their nature and processes were realised, methods needed to be chosen that helped to illuminate the current position of households with respect to the distribution of land rights in A1 resettlement areas. In order to choose the optimum data production methods, a range of possible methods were considered and their suitability to this study is discussed below.

#### 3.3.4.1 Data Collection: Household Survey Data

As mentioned in subsection 3.3.2, the researcher used the raw data of the baseline survey data collected by the AIAS. The national survey data contained considerable breadth and covered key variables required to test the hypotheses of the study using statistical and regression analyses.
3.3.4.2 Data Collection: Case (Self-collected) Data

Data collection lasted for four months, from December 2012 to March 2013 and involved planning, implementation, the actual process of gathering data in the field and analysis. Given that the researcher was actually involved in the fieldwork and talked to A1 farmers (both men and women) and key informants in the case study area, this generated stories about gender relations on land in A1 resettlement areas. Such stories served as good supplements to survey data analysis and more specifically assisted in exemplifying the econometric and statistical results in Chapter Four. Five data collection techniques were used: questionnaire, interviews (structured and semi-structured), focus groups, observation and document analysis. This multi-method approach to data collection was part of an overall approach to improving the quality and validity of case data through triangulation (Bryman, 2001; Easterby-Smith et al., 2008; Miles and Huberman, 1994; Saunders et al., 2009). Of these methods, no single source had complete advantage over others. Instead, the methods were complementary to each other and where possible, they were used in tandem in order to give an in-depth understanding of gender relations on access to and control over land in A1 resettlement areas. The five data collection techniques used to gather case data are explored in detail in the following subsections.

Interviews

Patton (2002) and Saunders et al., (2009) recommend the use of interviews as a primary data gathering technique in a case study. In this thesis, the following interview types were used:

- Structured interviews offered a series of fixed responses using closed questions.
  
  They were easy to conduct as the same questions were asked to all participants.
Semi-structured interviews offered both closed and open questions. This method of interview had the advantage of both structured and unstructured interviews.

Unstructured interviews allowed the researcher to ask open-ended questions and the participants to express their opinions freely without any restrictions on length of responses. The advantage of unstructured interviewing was that rich data could emerge because the interviewer could probe the interviewee more deeply on specific issues (Patton, 2002). The method, however, was time consuming and posed challenges of data classification during data analysis.

A general description of how the interviews were conducted during the fieldwork is presented below.

- Interview briefing: After securing the interview, a brief explanation was given on the purpose and format of the interview as well as the roles of the interviewer and interviewee.

- Interview durations: These varied between structured and semi-structured and unstructured interviews. Each structured and semi-structured interview lasted for about 40 minutes while an unstructured interview took at least an hour.

- Groups interviewed: In this study, two categories of interviews were conducted: one-on-one interviews and focus group discussions.

- Venue of the interviews: One-on-one interviews with A1 farmers were held either at home or in the field while a central place (convenient to the participants and researcher) was selected for the focus groups. Given that some A1 farmers did not reside on their farm holdings but instead lived in Harare or Goromonzi Growth Point where they were involved in off-farm employment or business.
enterprises, interviews were rescheduled in these areas after obtaining the farmers’ telephone numbers and/or residential addresses from their farm workers and/or the farmers’ relatives living on the farms. The key informants (District Administrator, Gender Officer, ZWRCN Information Officer and District Lands Officer) were met in their offices while the headman, headwoman and one farm worker were met at their homes.

- Language: Both English and Shona were used during the interviews although the instrument and interview schedules were in English.
- Handwritten notes: Handwritten notes were used to capture the interview data from the key informants and research participants. The interviews were not recorded because the participants and the key informants were not comfortable with being audio-recorded given the political sensitivity of the FTLRP.
- Interview log sheets: These formed part of the questionnaire and were used to track the interview data. The log sheets indicated parties to the interview, time of the interview and place of the interview.

**Administering the Questionnaire to A1 Farmers**

The purpose of the research instrument was to capture opinions, perceptions and feelings of farmers on gender relations on land in A1 resettlement areas. The questionnaire was designed to allow for both structured assessment and identification and discussion of main themes relevant to the research topic. This made data classification and organisation easier during analysis and interpretation. More specifically, the data were summarised and organised according to these themes: background of A1 farmers; perceptions and experiences with the FTLRP; perceptions
and beliefs on gender relations on land; intra-household asset distribution; intra-household division of labour and decision making; intra-and/or extra-household conflicts on land.

The draft instrument was tested and reviewed by other stakeholders (Ministry of Lands and Rural Resettlement, Ministry of Women Affairs, Gender and Community Development and fellow researchers who included Dr. Timothy Musankuleni Kaputa and Dr. Lighton Dube) in order to improve ease of use and understanding by participants. A pilot or pre-test study was then undertaken with ten A1 farmers in Seke District in Mashonaland East Province. The pre-test study took a day to complete. During the pilot study, the instrument was checked on acceptability, wording, content, clarity and length (Muranda, 2004) in order to ensure that the data collected would be meaningful. No major changes were made to the questionnaire in terms of content and structure.

The research instrument was administered to 37 A1 farmers in the two study sites. During the fieldwork, the questionnaires were randomly distributed in the following proportions: 19 women; 11 men married to the women in the sample and seven widows and widowers. The headman (Ingwenya Farm) and headwoman (Bains Hope) assisted in coming up with a list of respondents in each stratum. Appendix I shows a sample questionnaire used for A1 farmers in Goromonzi District. The advantage of using a questionnaire was that it had to be prepared and checked for both validity and reliability (Williams, 2003) failure of which could have undermined the results of the study.

The fieldwork required complying with the set down procedures, guidelines and protocols when conducting research in a specific organisation or geographical area. The fieldwork commenced
after the researcher was granted permission by the District Administrator of Goromonzi District. Appendix II is a copy of confirmation letter that the researcher is a bona fide candidate for the Doctor of Philosophy in Development Economics at the Zimbabwe Open University and appendix III is a copy of the clearance letter from the District Administrator. In the A1 resettlement areas, the researcher complied with Government protocol and paid courtesy call on the headwoman and headman of Bains Hope and Ingwenya Farm, respectively, before conducting interviews with the A1 farmers. These brief meetings proved very crucial as the headwoman and headman encouraged their subjects to take part in the study. The headwoman and headman also assisted in the identification of participants in the three strata of the sample. In Ingwenya Farm, the researcher also met with the local political leadership of ZANU-PF called the Committee of Seven. The Committee of Seven manage the “security” situation in A1 schemes. The researcher was informed that the Committee of Seven was a gatekeeper that ensured that there was no political infiltration of A1 resettlement areas by the MDC.

Interviews with participants were undertaken face-to-face by the researcher and the research assistant. Face-to-face interviews had the advantage of clarifying unclear questions to the respondent(s) and ensured that all questions were answered by the intended subject(s). The interviewer-administered questionnaire had the added advantage that open-ended questions were used to probe and collect a range of possible responses including nonverbal responses. Face-to-face interviews provided the researcher with the opportunity to visit each A1 farm, observe the physical settings, take photographs and to witness first hand the processes involved. However, interviewer-administered questionnaires have disadvantages of interviewer bias, more expensive because trained interviewer(s) are needed and time-consuming (Williams, 2003).
**Hiring a Research Assistant**

A research assistant was hired to help conduct the interviews with A1 farmers. The research assistant was trained and participated in the pilot study as part of the training. The research assistant was particularly necessary to reach out to both A1 farmers and key informants in Goromonzi District. Given that the research assistant is an Amenities Officer for Goromonzi District, the research benefitted from the good rapport already established with the A1 farmers and other key informants such as, the District Administrator and District Lands Officer.

**Unstructured Interviews**

Unstructured interviews are in-depth interviews which involve open-ended questions (Paton, 2002) and use extensive probing to get the respondents to express detailed beliefs and feelings on a topic (Muranda, 2004). The interviewee is allowed options to take different paths and explore different thoughts or feelings as long as they are within what the interviewer wants to cover (Saunders et al., 2009). Unstructured interviews were designed for use with the key informants.

At the national level, key informant interview was held with a Gender Officer in the Ministry of Women Affairs, Gender and Community Development on the official position on beneficiary selection during the FTLRP. In-depth interview with Information Officer at ZCWRN was meant to give a non-state perspective of the FTLRP and beneficiary selection. At the district level, key informant interviews were held with the District Administrator and District Lands Officer. At the local level, the key informants included the village headwoman (Bains Hope), village headman (Ingwenya Farm), three members of the Committee of Seven (Ingwenya Farm) and one farm worker (Bains Hope). Local level in-depth interviews enriched the study with the details on how
plot beneficiaries were selected and any challenges encountered. Interview schedules for the key informants used in the study are shown in Appendix IV. Any further questions related to specific issues arising from the discussion were added during the interviews.

**Focus Groups**

A focus group is a small group of 6-12 people selected and assembled by researchers to discuss and comment on, from personal experience, the topic that is the subject of the research under the guidance of a moderator (Powell et al., 1996 cited in Gibbs, 1997; Muranda, 2004). Compared to observation, Gibbs (1997) notes that focus groups enable a researcher to gain a larger amount of information in a shorter period of time. In this study, focus groups were used to gather a multiplicity of opinions, beliefs, experiences and attitudes about the distribution of land rights between men and women in A1 resettlement areas; stimulate debate on intra-household asset distribution; resolve conflicting information gathered during one-on-one interviews through the interplay of responses from participants and to test assumptions of the study.

Morgan and Kuerger (1993) cited in Gibbs (1997) argue that focus groups are particularly useful when there are power differences between the participants and decision makers or professionals, when the everyday use of the language and culture of particular groups is of interest and when one wants to explore the degree of consensus on a given topic. Interaction between participants leads to new issues being identified (Williams, 2003). However, focus groups are difficult to assemble, may not be easy to get a representative sample, may discourage certain people from participating (especially those who are not articulate or confident), may discourage some people
from trusting others with sensitive or personal information (Gibbs, 1997) and are expensive to put together (Muranda, 2004).

In this study, focus group participants were grouped by sex: males only and females only because each group experienced land gender relations differently. Separating participants according to sex was intended to encourage free participation as each assembled group shared homogenous characteristics (Morgan, 1988 cited in Gibbs, 1997; Muranda, 2004). A focus group consisting of six women was conducted in Bains Hope while a focus group with five men was conducted in Ingwenya Farm. In Ingwenya Farm, the researcher took the advantage of finding farmers grading and curing their tobacco crop in a communal barn to conduct a focus group discussion. For the Bains Hope focus group, twelve invitations were made to allow for no-shows. The venue for the Bains Hope focus group was the homestead of the headwoman. This was done to circumvent seeking police clearance for organising public gatherings under the Public Order and Security Act [Chapter 11.17] and also not to raise suspicion that the meeting was of a political nature. Under the Public Order and Security Act, individuals and organisations are required to seek police permission to hold public meetings or workshops of more than five people (GOZ, 2002). Although the headwoman was instrumental in mobilising the focus group participants, she was not part of the discussion. This was meant to create a conducive environment for open discussion where participants could express their views freely without fearing “reprisals” from the local leadership. The research assistant was the moderator of the focus group discussion in Bains Hope while the researcher took notes. The participants refused to have the discussion audio recorded. The role of the moderator was to ask questions and encourage and moderate the discussion using a specific guide. Appendix V is a sample invitation letter for focus group participants while appendix VI is a focus group schedule used in this study.
**Observation**

Observation is a valuable data collection technique within a case study setting (Saunders et al., 2009) and complements interviews and focus groups. Given that observations covered events in real time and were contextual, this technique generated insight and better understanding of gender relations on land through ethnographic evidence such as social characteristics and material and spiritual culture of the people. The researcher observed the physical settings and socio-economic livelihood processes taking place on A1 settlements and took photographs of infrastructure including types of houses and roads, livestock, agricultural machinery and technology used.

**Document Analysis**

The collection of documents is another valuable technique used to collect field data in a case study (Saunders et al., 2009). In this study, secondary data was used to formulate the research agenda, develop the conceptual framework and to analyse the results of the study. The researcher obtained various secondary documentation on the FTLRP in the form of reports and publications from the Government of Zimbabwe, donors (such as SIDA, UNDP and World Bank) and NGOs which focus on women and land (such as WLZ and ZWRCN), books and journal articles. The baseline survey on the FTLRP by the AIAS provided the critical raw data which also assisted in the design of the scope of the study. The major strength of documentation is that it is stable and unobtrusive since the data has been there before the study (Miles and Huberman, 1994; Silverman, 2001). However, irretrievability and inaccessibility could be the major challenges especially for classified Government information. Documentation may also suffer reporting bias.
validity of the documents used in this study was carefully reviewed in order to avoid incorrect data from being included in the study.

After presenting the approaches to data collection, the following sub-section provides approaches to data analysis.

3.3.5 Data Analysis Procedures

How do we integrate quantitative and qualitative data in mixed methods research during data analysis and interpretation? The basic concept is that integration of quantitative and qualitative data maximises the strengths and minimises the weaknesses of each type of data (Bryman, 2001; Johnson and Onwuegbuzie, 2004; Muranda, 2004; Morgan, 1998 cited in Sale et al., 2002; Saunders et al., 2009; Tillman et al., 2011). Creswell and Plano-Clark (2007) identify three approaches of integrating quantitative and qualitative data namely, merging, connecting and embedding data.

Merging data involves combining the qualitative data in the form of texts (or images) with quantitative data in the form of numeric information. According to Creswell and Plano-Clark (2007), the integration occurs at three levels: reporting results together in a discussion section of the study such as reporting first the quantitative statistical results followed by qualitative quotes or themes that support or refute the quantitative results; transforming one dataset (for example, counting the occurrence of themes in a qualitative dataset) so that the transformed qualitative results can be compared with the quantitative dataset and using tables or figures that display both the quantitative and qualitative results (data displays). Connecting data involves analysing one
dataset (for example, a quantitative survey) and then using the information to inform the subsequent data collection (for example, interviews and identification of participants) in a qualitative research. Embedding data involves embedding dataset of secondary priority within a larger primary design.

Given that a concurrent design was adopted in this study, the integration of quantitative and qualitative data was done through merging data and comparing the two sets of data and results. Creswell and Plano-Clark (2007) observe that when merging data during a concurrent design, the findings may conflict and there would be need to gather more data or revisit the databases. Other authors such as, Hammersley (2005) cited in Brannen (2005) and Tillman et al., (2011) recommend that the researcher may simply juxtapose the contradictions for others to explore in further research.

Given that the study adopted mixed method design, the type of data analysis integrated both thematic and statistical data. More specifically, the survey data were analysed using statistical and econometric methods while case study data were analysed using thematic identification and description. This allowed comprehension (interpretation and contextualisation) and explanation (prediction and generalisation) of the phenomenon under study (Tillman et al., 2011). The survey and case study data were kept and analysed using Statistical Package for Social Scientists for Windows version 15.
3.3.5.1 Statistical Methods of Analysing Survey Data

How are different groups of data compared? What determines the basis of comparison? There are different methods to compare two different groups of data and to check if the difference is significant or is just a result of inherent randomness in the data. The decision on which statistical method(s) to use depends on the type of data that is, whether the data are continuous or categorical. In this study both categories of data were collected. In the analysis, both the t-test and chi-square tests were used. The t-test was used to analyse the distribution of land between men and women while the chi-square test was used to determine if there was any association between two attributes, sex and landholding.

Econometric Methods of Analysing Survey Data

Regression analysis is one of the cornerstones of econometrics (Verbeek, 2008). There are two types of regression models, namely, simple regression and multiple regression models. A simple or two-variable regression model is a model in which the dependent variable is expressed as a linear function of a single explanatory variable (Gujarati, 1988; Verbeek, 2008). In this study multiple regression models were used to test the hypothesis that the distribution of land is gendered in A1 resettlement areas. A multiple regression model is a model in which the dependent variable depends on two or more explanatory variables (Gujarati, 1988, 1999). The underlying theory specifies what variables are independent (explanatory) and which is the dependent (explained) variable (Greene, 2003). A three-variable multiple regression model with one dependent variable and two explanatory variables is shown in equation 3.1.

\[ Y_i = \beta_1 + \beta_2 X_{1i} + \beta_3 X_{2i} + U_i \]  

3.1
where $Y_i$ is the dependent variable, $\beta_1$ is the intercept, $\beta_2$ and $\beta_3$ are partial slope coefficients, $X_{1i}$ and $X_{2i}$ are independent variables explaining the changes in $Y_i$ and $U_i$ is the disturbance or error term. The disturbance term is random (stochastic) variable that has well-defined probabilistic properties (Gujarati, 1988). The error term represents the influence of variables that are not explicitly included in the model; inherent randomness in human behaviour; errors of measurement and ensures that the regression model is kept simple until proved inadequate (Principle of Occam’s razor) (Gujarati, 1999; Greene, 2003).

There is a monotonic relationship between the dependent variable, $Y_i$ and the explanatory variables $X_{1i}$ and $X_{2i}$. The partial regression coefficient, $\beta_2$, measures the mean value of $Y_i, E(Y_i / X_{1i}, X_{2i})$ per unit change in $X_{1i}$ holding $X_{2i}$ constant. Likewise, $\beta_3$ measures the change in the mean value of $Y_i$ per unit change in $X_{2i}$ holding $X_{1i}$ constant. In words therefore, equation 3.1 gives the conditional mean or expected value of $Y_i$ conditional upon the given or fixed values of the variables $X_{1i}$ and $X_{2i}$. This shows that multiple regression analysis allows us to study the effects of several variables simultaneously and to isolate the effects of one variable while controlling for the influence of other variables.

Generalising the three-variable linear regression models, the k-variable regression model involving the dependent variable $Y$ and k-1 explanatory variables $X_2, X_3, ..., X_k$ may be written as

$$Y_i = \beta_1 + \beta_2 X_{2i} + \beta_3 X_{3i} + \ldots + \beta_k X_{ki} + U_i, \quad i = 1, 2, 3, \ldots, N$$  

3.2
where $\beta_1$ is the intercept, $\beta_2$ to $\beta_k$ are partial slope coefficients, $U_i$ is the stochastic disturbance term and $i$ is the $i^{th}$ observation, $N$ being the size of the population. Equation 3.2 is interpreted in the same manner as 3.1. Both equations 3.1 and 3.2 can be estimated using the ordinary least squares (OLS) method if all the Gauss-Markov assumptions are met (Gujarati, 1988; Verbeek, 2008). The OLS method is the most widely used estimation method in econometrics because OLS estimators, in the class of unbiased linear estimators, have minimum variance, that is, they are best linear unbiased estimators (Gujarati, 1988, 1999).

In this study, the dependent variable is the category of land access denoting the name in which the offer letter was issued (farmdoc): household head, spouse’s name, joint access or others. Such a non-numeric variable is termed a polytomous or multiple response (category) dependent variable (Gujarati, 1988) and OLS estimates though unbiased, are inefficient (Kennedy, 2003). Probability models are used when the dependent variable’s outcomes are limited. In this study the probability model was used because of the need to estimate the probabilities of different categories of access to and control over land in A1 resettlement areas.

**Probability Models**

There are two probability models, namely, logit and probit models (Gujarati, 1988, 1999). All probability models usually come in the logit form due to its comparative mathematical simplicity (Gujarati, 1999; Greene, 2003; Kennedy, 2003) and have been used in a number of disciplines including economics (Greene, 2003). The probit model, on the other hand, involves solving multiple integration related to the multivariate normal distribution and thus is computationally difficult in estimation and rarely used (Gujarati, 1988; Kennedy, 2003). The logit model is a binary choice model which can be used when the dependent variable has two discrete outcomes.
A dependent variable with two outcomes is called a dichotomous dependent variable (Greene, 2003). For example,

\[ L_i = \ln \left[ \frac{P_i}{1 - P_i} \right] = \alpha_i + \alpha_2 X_i + U_i \]

where \( L_i \) is the log of the odds ratio which is linear in \( X \) and parameters (Gujarati, 1988). It is the odds in favour of getting a particular outcome for the dependent variable. \( L_i \) is called the logit and hence the name logit model for models like equation 3.3. \( P_i \) is the probability of getting a particular outcome for the dependent variable and \( (1 - P_i) \) is the probability of not getting it. In this study, \( P_i \) was the probability of getting A1 farm holding and \( (1 - P_i) \) was the probability of not getting it. The slope coefficient \( \alpha_2 \), measures the change in \( L_i \) for a unit change in \( X \). In this study, the slope coefficient tells how the log-odds in favour of owning an A1 farm holding change as one of the explanatory variables changes while holding others constant.

**Multinomial Logit Model**

A multinomial logit model is used to model relationships between a polychotomous or multi-category dependent variable and a set of explanatory variables (Greene, 2003; Gujarati, 1988). The relationship between the dependent variable and independent variables may be linear or non-linear (Verbeek, 2008). A multinomial logit model (MNL) uses maximum likelihood estimation to predict the odd ratio for the dependent variable and requires a large sample (Hosmer and Lemeshow, 2000). The maximum likelihood estimation (MLE) is an iterative fitting process that attempts to cycle through repetitions to find an answer. Unlike the OLS estimation whose objective is to minimise the error sum of squares, the MLE seeks to maximise the log likelihood (Hosmer and Lemeshow, 2000). A number of useful tests for assessing model
adequacy and fit are available for multinomial logistic regression models (ibid). Given that the dependent variable, land holding (denoted by farmdoc) is a polytomous variable, a MNLM was used in this study (Gujarati, 1999; Hosmer and Lemeshow, 2000; Verbeek, 2008).

A MNLM describes the probability of each of the possible outcomes of the dependent variable as a function of explanatory variables (Greene, 2003; Gujarati, 1988, 1999; Verbeek, 2008). The probability of each of the outcomes of the category of land access can be explained by different independent variables (IVs) such as household size, sex of household head, age of household head, marital status, education of household head, education of spouse, size of field cultivated, availability of credit or subsidies, mode of acquisition of the farm holding, farming experience, soil type or quality and availability of irrigation. The dependent variable (farmdoc) took discrete values, 1-4 depending in whose name the farm document was issued: 1=household head; 2=spouse name; 3=joint access and 4=others. This implied that four regression models were constructed. Table 3.6 shows the dependent variable and key determinants of land rights in A1 schemes.
Table 3.6: The dependent variable and key determinants of land rights in A1 schemes

<table>
<thead>
<tr>
<th>Name of Variable</th>
<th>Type and Description of the Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmdoc</td>
<td>Specifies in whose name the offer letter was issued. Categorical variable (non-binary). 1=household head; 2=spouse name; 3=joint registration; 4=other(s)</td>
</tr>
<tr>
<td>Offerle</td>
<td>Specifies whether A1 farmer has offer letter. Dummy variable. 1=Yes; 0=No</td>
</tr>
<tr>
<td>Marstat.</td>
<td>Marital status. Dummy variable. 1=married; 0=unmarried. The unmarried include single, widows, widowers and divorcees.</td>
</tr>
<tr>
<td>Dual-head</td>
<td>This is to distinguish between households headed by couples and households with only one head. 1=dual head; 0=otherwise</td>
</tr>
<tr>
<td>HHHAge</td>
<td>Age of household head. Continuous variable.</td>
</tr>
<tr>
<td>SpouseAge</td>
<td>Age of spouse. Continuous variable.</td>
</tr>
<tr>
<td>SexHHH</td>
<td>Dummy variable. Sex of household head. 1=Female; 0=Male</td>
</tr>
<tr>
<td>WomenHHH</td>
<td>All land held by women. 1=if A1 farm is owned by woman; 0=if otherwise</td>
</tr>
<tr>
<td>MenHHH</td>
<td>All land held by men. 1=if A1 farm is owned by man; 0=if otherwise</td>
</tr>
<tr>
<td>SpouseEdu</td>
<td>Education of spouse measured by the number of years spent at school. Continuous variable.</td>
</tr>
<tr>
<td>HHHEduc.</td>
<td>Education of household head measured by the number of years spent at school. Continuous variable.</td>
</tr>
<tr>
<td>HHHsize</td>
<td>Number of people in the household. Continuous variable.</td>
</tr>
<tr>
<td>HHsizmle</td>
<td>Number of males in the household. Continuous variable</td>
</tr>
<tr>
<td>HHsizfml</td>
<td>Number of females in the household. Continuous variable.</td>
</tr>
<tr>
<td>AraArea</td>
<td>Size of arable land in hectares. Continuous variable.</td>
</tr>
<tr>
<td>Soilqual</td>
<td>Predominant type of soil on the farm holding. 1=red soil; 2=clay; 3=clay-loam; 4=sandy-loam; 5=sandy soils</td>
</tr>
<tr>
<td>Modeacq</td>
<td>Mode of acquisition of A1 farm holding. Categorical variable. 1=formally allocated; 2=occupation; 3=bought it; 4=both formal allocation and occupation</td>
</tr>
<tr>
<td>Merespg</td>
<td>Specifies how the farmer got to know about the FTLRP. Categorical variable. 1=local leadership; 2=political party structures; 3=media source; 4=relative or friend; 5=government office</td>
</tr>
<tr>
<td>Irrig</td>
<td>Availability of irrigation on the farm. Dummy variable. 1=Yes; 0=No</td>
</tr>
<tr>
<td>Credit</td>
<td>Do you sometimes apply for loans or credits from banks? Dummy variable. 1=Yes; 0=No</td>
</tr>
<tr>
<td>Provsd</td>
<td>Dummies for provinces in the survey sample: Provsd1-Mash East; Provsd2-Mash West; Provsd3-Midlands; Provsd4-Mat North; Provsd5-Masvingo; Provsd6-Manicaland</td>
</tr>
<tr>
<td>Wom1-6</td>
<td>Interaction variable between women-HHH and provincial variation dummies. Takes the value of 1 if household is headed by woman in Provsd1 and 0 if otherwise.</td>
</tr>
<tr>
<td>Man1-6</td>
<td>Interaction variable between men-HHH and provincial variation dummies. Takes the value of 1 if household is headed by man in Provsd1 and 0 if otherwise</td>
</tr>
</tbody>
</table>
The selection of IVs which were expected to have influence on the dependent variable, *farmdoc* was based on findings from other studies (Deere and Doss, 2006; Deere and Leon, 2003; Fuentes and Wiig, 2009; Jacobs, 2000; Ncube et al., 1997), economic theory (Gujarati, 1988; Lipsey and Chrystal, 1995) and stated hypotheses of the study. Table 3.6 shows that the dependent variable (*farmdoc*) is influenced not only by variables which can be readily quantified on some defined scale (such as arable area, education, size of household and age) but also by variables which are essentially qualitative in nature (such as marital status, sex, availability of irrigation or credit and mode of acquiring A1 farm holding). Qualitative variables usually indicate the presence or absence of a “quality” or attribute and one method of quantifying such attributes is to construct artificial variables which take on values of 1 or 0; 0 indicating the absence of an attribute and 1 indicating the presence of such attribute (Gujarati, 1988, 1999). Variables which assume 0 and 1 values are called dummy variables or categorical variables (Gujarati, 1988, 1999; Verbeek, 2008). The rationale for the inclusion of interaction variables (*Wom1*-6 and *Man1*-6) is that there may be a combination of interaction effects of two variables on the dependent variable (Hosmer and Lamesshow, 2000). For example, when we predict the dependent variable *farmdoc* based on *HHHsex* and *WomenHHH* there will be two impacts: one is individual impact on the dependent variable and the other is the interaction impact (between *HHHsex* and *WomenHHH*). The combined effect of *HHHsex* and *WomenHHH* on the mean *farmdoc* may not be simply additive but rather multiplicative (Gujarati, 1988). According to Gujarati (1988), omitting a significant interaction variable will lead to a specification bias of the model.

3.3.5.2 Analysis Procedures for Case (Self-collected) Data

Leedy and Ormrod (2001) identified five stages of data analysis in a case study. First, is the organisation of details about the case where facts are arranged in a logical order. This involved
reducing both primary data (for example, responses to structured and semi-structured interviews) and secondary data (from document analysis) through the process of selecting (using the researcher’s own judgement), simplifying (using classification based on the topics in the research instrument) and transforming data (Leedy and Ormrod, 2001). In this study, various issues from the interviews and the secondary data sources were summarised and organised according to the following themes: perceptions and experiences with the FTLRP; perceptions and beliefs on gender relations on land; intra-household asset distribution; intra-household division of labour and decision making; intra-and/or extra-household conflicts on land. This classification was based on the researcher’s judgement in terms of the importance of these issues with respect to the research argument developed in Chapter Two.

The second stage was the categorisation of data where specific categories were identified that helped to classify data into meaningful groups. The third stage was the interpretation of documents, responses to interviews and observations for specific meanings related to the case. The identification of patterns and underlying themes was the fourth stage of data analysis in a case study setting. All the data gathered during the fieldwork were examined for underlying themes and patterns in relation to gender relations on land and were interpreted within the context of A1 resettlement schemes. The fifth stage was the overall synthesis of case data that helped to make conclusions. The process of analysing data from questionnaires involved editing, coding, data entry, actual analysis of data and data interpretation. The data from the questionnaires were then summarised in the form of tables, charts and figures showing farm activity, time budgets and resource profiles for both men and women.
3.3.5.3 Experiences and Challenges of Conducting Fieldwork in A1 Schemes

A number of researchers have written about the challenges of undertaking field research in resettlement areas during and in the aftermath of the FTLRP (Chaumba et al., 2003; LeBas, 2006; Makura-Paradza, 2010; Murisa, 2010; Marongwe, 2008; Sadomba, 2008). In this study, the key challenges encountered during the fieldwork related to the political sensitivity of the FTLRP, authenticity of some secondary data sources, inaccessibility of classified Government documents, missing farmers in the A1 schemes, time and financial constraints and issues concerning the researcher’s bias.

The key issue under investigation in this study was to evaluate the distribution of land between men and women in A1 schemes. The FTLRP in general and beneficiary selection in particular, is politically sensitive to be discussed in public (Marongwe, 2008). Given the political sensitivity of the FTLRP, the respondents, including the key informants, were not comfortable being audio-recorded and hence rejected the use of a recorder. In fact one of the key informants threatened to terminate the interview if a recorder was used. This meant that the researcher had to listen conscientiously and write fast in order to gather as much information as possible during the interviews. The political sensitivity of the FTLRP and entrenched political polarisation in Zimbabwe meant that the researcher had to devise creative methods to collect case data uninterrupted. These strategies did not compromise the researcher’s ethical conduct.

The researcher recruited a research assistant working at Goromonzi District in the Ministry of Public Works. The researcher avoided recruiting employees in the Ministry of Lands, Land Reform and Rural Resettlement or Ministry of Agriculture, Mechanisation and Irrigation
Development to avoid possible “disturbances” to the data as these employees often interacted with A1 farmers and participated in different government and/or district events that also involved the same farmers. This was likely to prompt them to discuss issues not addressed by the research. The hiring of a locally based research assistant was an effective and useful strategy for easy access to A1 farmers and key informants in Goromonzi District.

The other challenge related to the authenticity of some of the secondary data on the FTLRP. That is, given the high political stakes associated with the FTLRP, the Government deliberately inflated the number of resettled farmers to gain political mileage (Marongwe, 2008). For example, at one time the Government claimed to have resettled over 300,000 households (ibid) when in actual fact 134,452 households were resettled (GOZ, 2003). In this study, the researcher depended on the Presidential Land Review Committee Report (2003) as it published credible statistics on the beneficiaries of the FTLRP. In order to address the methodological weaknesses in secondary data, the researcher cross-referenced the data sources to test accuracy and consistency. The comparison of different sources of data resulted in the removal of any inconsistencies in the data collected. In this study, data from the press and statements by political leaders were not used as authentic data.

Related to above, the other challenge pertained to secondary data from the government that could not be accessed because of the Official Secrets Act which prohibits the release of information to the public. It is the researcher’s considered view that minutes of meetings at all levels of government from the central government to the district that discussed beneficiary selection and allocation would have been important in shading more light on the pertinent processes of the
FTLRP. Marongwe (2008) overcame this challenge by hiring internally-based research assistants who secretly photocopied Government documents. This route was not pursued in this study, because of the legal and ethical issues that arise. In this study, classified Government information on the FTLRP was not used and the researcher relied on published material.

To address the challenge of negotiating entry into A1 schemes, the researcher applied for and was granted permission by the District Administrator of Goromonzi District to undertake research in wards 17 and 20. Despite the political sensitivity of the FTLRP and tense political contestations in contemporary Zimbabwe, the researcher was actually surprised that there were no specific challenges in accessing the study sites and talking to the A1 farmers. On entering the A1 scheme, the researcher always observed government protocol by making a courtesy call on the headman or headwoman. The headman or headwoman then informed the other levels of local governance and local ZANU-PF leadership. A majority of the A1 farmers were quite delighted to be research participants and fully co-operated throughout the interviews. This dispelled my first perception of A1 resettlement areas as “no-go areas” for strangers and “foreigners” particularly people from Harare which is regarded as a “stronghold” for the MDC. This was presumably because the study covered issues that affected them directly. A common question from the respondents was on the benefits of the study to them as farmers to which the researcher explained that the research sought to influence Government policy on land distribution between men and women so as to ensure poverty reduction and sustainable development in Zimbabwe. In Ingwenya Farm, some of the A1 farmers were initially suspicious of the research team’s motives. However, as the time progressed, the suspicion dissipated and sometimes the researchers would spend time socialising with the A1 farmers.
Research is undertaken under the constraints of time and budget which obviously presented their own challenges especially during data collection. The political sensitivity of the FTLRP also required that data collection had to be flexible. The fieldwork was sometimes suspended to avoid unnecessary clashes with the local political activities and processes. In particular, the research team would not visit the study site whenever there was a ZANU-PF meeting or funeral. This inevitably cost the research time and resources. The engagement of a locally-based research assistant was particularly important as she fed the researcher with updates on any upcoming political events in the study sites.

The other challenge was the unavailability of some plot holders in the A1 schemes. Some A1 plot holders were engaged in off-farm employment in Harare, Marondera and Goromonzi Growth Point and their farms were manned by “farm managers” in the form of relatives or hired labour. The problem of missing A1 farmers was more prevalent in Bains Hope probably because of the scheme’s close proximity to Harare and Goromonzi Growth Point. The survey data showed that 23.6 percent of the farmers did not live on their farm holdings (AIAS, 2006). The process of administering the questionnaire became costly and time consuming as the researcher had to revisit some of the farms during the weekends as a way to pin down such farmers.

As mentioned in Chapter One and Chapter Three, ethical considerations were relevant to this study. The act of responding to the questionnaire did not cause any harm to the participants. The rights of respondents were not violated in any way as participation was voluntary. The entry of the research team into A1 schemes was peacefully negotiated and no unorthodox ways were used to gather data from the subjects. However, collecting qualitative data on the A1 farmers’ beliefs,
opinions and lived experiences about the FTLRP induced researcher bias which had to be dealt with.

The FTLRP evoked strong emotions among those who supported it and those less keen on the programme. The researcher was inevitably caught up in a web of value-laden and “contentious” type of land reform programme. The FTLRP was followed by the contraction of the economy by 15 percent in 2003; destroyed property rights on land (Richardson, 2004); destroyed market confidence and stability (Chaumba et al., 2003; Zikhali, 2008); replaced experienced farmers with less experienced ones who are geared towards subsistence agricultural production (Zikhali, 2008) and precipitated unemployment knock-on effects (Chaumba et al., 2003). For those who opposed the FTLRP and incidentally bore the brunt of the economic meltdown, it became impossible to see anything positive about the programme. On the other hand, for those who supported the FTLRP as an empowerment drive by the Government, the economic crisis in the aftermath of the programme was caused by Zimbabwe’s detractors who did not want indigenous black Zimbabweans to redress an historical injustice. In this study, the researcher’s bias was contained through the use of both quantitative and qualitative data as well as self reflection. Quantitative data was used so as to present the facts as they are (Marongwe, 2008).

The benefits of this study are immense. The study would contribute to the discourse on the FTLRP and therefore enhance the nation’s knowledge about the programme. The key issue investigated in this thesis of the distribution of land between men and women in A1 schemes and its impact on gender relations is a pertinent issue regarding an important natural resource, land. The distribution of land impacts on gender equality and social justice and has implications on the
country’s sustainable development. This provided a rationale for the nation to know how an important resource is shared between men and women and how such a distribution affects gender relations, household welfare, women empowerment and smallholder agricultural production and rural development.

3.3.6 Linking Objectives, Research Questions and Method of Analysis

After presenting data analysis procedures for the survey and case study above, Table 3.7 shows the relationship between research objectives, research questions and method(s) of analysis. The specification grid helped to ensure that appropriate data analysis techniques were used to address the research problem under study.

Table 3.7: Relationship between research objectives, research questions and method of analysis

<table>
<thead>
<tr>
<th>Objectives and research questions to be addressed</th>
<th>Type(s) of analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land characterisation and discrimination of women in landholding</td>
<td>Objective 1 Question 1</td>
</tr>
<tr>
<td>Determinants of security of women’s land rights</td>
<td>Objective 2 Question 2</td>
</tr>
<tr>
<td>Land use patterns: farm size, soil quality and farm infrastructure</td>
<td>Objective 3 Question 3</td>
</tr>
<tr>
<td>Household economic portfolio model on acquisition and utilisation of land</td>
<td>Objective 4 Question 4</td>
</tr>
</tbody>
</table>

Source: Author, 2013

The next sub-section presents validity and reliability in mixed methods research and their relevance to this study.

3.3.7 Validity and Reliability in Mixed Methods Research

Traditionally, reliability and validity were used to assess the quality and integrity of research in natural sciences but some authors such as Johnson (1997) cited in Cameron (2011) have tried to adapt these quantitative measures to qualitative research. Guba and Lincoln (1994) have
advocated for separate criteria to judge qualitative research. Hammersley (1992) suggests that the criteria should come from both quantitative and qualitative paradigms.

In doing MMR, how far do we work with these separate criteria? Bryman (2001) suggests that the criteria used would depend on the dominance of the qualitative method or quantitative method or the type of data analysis used in the research. Johnson and Onwuegbuzie (2004) call it legitimation. It involves assessing the trustworthiness of both qualitative and quantitative data used in MMR and subsequent interpretations. Sale and Brazil (2004) cited in Cameron (2011) propose a separate quality criteria: truth value; applicability; consistency and neutrality. Tillman et al., (2011) recommend combined strength of validity from the qualitative strand and reliability from the quantitative strand. The rationale is that the weaknesses in one test or method will be counter-balanced by the strength of the other method in the process increasing claims of validity (Brannen, 2005).

For this study, the concept of reliability applies because it is replicable by other researchers in other times and spaces in Zimbabwe and beyond including Latin America and Asia. The findings of the research are expected to be internally consistent due to a number of factors: the use of triangulation; if words of participants correspond with observational findings and information from document analysis including research findings from comparable studies Jacobs (2000) in Zimbabwe; Fuentes and Wiig (2009) in Peru; Deere et al., (2005) cited in Deere and Doss (2006) and Deere and Leon (2003) for various countries in Latin America; Agarwal (2003) in India and UNECA (2003) for various countries in Sub-Saharan Africa. On generalisability, the research’s findings can be used to infer to the underlying population since the survey data deployed for the
statistical tests and regression model covered six provinces (out of eight) in Zimbabwe. This indicates that the survey data came from a sampling frame which is not only representative of a broader national population but the sub-national regions as well.

The household survey data was collected by a reputable research institute in Southern Africa and according to Boslaugh (2007) it is likely that the data collection process was informed by expertise and professionalism. Given that the AIAS has undertaken similar quantitative socio-economic studies for the European Union, World Bank, African Development Bank and SADC, one would expect the survey data to be of good quality. The data may be of higher quality because they involved a larger sample that is more representative of the target population (greater external validity) (Boslaugh, 2007). The sample size for each sampled district averaged 15 percent of the total district which was considered statistically representative of the sampled area (AIAS, 2009). According to Boslaugh (2007), the more representative the sample, the more confident we can be in generalising from the sample to the population.

An inspection of the survey data showed that some variables had missing observations. These omissions could be due to errors during the initial data collection or from data entry into the SPSS spreadsheets. Although there were some gaps in the survey data, the data set contained considerable breadth, was appropriate for the study’s unit of analysis (the A1 farming household) and covered the key variables required for the statistical tests and econometric modelling on access to and control over land in A1 resettlement areas. The researcher familiarised himself with the original study and data by examining the scope of the study, key research questions,
questionnaire and interview protocols and talking to some people who participated in the baseline survey as enumerators.

Creswell (2009) and Guba and Lincoln (1994) identify four criteria of assessing accuracy and trustworthiness of qualitative research: credibility (assessed through prolonged engagement); transferability (assessed through purposive sampling and thick description); dependability and confirmability (achieved through triangulation). These four criteria were satisfied in the qualitative component of the study. Validity of the case data was checked through prolonged engagement during the fieldwork; repeating processes a number of times; consistency checks by examining the literature and comparing one’s findings with others; employing triangulation (using several data collection methods); consistent note taking, immersion in the context, exposure to multiple situations and referring to other researchers. Prolonged engagement allowed the researcher to build a strong rapport with A1 farmers which facilitated a greater degree of obtaining credible information about the FTLRP and its impact on gender relations on land. As mentioned in subsection 3.3.3, five data collection techniques were used in order to triangulate the evidence and improve the accuracy and validity of the findings of the case study.

3.4 Ethical Issues in Research

Ethical considerations should be borne in mind whenever research is conducted with participants (Bryman, 2001). In this thesis, consideration was given to four major ethical issues. First, the benefit of this research is that its outcome will be used in evidence to mainstream gender in future asset distribution programmes such as land distribution and privatisation. The research identified the key determinants of land rights and highlighted the gender asset gap in A1
resettlement areas and the importance of individual land rights. Second, the research did not cause any harm to the participants and considered them as worthy partners. Third, the research acknowledged diversity, personal belief and values (Ewles and Simnett, 1999) and provided all A1 farmers within the study area with equal opportunity to participate. Informed consent was the fourth issue and it covered other ethical issues such as anonymity and confidentiality. Informed consent provided the potential participant with vital information about the research which helped their decision about whether to participate. The information contained in an informed consent form included benefits of the research, potential risks, purpose and procedure of the research and ensured that participation in the research was voluntary and required written consent before participation (Cohen et al., 2011).

The informed consent for this thesis consisted of an introductory letter outlining the purpose of the research, the researcher’s background, voluntary nature of participation, the right to withdraw from the research, anonymity of the participant, confidentiality of the participant’s opinions and what was expected of the participant. Appendix VII shows a sample informed consent form. The participants were assured of their anonymity and confidentiality of the data collected during and after the study. In this thesis, no names were used and instead non-identifying codes or fictitious names were used to refer to participants, where necessary, thus making it impossible for any reader to identify the interviewees.

3.5 Chapter Summary

The chapter described various options available for the execution of the research and the logic for the selection of specific research paradigm, approach, strategy and methods applied in this study. The overall methodology was one based on pragmatic philosophy. It combined empirical
and non-empirical approaches; was both subjective and objective; was both deductive and inductive and used both quantitative and qualitative (with quantitative predominating). The study employed the survey as the primary research strategy with case study as supplemental and used a combination of data sampling, collection and analysis methods.

Chapter Four presents data presentation, analyses and interpretation of the empirical survey dataset and case data gathered during the fieldwork in Goromonzi District.
CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

The previous chapter provided the research methodology and design for the study. This chapter presents the results and analysis of statistical tests and regression analysis performed on survey data and the findings of the case study conducted in Goromonzi District in Mashonaland East Province. Section 4.1 provides results of chi-square tests of independence, t-test and econometric estimation on survey data collected by AIAS. Section 4.2 presents findings from the case study. The framework developed in Chapter Two is used to present the findings of the case study on household portfolio model on land acquisition and utilisation in A1 schemes. The case study data is analysed using descriptions and interpretation of themes and summarised in the form of tables, graphs and charts showing farm activity, time budgets and resource profiles for both men and women. Section 4.3 presents analyses and synthesis of the results of the baseline survey and the case study. The proposed household economic portfolio model on land acquisition and utilisation in A1 schemes is presented in section 4.4. Section 4.5 provides the summary to the chapter.

4.1 Presentation and Analysis of Survey Data

This section presents the results of statistical tests and regression analysis on survey data. The analysis involved four steps: stating the hypotheses to be tested; formulating an analysis plan; analysing the sample data and interpreting the results. A description of the survey data is presented in sub-section 4.1.1. A chi-squared test of independence or otherwise of sex and
category of landholding is provided in sub-section 4.1.2. Sub-section 4.1.3 provides the econometric framework and estimation strategy of the intra-household and extra-household model on determinants of land rights in A1 resettlement areas. Land use patterns focusing on the magnitude of gender asset gap in A1 schemes are presented in subsection 4.1.4.

4.1.1 Description of Survey Data

As mentioned in Chapter Three, the household data were collected during the AIAS (2005-2006) national survey of the outcomes of the FTLRP. The key research questions addressed by the baseline survey included land distribution and allocation, the (in)security of land tenure, the efficacy of land use and production, natural resource use, farm labour and social differentiation and agrarian restructuring (AIAS, 2009). The data were collected from 2,089 individual farming households in A1 and A2 schemes (AIAS, 2009).

The survey was extensive as it tried to capture the different aspects and effects of the FTLRP. Geographically, the survey covered six districts from six different provinces. Zimbabwe is subdivided into ten administrative provinces, namely Bulawayo, Harare, Manicaland, Mashonaland Central, Mashonaland East, Mashonaland West, Masvingo, Matabeleland North, Matabeleland South and Midlands. Two of the provinces, Bulawayo and Harare, are metropolitan areas and did not have large scale commercial farms. These two provinces and the provinces of Mashonaland Central and Matabeleland North were not part of the survey.

The sample size for each sampled district averaged 15 percent of the total population of the district which is considered statistically representative of the sampled area (AIAS, 2009). Of
special importance to this study, the data were collected from individual farming households and contained key intra-household and extra-household variables that influenced land rights in A1 schemes. These variables included marital status, size of the household, level of education of the farm holder and spouse, sex of the farm holder, size of arable area, soil type and/or quality, method of farm acquisition and training in agriculture.

An inspection of the original baseline survey data showed that there were variations in the composition of the different farming households interviewed by AIAS and some observations were missing. The missing observations were due to errors during the initial data collection or from data entry into the SPSS spreadsheets. The 433 households from A2 schemes were removed from the sample survey because the focus of the study was the distribution of land between men and women in A1 schemes. The remaining sample survey contained 1,656 A1 villagised and A1 self-contained households. Table 4.1 shows the distribution of farming households in the sample survey by province after removing A2 households.

**Table 4.1 Distribution of farming households by province in the sample survey**

<table>
<thead>
<tr>
<th>Province of study</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mash West</td>
<td>308</td>
<td>14.7</td>
<td>14.7</td>
<td>14.7</td>
</tr>
<tr>
<td>Mash East</td>
<td>692</td>
<td>33.1</td>
<td>33.1</td>
<td>47.9</td>
</tr>
<tr>
<td>Manicaland</td>
<td>334</td>
<td>16.0</td>
<td>16.0</td>
<td>63.9</td>
</tr>
<tr>
<td>Masvingo</td>
<td>235</td>
<td>11.2</td>
<td>11.2</td>
<td>75.1</td>
</tr>
<tr>
<td>Midlands</td>
<td>375</td>
<td>18.0</td>
<td>18.0</td>
<td>93.1</td>
</tr>
<tr>
<td>Mat South</td>
<td>145</td>
<td>6.9</td>
<td>6.9</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2089</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** AIAS Baseline Survey, 2006

Although the analysis was based on a survey sample of 1,656 households, the number of observations for the statistical tests and regression estimation varied. The sample size varied
across tests because different variables with missing observations were used. The second reason was attributed to sub-sample analysis. For example, for the chi-square test, households with couples (\textit{dualhead}=1 and \textit{SexHHH}=0) were used. This excluded single-headed households made up of widows, widowers, divorcees and unmarried men and women. This meant that the samples for male and female farmers also varied across tests.

4.1.2 Statistical Analysis: Discrimination against Women in Land Distribution?

The first research question asks for the effects of the fast track land reform programme on women’s land rights. The research question was used to test if women were discriminated against in the distribution of land in A1 resettlement areas. Hypothesis one (H1) was used to answer the first research question. The first hypothesis was operationalised using a chi-squared test for independence or otherwise between sex and land holding.

\textbf{H1:} Women’s access to and control over land were neglected during the implementation of the fast track land reform programme.

A chi-squared test of independence was used to assess whether or not there is any association (relationship) between two categorical variables (Landau and Everitt, 2004). The chi-squared test for independence was used to determine if there was any association between two attributes, availability of offer letter and category of landholding. The rationale for using the chi-square test for independence was that the variables under study (availability of offer letter and category of landholding) are categorical; simple random sampling was used to obtain the survey data (AIAS, 2009) and the number of observations expected in each cell of the contingency table for the sampled data is more than five (Landau and Everitt, 2004).
To test the independence or otherwise between sex and landholding, variables *farmdoc* and *Offerle* as described in Table 3.6 were used. The variable *farmdoc* is from the baseline survey and asks in whose name the offer letter was issued. It takes values: 1=offer letter issued in the name of the household head (usually male); 2=offer letter is in the name of the spouse; 3=joint registration of both spouses’ names on the offer letter and 4=other(s) where the offer letter is in the name of a child or relative. The “other” category also includes category where the sex of the A1 farm holder is not known. The variable *Offerle* is a dummy variable and specifies whether the A1 farmer has an offer letter: Offerle=1, A1 farmer has an offer letter and Offerle=0, A1 farmer has no offer letter. A1 farmers without offer letters include squatters and those who forcibly occupied and self-appropriated the farm holding. The test included households with couples (*dualhead*=1) and male-headed households (*SexHHH*=0) since the researcher suspected married women to be deprived of their land rights under the FTLRP. On the other hand, women in single-headed households were expected to have access to land in their own right.

Under the chi-square test, what does the null hypothesis say? The null hypothesis to be tested is that there is no association between category of landholding and availability of offer letter. The categorical variable *Offerle* has two rows, *r* and categorical variable (*farmdoc*) has four columns, *c*. The null hypothesis states that knowing the level of variable availability of offer letter does not help us to predict the level of variable category of landholding. In other words, the variables are independent. The alternative hypothesis states that knowing the level of variable availability of offer letter can help us to predict the level of category of landholding. The null hypothesis would be rejected if the p-value (to be explained below) is less than the level of significance. Support for the alternative hypothesis would suggest that the two variables are related, but the
relationship is not necessarily causal in the sense that one variable “causes” the other (Gujarati, 1988, 1999; Verbeek, 2008).

The survey data were used to conduct a chi-square test for independence which tests the null hypothesis of no association between the variables, Offerle and farmdoc. In other words, the null hypothesis states that one variable does not vary according to the other. The results of the chi-squared test for independence between category of land holding and availability of offer letter are shown in Table 4.2.

**Table 4.2** Chi-square test of the relationship between category of landholding and availability of offer letter

<table>
<thead>
<tr>
<th>Do you have an offer letter?</th>
<th>Under whose name is the farm holding registered?</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Household head</td>
<td>Spouse</td>
<td>Joint registration</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Yes (=1)</td>
<td>1233</td>
<td>116</td>
<td>5</td>
<td>3</td>
<td>1357</td>
</tr>
<tr>
<td></td>
<td>90.9</td>
<td>8.5</td>
<td>0.2</td>
<td>0.4</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>81.1</td>
<td>93.5</td>
<td>62.5</td>
<td>62.5</td>
<td>81.9</td>
</tr>
<tr>
<td>No (=0)</td>
<td>288</td>
<td>8</td>
<td>3</td>
<td>0</td>
<td>299</td>
</tr>
<tr>
<td></td>
<td>96.3</td>
<td>2.7</td>
<td>0.0</td>
<td>1.0</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>18.9</td>
<td>6.5</td>
<td>37.5</td>
<td>0</td>
<td>18.1</td>
</tr>
<tr>
<td>Total</td>
<td>1521</td>
<td>124</td>
<td>8</td>
<td>3</td>
<td>1656</td>
</tr>
<tr>
<td></td>
<td>91.8</td>
<td>7.5</td>
<td>0.5</td>
<td>0.2</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Pearson Chi-square=14.785 \( \chi^2 \) \( df=3 \) \( p=0.002 \)

The results of the chi-square test show the degrees of freedom, expected count or frequencies, the test statistic, \( \chi^2 \) and the p-value associated with the test statistic. The degrees of freedom are the number of values that are free to vary after restriction has been placed on the data (Gujarati, 1999). For the chi-square test, the degrees of freedom \( (df) \) is given by:
\[ df = (r - 1)(c - 1) \]  

Equation 4.1

where \( r \) is the number of rows for variable \textit{Offerle} and \( c \) is the number of columns for variable \textit{farmdoc}. The test-statistic is a chi-square random variable, \( \chi^2 \) defined by the following formula:

\[
\chi^2 = \sum \sum \frac{(O_{rc} - E_{rc})^2}{E_{rc}}
\]

Equation 4.2

where \( O_{rc} \) is the observed frequency count at level \( r \) of variable \textit{Offerle} and level \( c \) of variable \textit{farmdoc} and \( E_{rc} \) is the expected frequency count at level \( r \) of variable \textit{Offerle} and level \( c \) of variable \textit{farmdoc}. The summation sign, \( \sum \), is written twice in equation 4.2 to indicate that we sum over the whole contingency table (\( r \) rows and \( c \) columns). The p-value is the probability that the deviation of the observed from the expected is due to chance alone (no other factor acting) (Landau and Everitt, 2004).

The results of chi-square tests in Table 4.2 show a statistically significant association between variables, \textit{Offerle} and \textit{farmdoc}. The chi-square test statistic is 14.785 with 3 degrees of freedom and p-value of 0.002. Since the p-value is less than the level of significance (p<0.05), the researcher rejected the null hypothesis and concluded that some factor(s) was/were involved for the deviation to be so great. Rejecting the null hypothesis meant that there was evidence that the relative distribution of land rights was statistically the same between the landholding constellations: offer letter in the name of the household head (who is usually male); offer letter in the name of the spouse; offer letter in the names of both spouses (joint registration) and other(s) category where the offer letter is in the name of a child or any other relative across the variable \textit{Offerle}. The variable \textit{Offerle} specifies if the household in the four landholding constellations has
been issued with an offer letter. The test does not say anything about causality between variables \textit{farmdoc} and \textit{Offerle}. However, given that there is dependence between the two variables, it can be inferred that the issuance of offer letters to land beneficiaries only served to perpetuate the status quo. According to the survey data, the majority of household heads are male while women constitute seven percent.

But how do we account for the regional differences in the allocation of land between men and women in A1 resettlement areas shown in Table 1.3? It is important to consider regional variations in order to capture the different socio-cultural and ethnic factors in the different provinces. A chi-square test to take into account the regional differences was performed. Upon stratification by province, insignificant associations were revealed between variables, \textit{farmdoc} and \textit{Offerle} for the five provinces of Masvingo, Matabeleland South, Mashonaland East, Mashonaland West and Midlands as the p-values exceeded 0.05. The chi-square test for Manicaland Province could not be performed because all farms in the survey sample are registered under the household head whereas the tests required dualhead=1. The computed contingency tables varied across provinces because of the unavailability of data in some cells. For example, a 2x2 contingency table was computed for Matabeleland South Province while a 3x3 contingency table was computed for Mashonaland West Province. The results of the chi-squared tests are shown in the appendix, in Tables B1-5.

From the above tests, the first hypothesis is rejected because there is no evidence to suggest that women were discriminated against under the FTLRP. To the contrary, it seems women’s land rights actually increased both as individuals and through joint registration of offer letters. This issue will be explained further in section 4.3.
4.1.3 Econometric Model: Determinants of Women’s Land Rights in A1 Schemes

The second research question asks the major intra-household and extra-household factors that determine the security of women’s land rights in A1 schemes. The research question was operationalised using multinominal logistic regression on survey data. The following two hypotheses were used to test the security of women’s land rights in A1 resettlement areas.

**H2:** Married women obtain rights to land through joint-registration of offer letters.

**H3:** Higher levels of education increase women’s propensity to obtain land rights.

Hypotheses 2 and 3 were tested using multinominal logistic regression. The dependent variable is the non-numeric and multi-category variable, `farmdoc` as specified in Table 3.6. The variable `farmdoc` specifies in whose name the offer letter was issued: 1=household head; 2=spouse’s name; 3=joint registration; 4=other(s). In this test, `farmdoc` was applied to observations with offer letters only, that is when the dummy variable, `Offerle`=1. The sub-sample for the test will include households headed by couples (`dualhead`=1). The single-headed households are excluded from the MNLM because the researcher expected women in such categories to obtain land in their own right. As mentioned in Chapter Two, the researcher expected marital status to have positive effect on married women’s access to and control over land through joint registration of offer letters. The level of education is important because it equips women with the necessary legal literacy on how to claim and defend their rights to land (Deere and Leon, 2001). Higher levels of education for women were expected to have a positive impact on the probabilities of obtaining rights to land either alone or through joint registration of offer letters with their
husbands. Formal education has a bearing on the kind of information accessed and on the nature of planning at both household and community levels (AIAS, 2009).

Marital status and level of education were not the only determinants of women’s rights to land. Following the contribution of Deere and Doss (2006), Fuentes and Wiig (2009) and Gujarati (1988, 1999), the researcher included other explanatory variables to increase the model’s statistical validity. Hosmer and Lemeshow (2000) warn that adding more and more variables to the model makes it inefficient as over-fitting may occur. In fact, a model can never completely capture reality (Gujarati, 1999) and should therefore be parsimonious to include relevant key variables suggested by theory (Gujarati, 1999; Hosmer and Lemeshow, 2000). The other IVs that determine the security of women’s rights to land include household head’s sex and age; size of the household; availability of irrigation and credit; geographical region and method used to acquire the plot (Deere and Doss, 2006; Fuentes and Wiig, 2009). The number of males and females in the household and the form of media used to make people aware of the FTLRP were also expected to influence the distribution of land rights between men and women.

**Specifying the Econometric Model**

Having identified the dependent variable and IVs, the next task was to specify the econometric model and justify the selection and inclusion of the explanatory variables into the model. As mentioned in Chapter Three, the selection of IVs which were expected to have influence on the dependent variable was based on findings from other studies (Deere and Doss, 2006; Deere and Leon, 2003; Deere et al., 2004 cited in Fuentes and Wiig, 2009), economic theory (Gujarati,
1988; Lipsey and Chrystal, 1995) and stated conjecture of the study. The econometric model used in this study is:

\[
Pr(Y_i = j) = f (HHH\text{Age},\text{SizeHH},\text{Marstat},\text{SpouseAge},\text{SpouseEdu},\text{AraArea},\text{Soilqual},\text{Modeacq}, \\
\text{Prov sd},\text{Irrig},\text{Credit},\text{Merespg},\text{Woml} - 6,\text{Manl} - 6,)
\]

for \( j=1, 2, 3,4 \)  

**Equation 4.3**

If parameters are included, then the econometric model to be estimated becomes:

\[
Pr(Y_i = j) = \beta_0 + \beta_1\text{HHH\text{Age}} + \beta_2\text{SizeHH} + \beta_3\text{Marstat} + \beta_4\text{SpouseAge} + \beta_5\text{SpouseEdu} + \\
\beta_6\text{AraArea} + \beta_7\text{Soilqual} + \beta_8\text{Modeacq} + \beta_9\text{Prov sd} + \beta_{10}\text{Irrig} + \beta_{11}\text{Credit} + \\
\beta_{12}\text{Merespg} + \beta_{13}\text{Woml} - 6 + \beta_{14}\text{Manl} - 6 + u_i
\]

**Equation 4.3a**

where \( \beta_0 \) is the intercept term; \( \beta_1 \) to \( \beta_{14} \) are partial slope coefficients and \( u_i \) is the error term. The error term or stochastic error term is used to keep the model simple and captures variables that have been omitted from the model, inherent randomness in human behaviour and errors of measurement (Gujarati, 1999). \( Y_i \) is a polytomous dependent variable, \( \text{farmdoc} \) and has four nominal outcomes (\( j=1, 2, 3, 4 \)): 1=offer letter in the name of the household head; 2=offer letter in spouse’s name; 3=joint registration, both spouses’ names appear on the offer letter; 4=other, offer letter in other person’s name, for example child or relative. Equations 4.3 and 4.3a are the probability of observing any of the four possible outcomes of variable \( \text{farmdoc} \) given the selected IVs. The key IVs and their expected signs are shown in Table 4.3. These IVs were defined in Chapter Three. The direction of the effect of the IVs on the dependent variable is shown by means of “–” or “+”. A question mark (?) is put where the category is not specified for sex and where the direction of the effect of the IV on the dependent variable is unclear or is not known.
Table 4.3 Key independent variables and their expected signs

<table>
<thead>
<tr>
<th>Name of Variable</th>
<th>Type of variable</th>
<th>Regression Models (MNLM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmdoc (j=1,2,3,4)</td>
<td>Ca</td>
<td>1</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marstat</td>
<td>D</td>
<td>?</td>
</tr>
<tr>
<td>Dualhead</td>
<td>D</td>
<td>?</td>
</tr>
<tr>
<td>HHHAge</td>
<td>Co</td>
<td>?</td>
</tr>
<tr>
<td>SpouseAge</td>
<td>Co</td>
<td>+</td>
</tr>
<tr>
<td>SexHHH</td>
<td>D</td>
<td>?</td>
</tr>
<tr>
<td>WomenHHH</td>
<td>D</td>
<td>?</td>
</tr>
<tr>
<td>MenHHH</td>
<td>D</td>
<td>?</td>
</tr>
<tr>
<td>SpouseEdu</td>
<td>Co</td>
<td>?</td>
</tr>
<tr>
<td>HHHEdu</td>
<td>Co</td>
<td>?</td>
</tr>
<tr>
<td>SizeHH</td>
<td>Co</td>
<td>?</td>
</tr>
<tr>
<td>HHSizelmle</td>
<td>Co</td>
<td>Dropped</td>
</tr>
<tr>
<td>HHSizflml</td>
<td>Co</td>
<td>Dropped</td>
</tr>
<tr>
<td>AraArea</td>
<td>Co</td>
<td>+</td>
</tr>
<tr>
<td>Soilqual</td>
<td>Ca</td>
<td>+</td>
</tr>
<tr>
<td>Modeacq</td>
<td>Ca</td>
<td>?</td>
</tr>
<tr>
<td>Merespg</td>
<td>Ca</td>
<td>?</td>
</tr>
<tr>
<td>Irrig</td>
<td>D</td>
<td>dropped</td>
</tr>
<tr>
<td>Credit</td>
<td>D</td>
<td>dropped</td>
</tr>
<tr>
<td>Provsd</td>
<td>D</td>
<td>?</td>
</tr>
<tr>
<td>Wom1-6</td>
<td>Iva</td>
<td>dropped</td>
</tr>
<tr>
<td>Man1-6</td>
<td>Iva</td>
<td>dropped</td>
</tr>
</tbody>
</table>

Ca=categorical variable; Co=continuous variable; D=dummy variable; HHH=household head; Iva=interaction variable

*Marstat* variable was used to control for the marital status of the couple and was expected to influence married women’s access to land through joint registration of the offer letters. As mentioned above, education is important in shaping women’s land rights. Higher levels of education for women were expected to have a positive impact on the probabilities of obtaining rights to land either alone or through joint registration of offer letters with their husbands. Education equips women with the necessary legal literacy which they can use to claim and defend their land rights (Deere et al., 2004 cited in Fuentes and Wiig, 2009). In Latin America, women’s land ownership is positively associated with the level of education (Deere et al., 2004;
Katz and Chamorro, 2002 cited in Fuentes and Wiig, 2009). In this model, education was split into two: education level of household head (HHHEdu) and education level of spouse (SpouseEdu).

Independent variables, size of arable land (AraArea), availability of irrigation (Irrig) and predominant type of soil on the farm holding (Soilqual) helped to answer the third research question on land use patterns in relation to plot size, soil type and/or quality and farm infrastructure. Variable AraArea was used to test if women cultivated smaller plots than men. It was used to control for land under cultivation across the four land holding constellations. Water and rights to irrigation are interlinked with rights to land (Deere and Leon, 1998, Lynch, 1997 cited in Fuentes and Wiig, 2009). Irrigation boosts agricultural productivity if it is fully utilised. The availability of irrigation was expected to influence the allocation of land between men and women where men are likely to take plots with irrigation. Variable irrigation, (Irrig) was included in the model to control for A1 plots with irrigation for men and women. Variable predominant type of soil on the farm holding, (Soilqual) was used to test the effect of the type and/or quality of soil on landholding in A1 schemes. Another variable which influences land use patterns is availability of credit (Credit). Variable Credit is a dummy variable from the questionnaire used in Goromonzi District and asked if A1 farmers sometimes applied for loans or credits from banks. It tested the distribution of credits or loans between men and women farmers. Dummies for provinces in the survey sample (Provsd) captured the differentials in landholding between men and women across the provinces. The following provincial dummies were used: Provsd1=Mashonaland East; Provsd2=Mashonaland West; Provsd3=Midlands; Provsd4=Matabeleland North; Provsd5=Masvingo and Provsd6=Manicaland. The method used
to acquire the farm \((\text{Modeacq})\) has influence on women’s land rights. The variable, \(\text{Modeacq}\) is categorical variable (non-binary) and has four outcomes: 1=formally allocated; 2=occupation and self-appropriation; 3=purchase; 4=both formal and occupation. It was used to control for the different methods of getting A1 farm holding. The variable, \(\text{Modeacq}\) only differed between the different forms of acquisition. The method used to acquire the farm holding also determined in whose name the offer letter was issued. The key informants revealed that some married women, after being allocated plots in their own right requested the District Administrator to replace their names on the offer letter with those of their husbands. The fieldwork in Goromonzi District revealed that an increasing number of women inherited land from their husbands. This was corroborated by the District Lands Officer who explained that in the event of the death of husband, the wife automatically assumed ownership of the A1 farm holding.

The variable, \(\text{Merespg}\) sought to establish how the A1 farmers got to know about the FTLRP. This helped to test the role of social capital or assets in land acquisition during the FTLRP. Variable \(\text{Merespg}\) is categorical (non-binary): 1=local leadership; 2=political party structures; 3=media source; 4=relative or friend; 5=government office. Lastly, two interaction variables, \(\text{Wom1-6}\) and \(\text{Man1-6}\) were included to capture the interaction effect of two qualitative variables of \(\text{SexHHH}\) and \(\text{WomenHHH}\) on the mean \(\text{farmdoc}\).

**Estimating the Parameters of the Econometric Model**

Given the survey data set as presented in Table 4.1, how do we estimate the regression coefficients of equation 4.3a? As mentioned in Chapter Three, the multinomial logistic regression was used to model the relationship between the non-numeric and multi-category
dependent variable, \textit{farmdoc} and selected IVs in Table 4.3. SPSS for Windows version 15 was used to estimate the regression parameters ($\beta_0$ to $\beta_{14}$) in equation 4.3a. In SPSS, multinomial logistic regression is found under: \textbf{Analyse/Regression/Multinomial Logistic}. The polytomous dependent variable, \textit{farmdoc} ($j=1, 2, 3, 4$) was entered into the dependent variable box; numeric and continuous IVs ($\text{HHHAge, SpouseAge, SpouseEdu, SizeHH, AraArea}$) were entered as covariates and dummy or categorical variables ($\text{Marstat, Soilqual, Modeacq, Meresp, Provsd}$) were entered as factors. There are three stepwise methods: enter method (all variables are included, whether significant or insignificant); backward method (insignificant variables are dropped from the list) and forward method (drop insignificant variables and move forward) (Hosmer and Lemeshow, 2000). The enter method was used in this study.

\textbf{Challenges of Econometric Estimation using Survey Data}

There were some challenges associated with using regression analysis on survey data. First, the survey data contained clusters and there was a potential for heteroscedasticity (Gujarati, 1988). In the survey data, both A1 villagised and A1 self-contained models were sampled together while different types of households namely, female-headed, male-headed, child-headed and dual-headed households were in the same sample. Heteroscedasticity occurs when the variance of the disturbance term is not constant from observation to observation (Greene, 2003; Gujarati, 1988, 1999). Although heteroscedasticity does not destroy the unbiasedness and consistency properties of OLS estimators, these estimators will not be efficient (Greene, 2003; Gujarati, 1988, 1999). It is not easy to eliminate heteroscedasticity in SPSS. Given that multinomial logistic regression does not impose requirements for normality, linearity and homogeneity of variance for the IVs, it
is a preferred method (to discriminant analysis) when the data does not satisfy these assumptions (Hosmer and Lemeshow, 2000).

Second, logistic regression requires that the explanatory variables should be independent of each other (no multicollinearity) in the model. The presence of multicollinearity among explanatory variables inflates the standard errors of the regression coefficients (Gujarati, 1988, 1999). This renders some IVs insignificant leading to null findings. In this study the problem of multicollinearity was resolved by dropping IVs with high standard errors. Dropping variable(s) leads to a specification bias (Gujarati, 1988). Third, as mentioned in Chapter Three, the MLE method used to compute logistic regression is an iterative fitting process that makes a series of repetitions to find an answer and will produce implausible results if it breaks down (Hosmer and Lemeshow, 2000). Some of the possible sources of implausible results include multicollinearity, categories of predictors having no cases or zero cells and complete separation whereby the two groups are perfectly separated by the scores on one or more IVs (ibid). In this study, some of the standard errors for the parameter estimates are more than 2 showing that there are still some numerical problems with the data set. These could be due to some of categories of IVs that have missing observations.

The fourth challenge concerns methodology of testing hypothesis derived from the property rights framework (Feder et al., 1998). Variables such as quality of land cultivated may present problems since they defer among smallholder farmers depending on the different tenure conditions existing across households. Some of the correlated attributes include different cultural traditions and cognitive dispositions as well as differences in the ability to manipulate
bureaucratic institutions (ibid). These systematic differences may introduce selectivity biases in any attempt to isolate the independent effects of landholding in A1 resettlement areas. An econometric model should control for variables such as topography, time in residence, time in marriage as well as socio-economic background of the landholders because they determine the type of registration of the A1 farm holding.

**Reporting Empirical Results and Discussion**

Figure 4.1 shows the distribution of land holding categories depending in whose name the offer letter was issued: 1=household head; 2=spouse name; 3=joint access or registration and 4=others. These statistics allow us to make univariate comparisons across the four land holding constellations. About 0.5 percent of the households indicated that they had joint registration of offer letters; 0.2 percent had offer letters in the name of someone else for example, son, mother or any other relative; 7.5 percent had offer letters in the name of the spouse and 91.8 percent had offer letters in the name of the household head. About 23.4 percent of the household heads were female showing a heavily skewed distribution of land between men and women in A1 schemes.

![Figure 4.1 Distribution of landholding categories in A1 schemes](image)
The important intra-household and extra-household determinants of women’s land rights were analysed using the multinomial logistic regression and the results are presented in Table 4.4. The multinomial logistic regression model is arduous and difficult to interpret due to a large number of possible comparisons it considers (Freese and Long, 2006 cited in Fuentes and Wiig, 2009). The model in Table 4.4 has four possible outcomes on the dependent variable, farmdoc and there are 16 explanatory variables. In this study, not all the possible outcome combinations were considered as this required more time than is available for the scope of the thesis. Instead, the researcher followed the advice of Fuentes and Wiig (2009) and Jariko, Junejo, Rahpoto and Shah (2011) to analyse IVs which are significant and relevant to the research questions and hypotheses. According to Jariko et al., (2011), the results of a multinomial logistic model can be analysed using the likelihood ratio tests to evaluate the overall model of goodness of fit instead of analysing the individual effects of IVs on the dependent variable. This was the approach adopted in this study.

**Table 4.4 Multinomial logistic regression estimates for determinants of women’s land rights**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Model Fitting Criteria</th>
<th>Likelihood Ratio Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>171.232</td>
<td>.000 0 .</td>
</tr>
<tr>
<td>HHAge</td>
<td>171.885</td>
<td>.653 3 .884</td>
</tr>
<tr>
<td>SpouseAge</td>
<td>172.574</td>
<td>1.342 3 .719</td>
</tr>
<tr>
<td>AraArea</td>
<td>165.343</td>
<td>11.036 3 .002</td>
</tr>
<tr>
<td>HHsize</td>
<td>171.598</td>
<td>.366 3 .947</td>
</tr>
<tr>
<td>Marstat</td>
<td>171.494</td>
<td>.261 9 1.000</td>
</tr>
<tr>
<td>Soilqual</td>
<td>183.368</td>
<td>12.136 12 .435</td>
</tr>
<tr>
<td>Modeacq</td>
<td>177.202</td>
<td>5.969 9 .743</td>
</tr>
<tr>
<td>Provld</td>
<td>374.535</td>
<td>203.303 12 .000</td>
</tr>
<tr>
<td>SpouseEdu</td>
<td>189.739</td>
<td>18.507 33 .980</td>
</tr>
<tr>
<td>Meresprg</td>
<td>880.490</td>
<td>709.258 21 .000</td>
</tr>
</tbody>
</table>
The log likelihood value suggests that the model has adequately explained the determinants of women’s land rights in A1 schemes. The independent variables, *AraArea, Provzd, and Meresprg* have significantly affected the likelihood of determining the category of land holding. These factors are statistically significant at p<0.05. Interestingly, intra-household explanatory variables, *Marstat, SpouseAge, HHHAge, SpouseEdu* and *HHsize* are not indicating any statistical significance. This is not what the researcher anticipated. The researcher had expected marital status and level of education to influence women’s propensity for land rights.

All the results of the multinomial logistic regression on survey data are shown in appendix B. Table B6 shows the results of the four multinomial logistic regression estimation using the category “other” as base. The “other” category was chosen as the reference because it was not specified by sex. In Table B6, a one unit increase in the variable *AraArea* is associated with a 0.21 decrease in the relative odds of having land holding category “household head” versus “other” category. A one unit increase in the variable *Provzd6* is associated with a 0.70 decrease in the relative odds of having land holding category “household head” versus “other” category. Lastly, a one unit increase in the variable *Meresprg* is associated with a 0.382 increase in the relative odds of having land holding category “household head” versus “other” category. Regression coefficients in a multinomial logistic model represent the change in log relative risk (log odds) per unit change in the predictor. The relative risk ratio for a one-unit increase in the variable *AraArea* is 0.813 (exp (-0.21)) for obtaining offer letter in household head versus “other” category. Based on these results, hypotheses, H2 and H3 could not be accepted. This meant that other factors besides intra-household factors (marital status and level of education) had influence on women’s land rights in A1 schemes.
Checking for Model Adequacy

The results in Table 4.4 were checked for model adequacy and fit. The model is statistically valid with a likelihood ratio chi-square equal to 427.247 with \( p<0.001 \). The log likelihood ratio shows that the model as a whole fits significantly better than a model with no predictors. This suggests that the model has adequately explained the determinants of security of women’s land rights in A1 schemes. This is confirmed by a “higher” pseudo R-square using McFadden’s \( R^2 \) of 0.714. Although the model is statistically valid, more robust results can be obtained if the data set is expanded and the design on data collection improved. The higher standard errors show that the data still contained some numerical problems which could not be resolved. The high standard errors affected the efficiency of the coefficient estimates. The possible source of such numerical problems could be some categories of predictors having no cases or zero cells.

Other Determinants of Security of Women’s Land Rights

This section presents IVs which could not be used in the model although they could be significant. Explanatory variables, \textit{Irrig} and \textit{Credit} were dropped because of the non-availability of data. Irrigation variable is important because it shows gender differentials (if any) with respect to access to and use of irrigation. Besides measuring the quality of land, variable \textit{Irrig} shows if men and women have the same water rights in the resettlement areas. In Latin America, more men’s plots have irrigation than women’s plots and men have more access to credit than women (Deere and Leon, 2001, 2003; Fuentes and Wiig, 2009). The fieldwork revealed that A1 farmers did not use irrigation in their fields. Instead, small water pumps (less than 5 horse power) were used to water nutrition gardens. The available irrigation infrastructure was vandalised and was lying idle because A1 farmers could not afford the cost of rehabilitation and electricity bills. The
variable *Credit* was expected to show if the allocation of loans was gendered and how this affected landholding in resettlement schemes. However, lending to A1 farmers was minimal because the offer letter was non-collaterised on its own. The offer letter could only be ceded with the bank together with title deeds of immovable property. A majority of the A1 farmers did not have immovable property such as houses in towns. During the fieldwork it was found that none of the farmers received institutional credit. Instead, some farmers depended on input dealers and informal money lenders. For example, tobacco farmers received inputs from agro-businesses under contract farming where they were given inputs upfront on the premise that they would sell their tobacco through the supplier.

### 4.1.4 Land Use Patterns in A1 Schemes

The third research question asks if women have the same land rights as men in A1 resettlement areas. The research question tries to examine the nature of land use patterns between men and women in terms of farm size and soil type (or quality) and the distribution of agricultural infrastructure. A t-test and chi-squared test for independence were used to operationalise the third research question. The research question was answered through two hypotheses that tested whether women cultivated smaller arable plots than men and whether women’s plots had worse soils than men’s.

**Measuring Gender-Land Gap in A1 Schemes**

**H4:** Women tend to have smaller arable plots than men.

Hypothesis 4 seeks to determine the magnitude of the gender-asset gap in access to and control over land in A1 resettlement areas using the mean size of arable area cultivated by men and
women. The null hypothesis that the mean sizes of arable area cultivated by men and women are equal was tested using the t-test. The independent t-test was used to compare the mean arable area for women to the mean arable area for men. The variable $WomenHHH$ which describes all households headed by women was used. The variable $WomenHHH$ is a dummy variable and assumes the value of 1 for land owned by women and value of 0 if otherwise. The group statistics for the two sub-samples are shown in Table 4.5.

**Table 4.5** Group statistics for mean size arable land in hectares

<table>
<thead>
<tr>
<th>Sex of farm holder</th>
<th>N</th>
<th>Mean, ha</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1238</td>
<td>8.100</td>
<td>8.4092</td>
<td>.2390</td>
</tr>
<tr>
<td>Female</td>
<td>308</td>
<td>8.390</td>
<td>18.3432</td>
<td>1.0452</td>
</tr>
<tr>
<td>Total</td>
<td>1546</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean arable area for men is 8.1 hectares while the mean arable area for women is 8.39 hectares. This shows that female beneficiaries of land in A1 schemes have slightly larger arable area than male beneficiaries. But, is the mean difference significant? This question was answered by conducting a t-test.

Table 4.6 shows the results of the independent t-test between the mean arable area for men and women. The results show that the difference in the mean sizes between men’s and women’s arable plots is not significantly different with a p-value of 0.682. Since the p-value is greater than the level of significance ($p>0.05$), the null hypothesis of equal mean arable area for men and women could not be rejected. By not rejecting the null hypothesis, the results showed that no gender asset gap existed in terms of the average arable area cultivated by men and women.
Table 4.6 Independent t-test on mean sizes of arable land in hectares

<table>
<thead>
<tr>
<th>Equal Var. ass.</th>
<th>Levene’s Test for Equality Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal Var. ass.</td>
<td>1.173</td>
<td>0.279</td>
</tr>
<tr>
<td>Equal Var. not ass.</td>
<td>-0.271</td>
<td>339.713</td>
</tr>
</tbody>
</table>

Testing Gender Differentials with respect to Soil Type and/or Quality

H5: Women tend to have land rights to farm holdings with worse soil quality than men.

Chi-square test for independence was used to test the null hypothesis that there is no association between soil type (or quality) and the allocation of A1 farms to men and women. As in the previous hypothesis, variable WomenHHH was used. Soil characteristics were described by the predominant type of soil on the farm holding. The Soilqual variable has five categories: 1=red soil; 2=clay; 3=clay-loam; 4=sandy-loam; 5=sandy soils. The assumption here is that red soil is excellent quality; clay is very good quality; clay-loam is good quality; sandy-loam is average quality and sandy soil is poor quality. Table 4.7 shows the results of the chi-square test on gender differentials with respect to the predominant type of soil on the farm holding.
Table 4.7 Chi-square test on gender differentials with respect to the predominant type of soil on the farm holding.

<table>
<thead>
<tr>
<th>Sex of farm holder</th>
<th>Predominant soil type on the farm holding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Clay</td>
</tr>
<tr>
<td>Male (=0)</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>5.9</td>
</tr>
<tr>
<td></td>
<td>81.1</td>
</tr>
<tr>
<td>Female (=1)</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>18.9</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>5.8</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Pearson Chi-square = 2.050  df=4  p=0.727

The chi-square test statistic is 2.050 with 4 degrees of freedom and p-value of 0.727. Since the p-value is greater than the level of significance (p>0.05), this means that the null hypothesis cannot be rejected. The results show that there is no significant association between soil type and allocation of plots to men and women. A clear pattern showing that women’s plots are of poor quality could not be discerned from the results and thus hypothesis 5 could not be sustained.

4.2 Presentation of Findings from the Case Study

As explained in Chapter Three, the case study was used as complementary evidence to the findings and analysis of the survey data. The primary purpose of the case study was to give an in-depth insight into the processes of the FTLRP and understand the lived experiences of A1 farmers. The case study was designed to understand the attitudes and perceptions of A1 farmers as regards the distribution of land rights between men and women.
Land occupations and the creation of a new agrarian structure in Goromonzi District are presented in subsection 4.2.1. Subsection 4.2.2 presents gender composition of land beneficiaries in A1 schemes. Results from simple observations in the case study area are provided in subsection 4.2.3. A description of one resettlement scheme visited is provided in subsection 4.2.4. The findings of the case study are summarised and presented in subsection 4.2.5.

4.2.1 Land Occupations and the Creation of a New Agrarian Structure in Goromonzi District

Goromonzi District’s privileged status of not having resettlement schemes was first threatened in 1998 when 20 LSCFs were invaded by peasants from Chikwakwa communal areas (Sadomba, 2008). The villagers were evicted from the occupied farms by the police. Like in all other districts in Zimbabwe, widespread land occupations resumed in Goromonzi District in February 2000 after the rejection of the Draft Constitution in a referendum. Marongwe (2008) reports that by March 2000, about 16 LSCFs had been occupied and the number kept on increasing as the land occupations intensified. As mentioned in Chapter One, the Government announced the official launch of the FTLRP in July 2000. The declaration was meant to formalise and allow the government to regularise the haphazard farm occupations and settlement. This was done through an enactment of a battery of legislation. For example, the Government enacted the Rural Land Occupiers (Protection against Eviction) Act (2001) which “forced’ white commercial farmers to either abandon their land or to co-exist with the land occupiers (Madhuku, 2004; Marongwe, 2008; Masiwa and Chipungu, 2004). Of the 257 LSCFs in Goromonzi District, 243 were gazetted for resettlement (GOZ, 2003). Out of these, 76 LSCFs were delisted for various reasons including being indigenous-owned or dairy farms or farms protected under bilateral investment
promotion and protection agreements. However, on the ground even conservancies, dairy farms and farms protected under bilateral investment promotion and protection agreements were not spared from compulsory acquisition under the FTLRP.

The FTLRP changed land tenure systems from private land holdings to state land and a change in ownership patterns from white commercial farmers to indigenous blacks. Two models of settlement were introduced under the FTLRP: A1 and A2 models (GOZ, 2003). The A1 model has two variants, namely, A1 villagised model and A1 self-contained variant. The land tenure in A1 village model is akin to communal areas consisting of designated cultivation area for each household and a common grazing area. In A1 self-contained units, farmers settle in self-contained plots (or farms) that can be used for crop cultivation and livestock-rearing. Model A2 was aimed at creating small, medium and large scale black indigenous commercial farmers (GOZ, 2003) and to de-racialise the commercial agricultural subsector (UNDP, 2002).

The land redistribution programme significantly changed land rights, access rights and their administration. According to Government policy, the land tenure system under A1 self-contained units and A2 farms offered each family a 99-year lease with the option to purchase (GOZ, 2001). In addition, the policy explicitly stated that the land leases and title deeds for married couples should be in both spouses’ names (ibid). With regard to A1 villagised model, the Rural District Council is required to prepare a land use plan for each village and to issue a settlement permit to the head of the household. Section 24(4) of the Communal Lands Act (1982) allows each settlement permit to bear the names of both spouses (GOZ, 2001). In addition, unmarried women, divorcees and widows who are heads of households can have permits in their names as can child-headed households. Both A1
and A2 schemes are untitled and farmers have offer letters as evidence and a guarantee of security for their access to land (UNDP, 2002).

The FTLRP drastically reduced the land within the large-scale commercial sector from 58 percent to one percent; expanded the medium-scale and small scale commercial farming (14 percent); created peri-urban farming (nine percent); expanded small scale farming in communal areas (47 percent) and created A1 model (29 percent) (Marongwe, 2008). This means that the land area covered by LSCFs is 2,663 hectares and in the majority of cases the size of each commercial farm was drastically reduced. In Chikomba, Goromonzi and Seke Districts more land was allocated to the A2 model due to the proximity of these districts to urban centres (GOZ, 2003).

4.2.2 Gender Composition of Land Beneficiaries in A1 Schemes

The FTLRP did not only lead to a new agrarian structure in the form of A1 and A2 models but also created a new regime of gender relations on land. In particular, women in different categories of marital status (married, widowed, divorced and single) were allocated land in their own right. The Government of Zimbabwe introduced a permit system for A1 farms and leasehold tenure for A2 farms in 2006. This was after effective efforts by women lobbyists such as WLZ (AIAS, 2009; Chari, 1999). The permit and lease are registered in the names of both spouses (in the case of married couples). In the event of permit disposal, the husband or wife is required to seek written consent of the other party before the disposal can be legally recognised (AIAS, 2009). This clearly shows that land rights in resettlement areas are qualitatively different from those bestowed to peasants in the communal areas. In the communal areas patriarchy still predominates and land is allocated to the father or eldest male in the household (Makura-
This is aptly captured by Moyo (1995b) who states that in communal areas cropping land is allocated to men by District Councils which are advised by male-dominated village development committees and traditional leaders. Women have secondary land rights obtained through their relationship with male family members (Cheater, 1986; Wach and Reeves, 2000; Walker, 2002; FAO, 2010b) and they risk losing entitlements in case of divorce, widowhood or their husbands’ migration (FAO, 2010b; Ncube et al. 1997; Peters and Peters, 1998). Women’s inheritance rights over land are also limited as property devolves along the male line (FAO, 2010c).

4.2.3 Results of Simple Observations in Bains Hope and Ingwenya Farm

Observation tours were undertaken in the two study sites. Simple direct observation was used to compare and/or complement data collected through the questionnaire and other sources. This data collection tool was instrumental in understanding gender and power dynamics, division of labour and asset distribution within A1 households. Observations allowed the research team to witness first hand the socio-economic livelihood initiatives such as the number of livestock and types of crops grown as well as observe the physical infrastructure and acquired household and productive assets. The researchers engaged the A1 farmers in discussions as they related to the FTLRP and their own farming experiences.

The research team observed two types of households: household beneficiaries of the FTLRP and farm worker households. The farm workers were either employed in the new farms and the remaining LSCFs or unemployed but still resided in the farm compounds. The researcher was informed that all the farm workers were not allocated land under the FTLRP because some of them were anti-land reform. During land occupations, some farm workers forged alliances with
white commercial farmers in defence of the LSCFs against the land occupiers. However, in some cases farm workers were mobilised by war veterans to join the land occupation movement with other peasants from the communal areas (Sadomba, 2008). In Chegutu, Kwekwe and Kadoma, ZCDT (2003) reported that 64.4 percent of the farm workers did not access land under the FTLRP. In Chipinge (Manicaland Province) and Mangwe (Matabeleland South Province), 17.7 percent of the beneficiaries came from the large scale commercial farming sector indicating an inclusion of the former farm labour in the FTLRP (AIAS, 2009). In Bains Hope a farm worker recalled that the District Administrator informed all the farm workers that they were left out of the FTLRP because they were supposed to work for the A1 farmers and thereby orientate them to commercial agriculture. The trend to marginalise farm workers has been noticed in resettlement programmes in Namibia and South Africa (Marongwe, 2008). A majority of the farm workers were hired on A1 farms as casual labourers. The casual labourers were usually paid in kind in the form of maize. A key informant among the farm workers revealed that sometimes some A1 farmers sublet pieces of land to farm workers in return for labour. According to the baseline survey data, about 63.2 percent of the A1 farmers used casual labour. In Bains Hope, the research team observed that some A1 households lived in the farm compound together with farm workers for “security” reasons against infiltration by the MDC.

A transect-walk through Ingwenya Farm showed that irrigation infrastructure was lying idle because the A1 farmers could not afford the cost of rehabilitation and electricity bills. Some of the irrigation infrastructure had been vandalised. The tobacco barn left behind by the former white commercial farmer was being fully utilised. The tobacco barn had become a common pool resource used by dozens of smallholder farmers. Instead of using coal to cure their tobacco, the A1 farmers used firewood with disastrous consequences on woodlot depletion. In both study
sites, the researcher observed how agricultural work was shared between men and women. In Ingwenya Farm the research team observed farmers harvesting, grading, curing and packaging tobacco. The team observed farm infrastructure (dams and irrigation); farm buildings (tobacco barns and warehouses); water collection points; roads; types and quality of crops; livestock and productive assets such as tractors, ox ploughs and water pumps. In Bains Hope, the borehole in the farm compound broke down in 2001 and the A1 farmers were failing to repair it. Photographs of physical infrastructure, livestock and productive assets are shown in the appendix, A2-7. A summary of the issues observed in the two study sites is provided in Box 4.1.

### Box 4.1 Checklist of issues observed in Bains Hope and Ingwenya Farm

<table>
<thead>
<tr>
<th>Types of households:</th>
<th>Two types of households were observed: household beneficiaries of the FTLRP and farm worker households. The farm workers were either employed in the new farms and remaining LSCFs or unemployed but still resided in the farm compounds.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 Settlements:</td>
<td>The researcher observed well-planned settlement systems with bigger houses. A majority of the houses had roof types of zinc, asbestos and improved thatch. The FTLRP was preceded by haphazard land occupations and settlement. The settlements were characterised by poorly built pole and dagga huts.</td>
</tr>
<tr>
<td>Size of A1 farms:</td>
<td>The farm holdings in the two schemes are A1 village model. The researcher toured the farms and saw the proportion of the farm under cultivation during the 2012/2013 agricultural season. The arable area allocated to each household varied between five and nine hectares and there was a common grazing area.</td>
</tr>
<tr>
<td>Land use patterns:</td>
<td>The researcher observed the emerging land use patterns on A1 farms regarding the type and quality of crops and livestock rearing. Maize was the major crop grown. Some farmers ventured into commercial crops such as tobacco, soya beans and potatoes.</td>
</tr>
<tr>
<td>Division of labour:</td>
<td>The researcher observed farming activities and division of labour between men and women. The division of labour extended to hired labour though some female labourers performed tasks previously meant for males.</td>
</tr>
<tr>
<td>Farm infrastructure:</td>
<td>Prior to 2000, most farms in Goromonzi had farm infrastructure including dams, irrigation, green houses and farm buildings (tobacco barns and warehouses). The researcher observed that tobacco barns had become common pool resources being used by dozens of A1 farmers. The irrigation infrastructure had been vandalised and was lying idle.</td>
</tr>
<tr>
<td>Productive assets:</td>
<td>The researcher observed that most A1 farmers had acquired productive assets (tractors, lorries, ox ploughs, scotch carts and ox-drawn cultivators) and livestock (cattle, goats, pigs and poultry).</td>
</tr>
</tbody>
</table>

**Source:** Author, 2013
4.2.4 A Description of A1 Resettlement Scheme

A detailed description of Bains Hope is presented here in order to allow a deeper understanding of the context of A1 farmers and streamline discussion in the findings and analysis sections. The description includes information about the historical background of the farm, processes of occupation, designation and allocation to A1 farmers. The information came from interviews with A1 farmers, former farm workers and District Lands Officer as well as published literature.

The Case of Bains Hope Resettlement Scheme in Goromonzi District

Bains Hope is 45 kilometres east of Harare and about 2.3 kilometres south-west of Goromonzi Growth Point. The farm was formerly owned by William Hughes, who had inherited it from his father. Bains Hope farm is a subdivision of Middleton Farm. The other part of Middleton is now an A2 farm owned by a black indigenous Zimbabwean. The predominant soil types are deep sandy soils which are suitable for tobacco production. The vegetation on the farm largely consists of miombo woodlands. Prior to February 2000, the major agricultural activities on the farm included livestock rearing (cattle and horses) and dairy farming.

In February 2000, an estimated 80 land hungry people occupied Bains Hope farm. The mobilisation of the occupiers was spearheaded by four war veterans, one male and three females. The occupiers came from Harare, Goromonzi communal areas, other districts in Mashonaland East Province and other far afield provinces such as Mashonaland Central and Manicaland. The reasons cited for occupying the farm included: bad blood between the farm owner and the surrounding communities; the need to reclaim ancestral land and redistribute it equitably;
shortage of productive arable land in the communal areas and inability to secure residential lodgings in Harare.

The farmer was not given notice in advance of the imminent occupation of his farm. The occupation was “spontaneous”. The occupiers just moved into the farm and started to set up temporary structures using tents, plastic, canvas, poles and grass. The occupiers included men, women and children. The occupiers relied on their own food supplies which were replenished by family members left at home. However, sometimes the farm owner was asked to supply the farm occupiers with food which included mealie meal, sugar and salt. Those left home were mostly women, children and the elderly. Water was sourced from a borehole in the farm compound.

The relationship between the farm owner and the occupiers was acrimonious as the former refused to share his farm with the occupiers. The headwoman recalled that the land occupiers did not interfere with the agricultural production on the farm. The four war veterans led the team that negotiated with the farmer. The negotiations centred on how to partition the farm between the white farmer and the land occupiers. One “war veteran”, Ivhu Kuvanhu (not his real name) recalled how he was almost shot down by the farmer as he tried to disarm him during one of the numerous meetings they held with the white farmer. The negotiations broke down after the white farmer refused to give up part of his farm. The farm was subsequently designated by the government in the same year and allocated to A1 farmers. Mr. Hughes was allowed to remove his belongings including livestock (cattle and horses) and household and productive assets.
Bains Hope had 57 A1 farmers with arable plots averaging six hectares. Out of these, 33 were women. There were 20 married women who were allocated plots in their own right. The high number of women (57.9 percent) could be attributed to the gender composition of the war veterans who spearheaded the occupation of Bains Hope and the urban influence of Harare. The fact that the village head was female clearly demonstrated that the issue of gender equality was deep-rooted in this particular A1 scheme. The land use patterns had changed significantly from animal husbandry to crop production. The major crops cultivated included maize, tobacco, potatoes, sugar beans, ground nuts and sesame seeds. Maize was the predominant crop. During the 2012/13 agricultural season only one farmer planted tobacco.

4.2.5 Summary of the Findings from the Case Study

The data were summarised and organised according to these themes: background of A1 farmers; perceptions and experiences with the FTLRP; perceptions and beliefs on gender relations on land; intra-household asset distribution; intra-household division of labour and decision making and intra-and/or extra-household conflicts on land. The answers to the questions asked revealed how gender relations on land were organised and what roles and responsibilities were assigned to each member of the household. These findings were mapped onto the household model in order to identify factors that influenced land rights in A1 resettlement areas.

Examples of A1 Farmers in the Study Sites

The following examples in Box 4.2 help to understand who the A1 farmers are and where they came from.
**Box 4.2 Examples of A1 farmers**

<table>
<thead>
<tr>
<th>Name</th>
<th>Background</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheila</td>
<td>Widow with three children. Originally came from Epworth in Harare.</td>
<td>She rented one tiny room and was a street vegetable vendor. She was allocated a plot in Bains Hope in 2001. She has built a four-roomed house and has three herds of cattle. She grows maize, sugar beans and groundnuts.</td>
</tr>
<tr>
<td>Mai Tizai</td>
<td>Widow with six children. Separated with her husband in 1998.</td>
<td>She was allocated a plot in Ingwenya farm in 2001. Her husband reunited with her towards the end of 2000. She built a bigger house after the death of her husband. She is a maize farmer.</td>
</tr>
<tr>
<td>Mai Sarai</td>
<td>Originally came from Rusike communal areas in Goromonzi District.</td>
<td>Was mobilised to participate in farm occupations by a friend in ZANU-PF Women’s League. Her husband married another woman and she was allocated land in Ingwenya farm. She is a maize farmer.</td>
</tr>
<tr>
<td>Tadzai</td>
<td>Came from Guruve District in Mashonaland Central Province.</td>
<td>Was allocated a plot in Bains Hope in 2000. He participated in the occupation of Bains Hope farm in February 2000 because he needed land for himself and his three children. The farm holding is in his name.</td>
</tr>
</tbody>
</table>

**Source:** Author, 2013

The following illustrations, tables, charts and figures show important highlights that are used mostly in the next section for the analysis. Following the recommendations of various authors (Basar-Bener, 2000; Bryman, 2001; Deere and Leon, 2001, 2003; Fuentes and Wiig, 2009), the researcher used the results from the case study to complement findings and analysis of the predominant quantitative baseline survey.
Background of A1 Farmers

Question: Please tell me your age (in years).

Figure 4.2 Age of A1 farm holders

Source: Author, 2013

Question: What is your highest educational qualification to date?

Figure 4.3 Highest educational qualifications for A1 farmers

Source: Author, 2013

Other* Includes all grades below grade seven
Question: What is your highest agricultural training to date?

![Highest agricultural training for A1 farmers](image1)

**Figure 4.4** Highest agricultural training for A1 farmers

**Source:** Author, 2013

Other* Refers to ZJC and O level Agriculture

**Question:** What is your agricultural experience (in years)?

![Agricultural experience of A1 farmers (in years)](image2)

**Figure 4.5** Agricultural experience of A1 farmers (in years)

**Source:** Author, 2013
Perceptions and experiences of A1 farmers with the fast track land reform programme

Question: How did you become aware of the fast track land reform programme?

![Bar chart showing how A1 farmers became aware of the FTLRP](image)

**Figure 4.6** How A1 farmers became aware of the FTLRP  
**Source:** Author, 2013

Question: What was your main occupation before being allocated this farm holding?

![Bar chart showing previous occupations of A1 farmers](image)

**Figure 4.7** Previous occupations of A1 farmers  
**Source:** Author, 2013
Question: Are you a full time farmer?

Figure 4.8 Status of A1 farmers

Source: Author, 2013

Question: Has your asset-holding increased as a result of the FTLRP?

Figure: 4.9 Asset holding of A1 farmers

Source: Author, 2013
Perceptions and beliefs on gender relations on land

**Question:** Should there be individual land rights between men and women?

**Figure 4.10** Individual land rights between men and women in A1 schemes  
**Source:** Author, 2013

**Question:** Do you think men and women have equal access to and control over land in A1 resettlement areas?

**Figure 4.11** Equal access to land between men and women in A1 schemes  
**Source:** Author, 2013
Intra-household asset distribution

**Question:** What type of house (with roof type) does your household own?

![Bar chart showing types of houses in A1 schemes](Figure 4.1)

*Source:* Author, 2013

**Figure 4.12** Types of houses in A1 schemes

**Question:** In whose name is the offer letter?

![Bar chart showing farm holding categories in A1 schemes](Figure 4.13)

*Source:* Author, 2013

**Figure 4.13** Farm holding categories in A1 schemes
Question: Which of the following assets does your household own?

Table 4.8 Types of assets owned in A1 schemes

<table>
<thead>
<tr>
<th>Productive asset owned</th>
<th>Yes (Percent)</th>
<th>No (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ox cultivator</td>
<td>17</td>
<td>83</td>
</tr>
<tr>
<td>Ox plough</td>
<td>56.8</td>
<td>43.2</td>
</tr>
<tr>
<td>Ox cart</td>
<td>37.8</td>
<td>62.2</td>
</tr>
<tr>
<td>Ox harrow</td>
<td>16.2</td>
<td>83.8</td>
</tr>
<tr>
<td>Ox ridger</td>
<td>5.4</td>
<td>94.6</td>
</tr>
<tr>
<td>Tractor</td>
<td>5.4</td>
<td>94.6</td>
</tr>
<tr>
<td>Tractor implements</td>
<td>5.4</td>
<td>94.6</td>
</tr>
<tr>
<td>Lorry</td>
<td>5.4</td>
<td>94.6</td>
</tr>
<tr>
<td>Car</td>
<td>13.5</td>
<td>86.5</td>
</tr>
<tr>
<td>Motor cycle</td>
<td>8.1</td>
<td>91.9</td>
</tr>
<tr>
<td>Agricultural implements e.g.</td>
<td>97.3</td>
<td>2.7</td>
</tr>
<tr>
<td>hoe, shovel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicycle</td>
<td>70.3</td>
<td>29.7</td>
</tr>
<tr>
<td>Wheelbarrow</td>
<td>86.5</td>
<td>13.5</td>
</tr>
</tbody>
</table>

Source: Author, 2013

Question: Who decides acquisition and disposal of productive assets?

Figure 4.14 Decision making in asset acquisition and disposal in A1 schemes

Source: Author, 2013
Question: How many of the following livestock does your household own?

Table 4.9 Types of livestock owned in A1 schemes

<table>
<thead>
<tr>
<th>Livestock owned</th>
<th>Mean</th>
<th>Std deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>1.49</td>
<td>4.30</td>
</tr>
<tr>
<td>Goats</td>
<td>3.08</td>
<td>8.12</td>
</tr>
<tr>
<td>Pigs</td>
<td>1.24</td>
<td>8.58</td>
</tr>
<tr>
<td>Donkeys</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Chicken</td>
<td>13.86</td>
<td>17.89</td>
</tr>
<tr>
<td>Fowls</td>
<td>0.56</td>
<td>8.92</td>
</tr>
<tr>
<td>Sheep</td>
<td>0.06</td>
<td>0.33</td>
</tr>
<tr>
<td>Ducks</td>
<td>2.65</td>
<td>8.93</td>
</tr>
</tbody>
</table>

Source: Author, 2013

Question: Who decides acquisition and disposal of livestock?

Figure 4.15 Decision making in the acquisition and disposal of livestock in A1 schemes

Source: Author, 2013
Intra-household division of labour and decision making

**Question:** How much time do you spend on agricultural activities (per day)?

**Figure 4.1** Time budgets for men and women

**Source:** Author, 2013

**Question:** Who collects money after selling agricultural produce?

**Figure 4.17** Person collecting income from sale of agricultural produce

**Source:** Author, 2013
Question: Who decides on the use of income from sale of agricultural produce?

<table>
<thead>
<tr>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Both husband &amp; wife</td>
</tr>
<tr>
<td>Wife</td>
</tr>
<tr>
<td>Husband</td>
</tr>
</tbody>
</table>

**Figure 4.18** Decision making on how to spend income from sale of agricultural produce
**Source:** Author, 2013

**Intra-household and/or extra-household conflict on land in A1 schemes**

Question: Have you been involved in any land conflict(s)?

**Figure 4.19** Prevalence of conflict in A1 schemes
**Source:** Author, 2013

After presenting a summary of the findings from the case study in Goromonzi District, the following section provides an integration of the results of the statistical tests and multinomial
logistic regression on baseline survey and findings from the case study. As explained above, the findings from the case study are only used to exemplify the analysis of results from the predominant baseline survey data.

4.3 Analyses and Synthesis of Findings from Survey and Case Study

In mixed methods data analysis, the qualitative and quantitative aspects of the study must not only be reported, but also integrated or linked together to draw conclusions about the topic under study (Tillman et al., 2011). Teddlie and Tashakkori (2009), cited in Tillman et al., (2011) described the process of data integration as allowing the two sets of analysis to talk to each other in at least a semi-iterative manner though the conversation may lead to both convergent and divergent results. In this section, the objective was to analyse findings of the statistical tests and multinomial logistic regression and case study presented in sections 4.1 and 4.2 respectively. Following the analyses of the baseline survey results and findings from the case study, the researcher’s aim was to synthesise these analyses and reach a conclusion about the research questions and hypotheses outlined in Chapter One. As mentioned elsewhere in the thesis, the findings from the case study were used to confirm and/or exemplify the results from the statistical tests and multinomial logistic regression estimation on the survey data.

Subsections 4.3.1 to 4.3.3 provide answers to the research questions outlined in Chapter One.

4.3.1 Answering Research Question One

The first research question was aimed at establishing if women were discriminated against during the FTLRP. To the contrary, the statistical tests on survey data and findings from the case study conducted in Goromonzi District did not show evidence of discrimination against married
women under the FTLRP. In the case study, 83.8 percent confirmed that there was equal access to and control over land in A1 resettlement areas between men and women and that there was no discrimination in the allocation of land.

An inspection of the survey data showed that there was an overall trend where women tended to obtain more rights to land through two avenues: obtaining land as individuals in their own right and through the joint registration of offer letters with their husbands. This result was what the researcher also found in Goromonzi District. For example, in Bains Hope there were more female land beneficiaries than males. Out of the 57 A1 farmers in Bains Hope, 33 were women. Out of these, 20 were married women who were allocated land in their own right. The fact that spouses jointly possessed land in resettlement areas meant that married women’s position in terms of land access had improved compared to their counterparts in communal areas where access is through their husbands or male relatives. This observation was supported by a number of authors (Cheater, 1986; Makura-Paradza, 2010; Peters and Peters, 1998; Walker, 2002). The number of jointly registered offer letters was very low for both the baseline survey and data from Goromonzi District. In Goromonzi District, jointly registered offer letters constituted a mere 8.1 percent. The low numbers of jointly registered offer letters was attributed to three factors. First, there was no adequate awareness among land beneficiaries on the Government policy on joint registration of offer letters for married couples. The people in Goromonzi District were not aware of this policy. The second reason was the strength of patriarchy in the Zimbabwean society. In Goromonzi District, it was found that where the wife was allocated land she would jointly register the farm holding with the husband but this was not the case with a majority of men who registered the plots in their own names. The third factor was attributed to the structure
of the offer letter itself. The offer letter has a section for Plot Holder only and not Plot Holder(s) which hopefully could have “encouraged” married partners to put both names on the farm document.

The above finding is consistent with Jacobs (2000) who noted that an increasing number of married women were allocated land in their own right under Model A during Phase I of the Land Reform Programme. In Peru, Fuentes and Wiig (2009) did not find evidence of discrimination of women during a land titling programme. Instead, they found that more women were issued land titles both as individuals and through joint titling with their spouses. Deere and Leon (2003) found out that the land distribution of titled lands in Peru was not that unequal if one took account of the jointly held lands. They found out that women owned 12.7 percent of the land, men owned 74.4 percent and couples owned 12.8 percent of the land. However, given Goromonzi District’s close proximity to Harare and Marondera, the urban influence on the distribution of land between men and women cannot be wholly ignored. According to the case study, 43 percent of the land beneficiaries originally came from Harare and Epworth (a dormitory settlement which is 30 kilometres to the east of Harare). The higher number of female land beneficiaries in Bains Hope was attributed to the gender composition of the team of war veterans (one male and three females) who spearheaded the occupation of the farm in 2000.

Inheritance was another avenue through which women accessed land in Goromonzi District. In resettlement areas in Mount Darwin (Mashonaland Central Province) and Mutoko (Mashonaland East Province), Jacobs (2000) found that women could actually inherit the farm holding ahead of the husband’s brothers. Goebel (1999) cited in Jacobs (2000) argued that the percentage of
widows (30 percent in one village) was high because of the intervention of the Resettlement Officer who had stipulated that the widow should inherit the land. Even more startling to Goebel was that in some cases Resettlement Officers awarded land to married women. In Bains Hope, all the widows had assumed ownership of the plots while some were still in the process of transferring ownership of the plots into their names. The inheritance procedure involved obtaining a letter confirming death of spouse from the headman or headwoman (in addition to the death certificate of the farm holder) and submitting a letter of application of change of ownership to the District Administrator through the District Lands Officer. Given that the offer letter has provisions for a maximum of two spouses and three legitimate children, the inheritance procedure is more explicit in resettlement areas than in the communal areas. However the inheritance procedure discriminates against other dependent children and additional spouses in a polygamous marriage. On the other hand, in the communal areas, legislation is silent on the issue of married women’s rights to inherit the land in the event of the death of the husband intestate. Many women who remained on the land in the communal areas did so at the goodwill of their in-laws or traditional leaders. In Uganda, Tripp (2012) citing West (1972) and Trout (1994) found that although it was not traditionally customary for women to inherit land, an increasing number of women did although they inherited smaller portions of land than men.

Jacobs (2000) observed that an unmarried woman had no claim on land. This is contrary to what was observed in Goromonzi District where both married and unmarried women had equal access to land. Some authors, (Jacobs, 2000; Ncube et al., 1997) noted that a wife’s access to land depended upon the marriage continuing since upon divorce it was she who had to leave the resettlement area. Where women lost their right to land in A1 schemes, it was “consensual” with their spouses. The District Lands Officer recalled that there were cases where some women, after
being allocated land refused to have their names on the offer letters as beneficiaries and instead requested that their names should be replaced with those of their husbands as farm holders. The case of Mai Sarai reported in Box 4.2 clearly demonstrated how some unscrupulous men took advantage of their wives to deny them rights to land.

A pertinent question to ask is how such a highly politicised land redistribution programme did not discriminate against women. Women were not passive spectators of the farm occupations and had strong social assets of being active members of ZANU-PF which guaranteed them allocation of land. A significant number of women beneficiaries confirmed that they were able to obtain land because of their party, ZANU-PF. Other factors that help to explain non-discrimination in access to and control over land between men and women in A1 schemes, include the type of land tenure in A1 schemes, the legal and policy framework under which the FTLP was implemented; the selection of beneficiaries in A1 schemes; perceptions and beliefs of A1 farmers on equal land rights between men and women and structural factors that influence land rights. These factors are explained below. The structural factors influencing women’s land rights in A1 schemes are explained in subsection 4.3.2.

**Land Tenure in A1 Schemes**

According to Government policy, the land tenure system under A1 model (villagised), the Rural District Council is required to prepare a land use plan for each village and to issue a settlement permit to the head of the household. A1 tenure consists of use rights to a family plot plus common grazing land. The family plot is inheritable but non-marketable (Moyo and Yeros, 2004). Unmarried
women, divorcees and widows who were heads of households obtained permits in their names as married women and child-headed households.

**Legal Framework under the FTLRP**

As already mentioned in Chapter One, Zimbabwe is a signatory to a number of international and regional conventions that seek to guarantee gender equality in the regulation of access to assets including land. For example, Article 14(2) (g) of CEDAW explicitly states that women have a right to “...equal treatment in land and agrarian reform.” The SADC Protocol on Gender and Development (2008) seeks to promote women’s full access to and control over productive resources such as land, livestock, markets, credit, modern technology, formal employment and a good quality of life in order to reduce the level of poverty among women. The Constitution of Zimbabwe (March 1980-May 2013) was the supreme law of the country when the FTLRP was implemented. Zimbabwe adopted a new constitution in May 2013. The Constitutional Bill of Rights recognised equal status of women and men. As explained in Chapter One, the Government introduced a battery of legislation that ensured that men and women were treated the same in economic, political and social spheres of life.

**Policy Framework under the FTLRP**

The conceptualisation, planning and subsequent implementation of the FTLRP was guided by the Land Reform and Resettlement Programme Phase II (1998), the National Land Policy Framework Paper (1999), the Inception Phase Framework Plan (1999-2000) and the Accelerated Land Reform and Resettlement Implementation Plan (Fast Track Approach)(2000). Under Phase II, the Government planned to, among other things, compulsorily acquire 50,000 square
kilometres over a five-year period and to resettle 91,000 families and youth...“in a gender-sensitive manner” and to “…increase conditions for sustainable peace and social justice by removing imbalances in ownership” (GOZ, 1998b). However, the policy framework guiding the implementation of the FTLRP was silent on how gender balance was to be attained in the distribution of land between men and women neither did it elaborate on how the different categories of women (widows, married women, unmarried women) were to benefit from the programme. According to Mgugu and Chimonyo (2004), the selection of beneficiaries was not addressed in a gender-sensitive manner as women were lumped together with other beneficiaries. Mgugu and Chimonyo (2004) argue that in order to meet the challenges of mainstreaming gender into the land reform programme, women should be treated as a special group with different conditions to that of men.

**Selection of Land Beneficiaries under the FTLRP**

During the FTLRP the responsibility for beneficiary selection included diverse stakeholders such as traditional leaders (chiefs, headmen and village heads), Rural District Councils, District Administrators, Provincial Administrators, Provincial Governors, farmers’ unions and NGOs (Roth and Gonese, 2003). The procedure to apply for land under A1 model involved the applicants filling in an application form from the District Administrator. In Goromonzi District, applicant was allocated his or her plot as a result of a random selection among other successful applicants although in some cases some land beneficiaries self-appropriated the farms. In Masvingo Province, Scoones et al., (2010) found that war veterans often with an ambivalent attitude to the ZANU-PF party hierarchy were influential in land allocation during and following the invasions and often managed to secure better plots on A1 self-contained schemes. From the
baseline survey 9.5 percent A1 farm holders obtained their plots through occupation and self-appropriation. This method disadvantaged women who due to division of household labour were left behind in the communal areas to look after livestock and children and the elderly. At the grassroots level, the ward councillor, headman and a local representative of ZANU-PF were responsible for selecting beneficiaries (Chingarande, 2008). In Goromonzi District, a majority of land beneficiaries (68 percent) said that they obtained their A1 farm holdings because they are members of the ruling party, ZANU-PF. Chingarande (2008) concurs with this finding and states that sometimes beneficiary selection became highly politicised as the official structure for allocating land through civil service and elected officials was often superseded by informal and unregulated processes governed by the war veterans, police, army and civil servants.

**Perceptions and Beliefs of A1 Farmers on Equal Land Rights**

The available literature blames discriminatory customary law (or practices) as the main reason for the exclusion of women from the land reform programme (Chingarande, 2008; Gaidzanwa, 1988, 1994; Goebel, 2005; Mgugu and Chimonyo, 2004; Pasura, 2010; Peters and Peters, 1998; Sachikonye, 2004; UNDP, 2002; ZWRCN, 2008). Cultural practices also discouraged women from participating in land allocation committees and decision-making meetings (Moyo, 2004). From the fieldwork 86.5 percent of the respondents supported individual land rights. Out of these, 89.5 percent the married women supported individual land rights because they provided them with security (in the event of divorce), financial independence, individual recognition for any improvement in household welfare, increased family wealth and freedom to bequeath the land without restrictions. This demonstrated that individual land rights empowered women and strengthened their bargaining power within the household. According to *Mai Tseu* (‘...an A1
farm is a future inheritance of my children and if the farm holding is in my name, then the plot cannot be shared with another wife’s children”. Having a farm in their names made women less dependent on men. This observation was consistent with Agarwal’s (1994) finding that women empowerment through land ownership gave them a strengthened status and ability to challenge structures of patriarchy within households and rural communities. Lastly, some women especially female war veterans viewed individual land rights as a reward for their participation in the liberation war of the 1970s. This was aptly captured by Mai Bazooka:

“…during the liberation war, there was no discrimination between males and females. We were all soldiers fighting a common enemy. The distribution of land should therefore not discriminate between men and women since we are equal…”

About 83.8 percent of the respondents felt that there was equal distribution of land between men and women in A1 schemes because “all those” who applied were allocated land. Overall, there are more male beneficiaries than females due to a number of structural factors such as household division of labour where women remained in the communal areas looking after children and livestock while men occupied white-owned commercial farms (Gaidzanwa, 2011). More structural factors that affect the security of women’s land rights are discussed in subsection 4.3.2.

4.3.2 Answering Research Question Two

The second research question sought to establish the determinants of women’s land rights in A1 resettlement areas. Two hypotheses were used to test the security of women’s land rights. Hypothesis two (H2) conjectured that married women obtain land rights through joint
registration of offer letters with their husbands. Hypothesis three (H3) tested whether higher levels of education increased women’s propensity to obtain land rights. The research question was operationalised using multinomial logistic regression on the baseline survey data. Both intra-household and extra-household factors influencing the security of women’s land rights were identified from relevant literature and the researcher’s own hypotheses. The results of the multinomial logistic regression analysis showed that intra-household factors such as marital status, age of spouse, age of the household head, size of the household and spouse’s education had no impact on the choice of landholding category. If marital status did not explain land holding in A1 schemes, it meant that married women could access land in their own right. This was supported by findings in Bains Hope where 20 out of the 33 female land beneficiaries were married women. There were 57 A1 farmers in Bains Hope.

In the survey data, married women with offer letters constituted 24.3 percent of the land beneficiaries. About 10.8 percent of the land beneficiaries in Goromonzi District were married women with offer letters in their names. Among female land beneficiaries, married women constituted 16 percent. This showed that married women lagged behind unmarried women in accessing land in A1 resettlement areas. As noted above, more married women hold land in their names than unmarried women in Bains Hope, presumably due to the proximity of the resettlement scheme to Harare and the gender composition of war veterans (one male and three females) who spearheaded the occupation of the farm in 2000. In Nicaragua, Honduras, Peru, Brazil and Paraguay female heads owned significantly more land than female spouses (Katz and Chamorro, 2002 and Deere et al., 2004 cited in Fuentes and Wiig, 2009).
The level of education was not a significant determinant of women’s land rights in A1 schemes. Both literate and illiterate people were allocated land under the FTLRP. This was confirmed by findings from the case study. In the study area, 48.6 percent of the land beneficiaries did not go beyond primary education. Among the women land beneficiaries, 28 percent did not attain any formal education while an equivalent number did no go beyond primary education. This was because in Zimbabwe, land and in particular agriculture is a major source of livelihood for both men and women. The above finding is not consistent with previous studies (Ncube et al., 1997; ZWRCN, 2008). Under the FTLRP, land was allocated to all those who applied irrespective of their educational background. However, according to key informants in Goromonzi District, besides being a member of ZANU-PF, another pre-qualification to obtain land in A1 schemes was one’s active participation in the farm occupations of 2000.

In Peru, Fuentes and Wiig (2009) found that the level of education and being married increased women’s probabilities of getting land rights as joint titles but not as individuals. Given that both marital status and level of education were not statistically significant, H2 and H3 could not be sustained. This meant that being married did not increase the probability of women’s land rights through joint registration of offer letters while the level of education did not increase women’s propensity to hold land in A1 schemes. Women obtained land rights in spite of their marital status and level of education attained. This finding demonstrated the centrality of land in shaping the socio-economic livelihoods of indigenous black Zimbabweans, both male and female. The success or failure of land reforms can be defined by the type of beneficiaries who received land (Marongwe, 2008). This means that the history, education, farming experience and skills possessed by the beneficiaries are key determinants of the agricultural production patterns of the settlers. Results from the survey and case study showed that a majority of A1 farmers had low
levels of education and scanty formal agricultural training. Lack of formal agricultural training may have negative consequences on the production efficiency of A1 farmers.

Meanwhile, extra-household factors such as method used to make beneficiaries aware about the FTLRP (Merespq), size of arable area cultivated (AraArea) and provincial variations (Provsd) were statistically significant. Merespq is a categorical variable (non-binary): 1=local leadership; 2=political party structures; 3=media source; 4=relative or friend; 5=government office. This variable helps to examine the role of social assets in the distribution of land under the FTLRP. For example, was there a political test for the land beneficiaries? The baseline survey showed that 61.5 percent of the land beneficiaries knew about the FTLRP through government office especially AREX while those who learnt about the programme through political party structures were 7.1 percent. In Goromonzi District, 71.4 percent of the land beneficiaries learnt about the FTLRP through their political party, ZANU-PF. The finding showed that the household is a permeable entity where individual and household interactions played out within the socio-political network which had influence over household decisions and actions regarding the acquisition, use and disposal of land in A1 schemes.

An interesting observation in Goromonzi District was that no one said that they knew about the FTLRP through AREX. Instead, 8.6 percent learnt about the land reform programme through electronic or print media while 11.4 percent knew about the programme through friends or relatives. Previous studies (Chaumba et al., 2003; Chingarande, 2008; Marongwe, 2008; Sadomba, 2008) corroborated these findings in Goromonzi District that social assets in the form of being a member of a political party determined the distribution of land rights between men
and women in A1 schemes. Marongwe (2008) found that beneficiary selection was by and large influenced by power dynamics and the role of political and social networks. This was notwithstanding the existence of an elaborate criterion that was supposed to guide beneficiary selection. The use of political and social networks in land allocation had the inevitable fundamental outcome of excluding those who did not belong to a particular social group. If there was political test in the selection of land beneficiaries, then both men and women who did not support ZANU-PF were discriminated against under the FTLRP. Probably, further research would be required to establish the magnitude of discrimination of those who did not belong to a particular social group but were denied access to land because of their political affiliation.

Scoones et al., (2010) did not find evidence of partisan allocation of land in Masvingo Province. Their study showed that the majority of the new settlers in both A1 and A2 models were ordinary people, with about 50 percent of the settler households coming from nearby communal areas while 18 percent were from urban areas. The remainder was made up of civil servants (16.5 percent), business people (4.8 percent), security service personnel (3.7 percent) and former farm workers (6.7 percent). Elich (2005) concurred with Scoones et al., (2010) and asserted that there was no political test in the allocation of land under the FTLRP and the process was open to anyone who cared to apply. According to Elich (2005), despite its problems, the FTLRP had established a far more equitable distribution than the obscene concentration of wealth inherited from the apartheid era of Rhodesia (colonial name for Zimbabwe). Elich argued that the focus on cronyism in the Western press was a red herring meant to invalidate the process of the land reform programme without arguing the issue on its merits. The setting up of a Committee of
Seven in each A1 resettlement scheme seemed to confirm that political test was indeed used to select land beneficiaries.

The variable $Prov_{sd}$ captured the provincial variations in the distribution of land between men and women. The following provincial dummies were used: $Prov_{sd}1=$Mashonaland East; $Prov_{sd}2=$Mashonaland West; $Prov_{sd}3=$Midlands; $Prov_{sd}4=$Matabeleland North; $Prov_{sd}5=$Masvingo and $Prov_{sd}6=$Manicaland. Table 1.3 shows that Mashonaland East Province at 24 percent has the highest number of female beneficiaries of land in A1 schemes while Mashonaland Central Province at 12 percent has the lowest number of female beneficiaries. The provincial variations in the number of women allocated land can be attributed to a number of factors: the predominant method of land acquisition used in the province; the demographic composition of war veterans spearheading land occupations in the province; proximity of the resettlement scheme to urban areas; predominant ethnic group(s) in the province and the strength of socio-cultural institutions in the province. A more detailed study of each province would be required to unravel the underlying factors for the land distribution patterns by sex exhibited in Table 1.3.

### 4.3.3 Answering Research Question Three

The third research question was aimed at establishing if women had the same land rights as men in A1 resettlement areas. The results from the t-test and chi-squared test of independence as well as evidence from Goromonzi District showed that women beneficiaries of the FTLRP obtained the same land rights as men in terms of land use patterns. The land use patterns focused on the
mean sizes of arable land allocated to men and women and the predominant type and/or quality of soil on the A1 farm holdings.

However, there is no denying that more men than women benefitted under the FTLRP. The survey data showed that 78.5 percent of the land beneficiaries were male while 21.5 percent were female. This was because the government used the household as the beneficiary unit. Although this approach provided female members of the household with access to land, it may have undermined their bargaining power (FAO, 2007). Zimbabwe is a predominantly patriarchal society where most households are headed by males. A number of studies have shown that more men than women were allocated land under the A1 model (Chingarande, 2008; Gaidzanwa, 2011; GOZ, 2003; Pasura, 2010; ZWRCN, 2008). The Utete Report (2003) shows that less than 20 percent female-headed households were allocated land under the FTLP for the different provinces. The use of a household as the beneficiary unit was based on the unitary agricultural household model. According to the unitary agricultural household model, an altruistic head ensures equitable allocations of goods and tasks (Becker, 1981 cited in Agarwal, 2003) in order to maximise household utility. Some authors (Haddad and Kanbur, 1990, Duflo and Udry, 2004 and Sen, 1990 cited in Doss et al., 2008; Haddad et al., 1997) have shown that household welfare is not equivalent to the welfare of the individuals within it. This led to the rejection of the unitary household model (Agarwal, 1997, 2003; Cohen, 1996; Haddad et al., 1997; Strauss and Thomas, 1995 and Behrman, 1997 cited in Meinzen-Dick et al., 2011; Quisumbing, 2003; Stowhase, 2009). The intra-household models on the other hand, are based on bargaining, conflict and unequal power relations between married partners (Haddad et al., 1997) and thus help to analyse the distributional effects of household resources to the individual members. As explained in Chapter Two, this was the approach adopted in this study.
Hypothesis four (H4) and hypothesis five (H5) were used to answer research question three. H4 sought to measure gender asset gap in terms of the mean sizes of arable land cultivated by men and women in A1 resettlement areas using the independent t-test. There was no evidence of gender asset gap in A1 schemes when using the mean sizes of arable land being cultivated by men and women. The survey data showed that women’s landholdings were in fact marginally greater than men’s: the average size of women’s plots is 8.39 hectares compared to 8.10 hectares for men. This result was supported by the researcher’s own anecdotal evidence in Goromonzi District where women’s and men’s arable plots were of equal size. The sizes of arable plots were determined by the Government and varied between provinces depending on the agro-ecological region. In the communal areas, the average size of women’s landholdings is 1.86 hectares compared with 2.73 hectares for men (Doss et al., 2008). In Egypt, the average farm size for men is 1.7 hectares while the average farm size for women is 0.7 hectares (ibid). These findings showed that women in A1 schemes did not only have access to bigger arable plots than their counterparts in the communal areas but even those in the rest of Africa. Based on the independent t-test and findings from the case study, the fourth hypothesis was rejected since the mean sizes of arable land for men and women were statistically equal.

H5 tested gender differentials with respect to soil type and/or quality. The results of the chi-squared test of independence between predominant type of soil and sex of the farm holder did not allow the researcher to keep the hypothesis that women tended to have land rights on farm holdings with worse soil types than men. This was also supported by evidence from Goromonzi District. For those successful applicants, plots were allocated through a random process which made it “impossible” to discriminate between men and women based on the predominant soil
type on the farm holding. According to Feder et al., (1998), soil types defer among farmers which further diminished chances of discrimination.

The distribution of land rights between men and women mirrored the distribution of assets, division of labour and decision making within households. Empirical evidence from the case study showed that a spouse’s bargaining power could be enhanced through access to and control over land. This was demonstrated by joint decisions in the acquisition and disposal of both household and productive assets and consultative processes on key agricultural activities and utilisation of the income derived from the agricultural enterprise. Testimonies by women in the two study sites depicted an improvement in their socio-economic status and food security as well as improved sense of dignity. In the study area, 54.1 percent of the respondents indicated that both husband and wife made joint decisions to acquire and/or dispose of productive assets. This was because both spouses contributed to the agricultural enterprise in different ways. About 37.8 percent of the respondents indicated that women were directly involved in the marketing of agricultural products and had considerable influence on the use of the income. This demonstrated that income from agriculture had value in changing gender roles and relations in the household and probably the whole community.

Empirical evidence from Bangladesh, Peru and the Philippines demonstrates how increases in women’s income earnings result in greater investments in education and health (Doss et al., 2008). In Bangladesh, married and working women have greater decision-making power in the household because of their wage income (Raworth, 2004 cited in Doss et al., 2008). The FTLRP offered married women space to engage in non-agricultural livelihoods-enhancing strategies (such as nutrition gardens, business enterprise and vending) that provided them with independent
scales of income. These increased opportunities for women improved household welfare (through increased income), gender equality and empowerment.

As already explained in subsection 4.3.1, married women fully supported individual land rights. Married women in the study sites confirmed that they gained considerable respect within their own households and community at large after they were allocated land under the FTLRP. The case of Mai Tizai of Ingwenya farm outlined in Box 4.2 showed that women empowerment through land access gave them a strengthened status and ability to challenge structures of patriarchy within the household. In India, Agarwal (1994) found that land ownership provided widows with greater respect and consideration while Allendorf (2007) observed that women who owned land had final say in household decisions in Nepal. The finding confirmed an earlier observation that an individual’s bargaining power was determined by his or her control over economic resources (Quisumbig and Maluccio, 2000; Agarwal, 2003).

During interviews with A1 farmers some revealed that they had virtually no assets when they were allocated land in 2000/2001 and that their livelihoods were now comparatively better in A1 schemes than communal areas. From the questionnaire, 94.6 percent answered that their asset holding increased after acquiring A1 farm holdings. The assets mostly mentioned included bigger houses (with either asbestos or zinc roof types), more livestock (mostly cattle) and productive assets (tractors, lorries, ox-drawn ploughs, scotch carts and ox-drawn cultivators) which they bought after selling crops. Most farmers attributed their improved welfare to richer soils and greater opportunities for a range of alternative livelihoods strategies besides agriculture. The farmers who answered “no” attributed their predicament to either theft or fire. They did not
mention poor soils or unavailability of agricultural inputs as the cause for their not accumulating assets. This showed that A1 farmers regarded farming as a productive business enterprise.

The researcher observed that farm labour was shared between the family and hired labour. The gendered relations of production still shaped the division of labour between males and females within the same farming household. This also extended to hired labour which comprised both males and females although female labour predominated. There was more female labour because some of the male farm workers were involved in informal activities such as vending in Harare. Land preparation was mostly done by hired labour (23 percent) while planting and hoeing (or weeding) were mainly done by family members (27 and 26 percent respectively). The harvesting of crops was done by family labour (31 percent). In terms of time budgets, women spent more time on agricultural activities than men. This confirmed an earlier observation by Saito et al., (1994) that women worked for longer hours in Burkina Faso, Kenya, Nigeria and Zambia.

From document analysis and fieldwork in Goromonzi District, the allocation of arable plots was random and hence there was no discrimination between male and female beneficiaries. In the study sites, 84 percent of the women interviewed indicated that the distribution of land rights between men and women was equal in Goromonzi District. The women respondents explained that men and women were allocated plots in the same area without regard to marital status or sex. The foregoing discussion showed that men and women were given the same land rights in A1 schemes in terms of land use patterns when the mean sizes of arable land and predominant soil type are used as parameters.
4. 4 Proposed Household Economic Portfolio Model on Land Acquisition and Utilisation

From the conceptual framework developed in Chapter Two, a proposed economic household portfolio model on land acquisition and utilisation is presented in Figure 4.23. There is interaction between household resources and household activities. Household resources and household activities are linked by two opposing flows, expenditure flow and income flow. The expenditure household flow represents both individual and joint household resources that are used to support household agricultural activities. Household resources that support agricultural activities include cash expenditures, labour inputs, government inputs and seed and social networks that assist in undertaking agricultural activities. The income household flow represents the income generated from agricultural activities of production and investment. The production and investment activities contribute to the household’s resources. Household production involves the production of goods and services by members and non-members of a household for their own consumption and market. In economics, labour and capital are the two factors of production (Ironmonger, 2001). In this model, labour consists of the time and effort (both mental and physical) provided by household members and non-members of the household. The second factor of production, capital is the use of physical or tangible non-human capital including land, housing, vehicles and equipment. Draught power in the form of livestock used to carry out agricultural activities forms part of household capital used to produce goods and services. Household investment activities include actual acquisition of the A1 plot on which residential lodgings and farm buildings can be constructed, acquisition of productive assets (for example, tractor or ox plough) and livestock (for example cattle or donkeys). Household or extra-household or both household and extra-household resources may be used to carry out household investment activities. This may lead to an overall increase of household resources particularly financial and physical assets. Given that the A1 plot is an agricultural business enterprise, the
household would produce market and non-market products. For example, where a household grows cash crops like tobacco then marketing becomes an important activity. Marketing will not be an issue if the household grows crops or rears livestock for subsistence. In A1 schemes crop production is both for subsistence and market and thus the household is viewed as both consumer and producer.

Apart from the external influence of the social network on household activities, the model looks at the intra-household interactions and dynamics. Some of the dimensions of the portfolio system that can be used to assess the impact of the FTLRP include domestic division of labour, access to resources, gender and market and non-market production. The set of activities pursued by the household are a mix of the individual activities of its members. Cohen (1996), citing Guyer (1988), notes that these activities may interact in a variety of ways: from multiple, separate activities to more coordinated, integrated activities. In A1 resettlement areas men and women may be involved in joint agricultural production or women may be involved in the agriculture enterprise while men pursue wage employment and vice versa. In the case of joint agricultural production, men and women may produce a given crop for which men perform certain activities and women others. A case of substitutable activities occurs when either of the spouses migrates for alternative employment (Cohen, 1996). The supra-household contributes to household agricultural activities through credit, “technical assistance” and labour. The labour could be free or paid. The hired labour also reflects division of tasks between men and women. The division is extended to the types of crops grown by men and women on the same plot. Groundnuts, round nuts, pumpkins and cow peas are designated as women’s crops. Although women may have their
own crops on women’s plots or *tseu*, the produce and/or income from such plots are used to improve the overall household welfare.

**Figure 4.20** Proposed household economic portfolio model on land acquisition and utilisation

**Source:** Author, 2013
Implications of the economic household portfolio model on land acquisition and utilisation

The proposed economic household portfolio model on land acquisition and utilisation covers three levels of analysis of the socio-economic behaviour of the household: the individual member of the household and the intra-household dynamics between and among members; the whole household at the aggregate level and the interaction between the household, its members and the external economic, social or political environment (supra-household or social network). This is in line with the realist paradigm that research should take different angles and at multiple levels so as to contribute to the understanding since reality can exist at multiple levels (Chia, 2002). The model has different dimensions of household portfolio that can be used to analyse the impact of the land reform programme on intra-household allocation of assets between men and women. It would allow for an investigation of the socially defined divisions within the household with respect to the demand for and use of the land in A1 schemes.

The model treats the household as a permeable entity whose activities especially the acquisition and utilisation of resources are influenced by external socio-economic and political factors. The study showed that social assets are a strong determinant of women’s land rights. Evidence from the baseline survey and fieldwork in Goromonzi District showed that belonging to the ruling party, ZANU-PF guaranteed one’s access to land in A1 schemes. This means that the social environment cannot be ignored when analysing the gendered outcomes of the FTLRP on land acquisition and utilisation in A1 resettlement areas. The above varied uses of the proposed economic household portfolio model on land acquisition and utilisation showed that it can be used during the planning, design, targeting, implementation, monitoring and final evaluation of socio-economic development programmes concerned with asset distribution such as land reform, privatisation and economic empowerment.
4.5 Chapter Summary

The chapter provided the estimation procedure and results of chi-squared tests of independence, t-test and multinomial logistic regression on baseline survey data. The case study provided complementary evidence to the main quantitative survey. Statistical tests showed that women were not discriminated against and enjoyed the same land rights as men while econometric estimation showed that extra-household factors such as social assets had significant effect on land distribution in A1 schemes. The conceptual framework developed in Chapter Two, results from econometric modelling and findings from the case study were used to develop a household portfolio model on land acquisition and utilisation in A1 schemes. The proposed model has varied uses and could be used during the planning, design, targeting, implementation, monitoring and final evaluation of socio-economic development programmes concerned with asset distribution such as land reform.

Chapter Five presents a summary and critical evaluation of the findings, a general summary of the study, contribution(s) to existing knowledge, specific policy recommendations and future research directions.
CHAPTER FIVE

FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

The purpose of this research was to make a systematic and critical evaluation of the distribution of land between men and women in A1 resettlement areas in order to understand the effects of the FTLRP on married women’s land rights. The researcher was motivated to answer the question on the effects of the FTLRP on women’s land rights and how those rights were distributed between men and women. The distribution of land impacted on gender relations, bargaining power and household welfare, social justice and agricultural production and development. In this thesis, the researcher argued that the reasons for women’s exclusion from the land reform programme required a comprehensive gender analysis that specified the imbalances in the division of labour between men and women; status of women in the domestic units; the diversity and asymmetry of households; intra-household power relations and gender-based differentials as regards access to and control over assets including land. Although the focus was on women beneficiaries of the FTLRP, the study adopted a gender approach in assessing the allocation and utilisation of land in A1 resettlement areas to study both men and women. This approach helped to identify the person in charge of the A1 farm holding; identify intra-household and extra-household factors that influenced the security of land rights; establish gender-land gap and intra-household distribution of assets and decision-making.
This chapter in its first section gives an overview of the whole thesis. Section 5.2 summarises the research’s main findings. Conclusion to the thesis is provided in section 5.3. The research’s contributions to theory, research methodology and practice are presented in section 5.4. A discussion on the weaknesses of the research design and framework are presented in section 5.5. Section 5.6 provides specific policy recommendations while future research directions are presented in section 5.7. The last section presents a summary of the chapter.

5.1 Summary of the Thesis

The first chapter was a discussion of what the research was all about and why the researcher undertook such a study. The researcher argued that although much of the FTLRP has been documented, the gendered outcomes of the programme, especially the consequences on different categories of women still remained problematic. Whereas women in single-headed households obtained land in their own rights, the security of land rights for married women had not been adequately investigated. In the thesis, the researcher argued that the reasons for women’s exclusion or otherwise from the FTLRP required a comprehensive gender analysis. This specified the imbalances in the division of labour between men and women, status of women in the domestic units, the diversity and asymmetry of households, intra-household and extra-household power relations and gender-based differentials as regards access to and control over land. The primary purpose of the study was to make a critical evaluation of the distribution of land between men and women under the FTLRP using a gender approach. The main research question addressed in the thesis was to what extent were intra-household and extra-household factors considered instantiation of women’s land rights in A1 schemes. The study specifically tested the hypothesis that access to and control over land was gendered in A1 resettlement areas. The household economic theory was used to analyse the distribution of land rights between men
and women. The researcher used the framework presented by Agarwal (2003) that women’s ownership of land is relevant to rural development, household welfare and empowerment.

In Chapter Two, the literature survey of Africa, Latin America and Asia showed that women were considered a marginalised social group in land ownership. In the case of Zimbabwe, what was established in the literature was that the land reform programme was gender selective (Chingarande, 2008; Gaidzanwa, 1988, 1994, 1995, 2011; Mgugu and Chiponyo, 2004; UNDP, 2002) but the extent to which this was the case as well as to why this varied in certain areas had not been thoroughly investigated. The available literature blamed discriminatory customary law (or practices) as the main reason for the exclusion of women from the land reform programme (Chingarande, 2008; Gaidzanwa, 1988, 1994; Goebel, 2005; Mgugu and Chimonyo, 2004; Pasura, 2010; Peters and Peters, 1998; Sachikonye, 2004; UNDP, 2002; ZWRCN, 2008); laws governing land (Chingarande, 2008; Mgugu and Chimonyo, 2004; Ncube et al., 1997); workings of marriage, women’s rights and gender norms in pre-colonial times (Jacobs, 2000) without looking at the gender dynamics and power relations within households. Power relations exist within the household and economy and therefore must be considered in all economic models. Exploring household economic theories helped the researcher to crystallise his views in gender land gap and also to identify different issues that could be of interest for the purposes of this research. From the work of Lundberg and Pollak (1993) and extended by Cohen (1996) in collective intra-household economic models, the researcher learnt how insightful economic and social anthropological theories could be used to understand the distribution of land and related assets within households. The intra-household models are based on bargaining, conflict and unequal power relations between married partners (Haddad et al., 1997) and thus help to analyse
the distributional effects of household resources to the individual members. From Agarwal’s (2003) analytical description approach, the researcher learnt how to extend the bargaining approach (developed by Manser and Brown, 1980; McElroy and Horney, 1981; Chiappori, 1988, 1992; and Lundberg and Pollak, 1993) beyond the household and was thus able to capture the complexity and variability of both intra-household and extra-household gender relations. By combining the collective intra-household model and analytical description approach, the researcher developed the conceptual framework of the economic household portfolio model on land acquisition and utilisation in A1 schemes which allowed the use and analysis of the baseline survey and case study in Goromonzi District to test the relevant hypotheses.

In Chapter Three, the researcher discussed various options available for the execution of the research and the logic for the selection of specific research paradigm, approach, strategy and methods applied in the study. After the examination of research methodologies, the researcher identified areas where the research could make contributions by the use of a realist approach. Previous researchers in development economics (Hulme, 2007; Lipton, 1970; Olsen, 2007) have used the realist approach. Given that economics is a multi-paradigmatic science and phenomena needed to be studied from multiple levels and angles, a mixed methods research was adopted so as to have different perspectives of the distribution of land rights between men and women in A1 resettlement areas. The researcher used the quantitative survey as the main research strategy. A case study was conducted in Goromonzi District and was used to complement findings from statistical tests and econometric estimation on the survey data collected by AIAS. The last part of Chapter Three provided a detailed discussion of the research design and methods of data collection and analysis as well as issues of validity and reliability within the MMR framework.
Chapter Four presented the research’s findings and analysis of the findings of the survey and case study. The researcher used the framework developed in Chapter Two in regard to the economic household portfolio model on land acquisition and utilisation in A1 resettlement areas. Statistical tests and regression estimation were used to analyse survey data while a combination of thematic analysis, descriptions and interpretations were used to analyse case data collected from Goromonzi District. A synthesis of the analyses of the results of statistical tests and econometric estimation on survey data and the findings from the case study provided answers to the research questions outlined in Chapter One. The last part of Chapter Four presented the proposed economic household portfolio model on land acquisition and utilisation. The model can be used to analyse the gendered process of land acquisition, utilisation and disposal in A1 schemes at three levels: the individual member of the household and the intra-household dynamics between and among members of the household; the whole household at the aggregate level and the interaction between the household, its members and the external socio-economic environment (supra-household or social network).

5.2 Research Findings

Although much has been documented about Zimbabwe’s land reform programme, very little was known about how it affected or was affected by differential access to and control over agricultural assets between men and women. Research from Africa, Latin America and Asia has shown that land reform and titling of rural lands can have unequal effects on women’s and men’s land rights (Agarwal, 1994, 2003; Deere and Leon, 2001, 2003; FAO, 1997 cited in Doss et al., 2008; UNECA, 2003) and often too little attention is paid to protecting women’s land rights (Deininger, 2003). In Zimbabwe, heavy criticism was raised against the two phases of the land reform programme. The major criticism was that the land reform programme has been gender
selective (Chingarande, 2008; Gaidzanwa, 1988, 1994, 1995, 2011; Mgugu and Chiponyo, 2004; UNDP, 2002) and that women’s rights were neglected because of a combination of factors. These factors included discriminatory customary law and practices (Chingarande, 2008; Gaidzanwa, 1988, 1994; Goebel, 2005; Jacobs, 2000; Peters and Peters, 1998; Mgugu and Chimonyo, 2004; Sachikonye, 2004; UNDP, 2002; ZWRCN, 2008); laws governing land (Chingarande, 2008; Mgugu and Chimonyo, 2004; Ncube et al., 1997); education (Ncube et al., 1997); workings of marriage (Jacobs, 2000); institutional effects of colonial rule in Zimbabwe (Moyo, 1995b; Peters and Peters, 1998) and lack of basic infrastructure such as access roads, clinics, service centres, clean water and schools (Chingarande, 2008).

With this background, the researcher analysed the effects of the FTLRP (2000-2002) on married women’s land rights in A1 schemes. The researcher conjectured that women’s land rights were neglected under the FTLRP. The household was used as the unit of analysis for both the survey and case data since each household was assumed to hold one A1 farm. Using statistical methods on household survey data collected by AIAS (2006) and qualitative data collected in Goromonzi District in Mashonaland East Province, the study did not find evidence of the discrimination of women in the allocation of land under the FTLRP. From the survey data and evidence from the fieldwork in Goromonzi District, the researcher found that women obtained more rights individually and together with their husbands through joint registration of offer letters although obtaining rights through the second avenue was minimal. This was because there was little awareness of the government policy on joint registration of offer letters by married partners. The policy on joint registration of offer letters was popularised in 2003 after most farmers had already been issued with the farm documents. Secondly, the design of the offer letter did not promote joint registration of A1 landholdings by married partners. The offer letter has a section
for a plot holder not plot holder(s). However, the fact that spouses jointly possessed land in resettlement areas meant that married women’s position in terms of land access had improved compared to their counterparts in communal areas where access is through their husbands or male relatives. In communal areas, land is given to the de jure head of the household who, in the majority of cases is male. Evidence from Goromonzi District also showed that women gained rights to land through inheritance. This observation was supported by Jacobs (2000).

Although more women accessed land through the above three avenues, the researcher found that overall, more men than women were allocated land under the FTLRP. This was attributed to a number of factors including household division of labour where women remained behind in the communal areas looking after children, the elderly and livestock while men occupied commercial farms (Gaidzanwa, 2011). The other factors included lack of basic infrastructure such as access roads, clinics, service centres, clean water and schools (Chingarande, 2008) and lower representation of women in land identification committees at all levels of government (Moyo, 2004). The land rights between men and women were also not equally distributed among the different provinces. These provincial variations in the distribution of land between men and women could be attributed to a number of factors: the predominant method of land acquisition used in the province; the demographic composition of war veterans spearheading land occupations in the province; proximity of the resettlement scheme to urban areas; predominant ethnic group(s) in the province and the strength of socio-cultural institutions in the province. Mashonaland East and Midlands provinces had the highest number of jointly registered offer letters according to the survey data (AIAS, 2006).
The researcher hypothesised that married women and women with higher levels of education were likely to obtain land rights in A1 schemes. Using multinomial logistic model, intra-household variables (marital status and level of education) were insignificant determinants for the probability to get land rights. This meant that being married and educated had no effect on the probability to obtain land rights in A1 schemes. This was supported by the fieldwork in Goromonzi District that showed that there was no educational test for one to be allocated land under the FTLRP. Neither were women asked if they were married to be allocated land. Resettlement land was allocated to all those who dared to apply. Extra-household factors such as the method used to make beneficiaries aware about the FTLRP, size of arable area cultivated and provincial variations in the distribution of land between men and women had significant effects on the probability to obtain land rights in A1 schemes. Social assets represented by belonging to the ruling party, ZANU-PF as well as kinship and friendships became the major factors influencing the probability of getting land in A1 resettlement areas. In Goromonzi District, 71.4 percent of the respondents confirmed that there was indeed political test for one to be allocated a farm holding. In addition, 11.4 percent said that they knew about the FTLRP through friends and relatives. These findings demonstrated that social assets could not be ignored when analysing the gendered outcomes of the FTLRP in A1 schemes. But were women and men belonging to other political parties discriminated against under the FTLRP? Further research would be required to ascertain this form of discrimination.

Lastly, the researcher tried to find if women had the same land rights as men in A1 resettlement areas by testing two hypotheses. The first hypothesis tested if women had access to and control over smaller arable plots than men. Using the independent t-test, the researcher tried to establish the magnitude of the gender asset gap using the mean size of arable areas cultivated by men and
women in A1 schemes. The t-test showed that no gender asset gap existed in terms of the average arable area cultivated by men and women. The second hypothesis tested if women had access to land rights on farm holdings with worse soil types than men. Using the chi-square test of independence between the predominant type of soil and sex of the farm holder, the researcher found that men and women had access to the same type of soil. The difference in soil types depends on the agro-ecological region. The fieldwork in Goromonzi District showed that for successful applicants, the allocation of plots was done through a random process which “diminished” any likelihood of bias in the allocation of plots between men and women.

5.3 Conclusion

The analysis of the findings did not support the hypotheses developed in Chapter One. Subsections 5.3.1 to 5.3.3 present the major conclusions from the thesis.

5.3.1 Women were not neglected under the FTLRP

For the first hypothesis, there was no evidence that women were discriminated against under the FTLRP. Instead, there was a modest increase in women’s rights to land through three avenues: as individuals, joint registration of offer letters with their husbands (though not very significant) and inheritance. The fact that married women in resettlement areas had access to land through joint registration of offer letters with their husbands showed that their land rights were qualitatively different from those of their counterparts in the communal areas where married women have secondary rights to land through their husbands or male relatives. Women enjoyed the same land rights as men in A1 resettlement schemes. The study did not find discrimination against women in the distribution of land rights when the predominant type of soil on the farm
holding was used as the parameter. This was because for successful applicants, the allocation of A1 plots was through a random process.

5.3.2 Determinants of Security of Women’s Land Rights

The second and third hypotheses sought to establish the determinants of the security of women’s land rights in A1 schemes. The study found that intra-household factors (marital status, level of education, household size, age of household head and number of males or females in each household) were not significant determinants of women’s land rights in A1 schemes. Instead, extra-household factors such as the method used to make beneficiaries aware about the FTLRP, the size of arable area cultivated and provincial differentials of male and female beneficiaries determined the probability of women’s land holding. Social assets were a strong determinant of women’s land rights in A1 resettlement areas. This was attributed to the political environment under which the FTLRP was undertaken. Evidence from the baseline survey and fieldwork in Goromonzi District showed that belonging to ZANU-PF guaranteed one’s access to land in A1 schemes. This means that the socio-political environment cannot be ignored when analysing the acquisition of land under the FTLRP. The provincial variations in the number of women allocated land under the FTLRP can be attributed to a number of factors: the predominant method of land acquisition used in the province; the demographic composition of war veterans spearheading land occupations in the province; proximity of the resettlement scheme to urban areas; predominant ethnic group(s) in the province and the strength of socio-cultural institutions in the province. A study of each province would be required to unravel the underlying factors for the differential land distribution patterns by sex.
5.3.3 Closing Gender Asset Gap in Access to Land

Regarding the fourth hypothesis, the researcher did not find evidence of gender asset gap in access to and control over arable lands in A1 schemes in connection with the average arable area allocated to men and women. However, there is no denying that more men than women benefitted under the FTLRP because the government used the household as the beneficiary unit. Although this approach provided female members of the household with access to land, it undermined their bargaining power because Zimbabwe is a predominantly patriarchal society where most households are headed by males. Given that the distribution of land rights between men and women mirrored the distribution of assets, division of labour and decision-making within households, empirical evidence from Goromonzi District depicted an improvement in women’s socio-economic status. Although the gendered relations of production still shaped the division of labour within households, women had equal status in decision-making on crop production and acquisition and disposal of livestock as well as household and productive assets.

The above findings provide useful information to policy makers on how to address the complex issues related to gender, household welfare and poverty reduction, women empowerment and agricultural development. The following section presents the research’s contributions.

5.4 Research’s Contributions

The research’s contributions are divided into three, namely, theoretical, methodological and practical contributions.
5.4.1 Theoretical Contributions

The theoretical contributions of the thesis can be divided into two categories. One is the interpretation of the works of Lundberg and Pollack (1993, 1996) into the field of household economics and Agarwal’s (2003) analytical description approach in examining the household welfare, agricultural development and women empowerment. The other is the thesis’ contribution to knowledge on the discourse of the impact of the FTLRP on gender relations and the distribution of land rights in resettlement areas. The interpretation of Lundberg and Pollack (1993, 1996) can be considered a theoretical contribution since the researcher’s interpretation of their work and the economic household portfolio model on land acquisition and utilisation developed by the researcher can be used when designing land redistribution programmes. Both theory and findings from this research make contributions to understanding how gendered patterns of land distribution affect the individuals within households.

The findings suggest that there was no discrimination of women and that women had the same land rights as men in A1 schemes. The study did not find evidence of gender asset gap in terms of mean arable area cultivated by men and women although more males than females benefitted under the FTLRP. More women received land through two main avenues, namely, as individuals, and through joint registration of offer letters with their husbands. In addition, the study found that an increasing number of women were obtaining land through inheritance. The research’s findings also suggested that extra-household factors influenced women’s access to and control over land in A1 schemes. These factors included, the method used to make beneficiaries aware about the FTLRP, size of arable area cultivated and provincial differentials in the number of men and women who obtained land. However, if there was discrimination in the selection of land beneficiaries in A1 schemes, then that could have been along political party lines including
some men. Further research would be required to ascertain the extent of this form of discrimination.

The researcher developed an economic household portfolio model on land acquisition and utilisation on the basis of the intra-household economic models and Agarwal’s (2003) analytical description approach to household welfare, agricultural development and women empowerment. This framework was used to collect data and later to make analyses of the findings of the survey and case study. The researcher modified this framework during data analysis to reflect the predominance of extra-household factors in influencing land rights in A1 schemes.

The proposed household economic portfolio model on land acquisition and utilisation can be used in social sciences to study asset distribution within households. On its own, the model may not be sufficient to explain the complexities of gender relations within and outside farming households. However, the model may be used by researchers as a starting point to explore the dynamics of gender and power relations over household assets between married partners.

5.4.2 Methodological Contributions

The contribution of this thesis to research methodology is related to the contributions of the theory. The survey and case study showed how to apply the theory and the framework developed with the type of data required studying the distribution of land between men and women in A1 resettlement areas. This was consistent with the advice of Bryman (2006) who stated that the choice of a mixed method design should be informed by a theoretical and conceptual orientation of the study. It is the researcher’s conviction that this research can be replicated using MMR and
data collection techniques discussed in Chapter Three. Given the complexities of gender, it was only appropriate that MMR was adopted in order to study the phenomenon from different perspectives, angles and levels. Previous studies (Chingarande, 2008; Gaidzanwa, 2011; Pasura, 2010; UNDP, 2002) on the impact of the FTLRP on gender used anecdotal qualitative research. On the other hand, neo-classical economic research is based on the epistemology of natural sciences and methodological monism (Dusek, 2008). Methodological monism means that theories are couched in mathematical forms in economics and that only statistically measurable variables are considered important in econometrics (ibid). This thesis has demonstrated that the use of multi-method approach helped to study the phenomenon from different angles and improved on policy prescriptions. The researcher is however cognisant of the fact that mixed methodology design is the most problematic (Schulze, 2003) since it may combine the two paradigms of quantitative and qualitative research in ways that are unacceptable to some scholars.

In this thesis, the researcher used the realist paradigm. The realist paradigm is consistent with a combination of quantitative and qualitative research methods (Creswell, 2009; Hammersley, 1990; Healy and Perry, 2000; Silverman, 2001) and allows the use of interviews (structured or unstructured) as are statistical analyses including regression analysis (Strauss, 2005). A variable-oriented baseline survey data set was used in conjunction with a case study conducted in Goromonzi District. The baseline survey was broad and produced generalisable trends in the distribution of land between men and women while the case study provided an in-depth and contextual picture of the phenomenon under study. The case study provided the researcher with a deeper understanding of the processes of the FTLRP and lived experiences of A1 farmers. By
combining a broad baseline survey and in-depth case study, the thesis added a moral angle to a pluralist approach to development economics.

5.4.3  Practical Contributions

The practical contributions of the thesis emanate from both the theory and findings from the survey and the case study conducted in Goromonzi District. The study established the major determinants of women’s land rights using econometric modelling and estimated the gender-land gap using statistical analysis in A1 resettlement areas. The research’s findings can be generalised to infer to the underlying population of similar A1 schemes since survey data were deployed.

In determining how to incorporate and mainstream gender in asset distribution programmes, policy makers could use the framework of the household economic portfolio model on land acquisition and utilisation before deciding the number of beneficiaries in each programme. The framework would help to identify structural inequalities and factors that constrain equal access to and control over assets between men and women. Using gender analysis in the distribution of assets including land between men and women would help to understand the ensuing intra-household relations and expose gender-specific barriers which may prevent women and men from benefiting equally from development programmes. It is the researcher’s considered view that unless these barriers are identified and addressed during the conception, design and planning process of the development programmes, the benefits would not be shared equally between men and women, boys and girls. This would not augur well for the country’s sustainable development since gender is a developmental issue.
The proposed economic household portfolio model on land acquisition and utilisation would help the government to mainstream gender in the planning, design, implementation and evaluation of asset redistribution programmes. It is the researcher’s considered view that identifying and addressing gender-based constraints to resource access can lead to a virtuous development cycle where women’s increased livelihood economic opportunities may lead to improved overall development outcomes. These development outcomes include enhanced gender equality, improved household welfare and increased efficiency in agricultural production and investment. The model would form the basis for structural analysis and policy evaluation of asset redistribution programmes such as land reform, privatisation and economic empowerment. More specifically, the research’s findings would contribute to the debate on how to mainstream gender on the proposed land tenure and land use policy reforms.

5.5 Weaknesses of the Research Approach: Research Design

In MMR, a number of methodological challenges arise due to the inherent complexities in mixed method design. Given that multiple forms of data are collected and analysed, MMR requires extensive time and resources (Johnson et al., 2007). There are challenges specific to the concurrent designs (merging quantitative and qualitative research) that include having adequate sample sizes for analyses, using comparable samples and employing a consistent unit of analysis across the databases (ibid). The researcher used the household as the unit of analysis for both the survey and case study. The samples of the survey and case study however, were not of comparable sizes. Financial and time constraints prohibited the researcher from studying more cases of A1 schemes in the different provinces. This could have unravelled the factors underlying differentials in the number of women beneficiaries in the provinces. The data for the
survey and case study were collected from AI schemes and hence were comparable. Notwithstanding the above, a sample of 37 participants for the case study is statistically significant and was able to produce credible results.

The third challenge related to data analysis and interpretation. Given that a concurrent design was used, findings from the survey and case study sometimes conflicted and a strategy of resolving the differences needed to be considered. Johnson et al., (2007) identified three options namely, gathering more data, revisiting the databases and presenting the conflicting results. In this study, the researcher followed the advice of Bryman (2006) of presenting the conflicting results so that further research can be pursued on the divergent views.

Fuentes and Wiig (2009) observed that getting an accurate scope of the gender asset gap was difficult due to the lack of sex-disaggregated data. It has been and continues to be the norm to consider agriculture a male activity. In Peru, Deere and Leon (2003) found that the design of agricultural surveys did not include the variable sex on the questionnaires when asking for whom the plots belonged to. Fortunately for this study, the baseline survey from AIAS was disaggregated by sex. However, there are some conceptual issues in disentangling assets between married partners. This difficulty may have limited the effectiveness of the study in analysing the land rights actually enjoyed by married women.

Feder et al., (1998) identified formidable methodological challenges that have hampered the testing of hypothesis derived from the property rights framework in empirical work. For example, variables such as wealth, education and quality of land cultivated may present problems since they defer among smallholder farmers depending on the different tenure
conditions existing across households. Correlated attributes further included different cultural traditions and cognitive dispositions as well as differences in the ability to manipulate bureaucratic institutions. These systematic differences may have introduced selectivity biases in any attempt to isolate the independent effects of independent variables on landholding in A1 resettlement areas. Econometric models should control for variables such as topography, time in residence, time in marriage as well as socio-economic background of the landholders because they determine the type of registration of the A1 farm holding.

Another issue in this study was how to deal with researcher bias. Given that the FTLRP evoked strong emotions among Zimbabweans, the researcher had his own judgements about the programme and A1 farmers. In addition, the research involved disaggregating assets within farming households and for the researcher to do that without being involved was impossible. Although for this study access to and first hand understanding of A1 farmers and their lived experiences of the FTLRP were more important than researcher bias, some strategies to contain it needed to be devised. First, the researcher bias was contained through the use of both quantitative and qualitative data. The use of quantitative data meant that facts were reported as they are (Marongwe, 2008). Second, in order to ensure self reflection during data collection, the researcher identified and wrote down any feelings, preconceptions and assumptions or beliefs he had about the FTLRP.

5.6 Recommendations

The following specific recommendations are forwarded:
• Collection of individual level asset ownership data is important for evaluating and understanding how benefits of development programmes are shared between men and women.

• Allocation of land under the land reform should focus on individuals within households. This requires clear mechanisms during the land reform programme design, planning and appraisal to ensure equitable beneficial distribution between men and women.

• Training on gender analysis and participatory gender planning should be carried out at all levels of government for those directly involved in the design, planning and implementation of the land reform programme. The training should also involve community development officers.

• Legal recognition of dual-headed households in any asset redistribution programmes like land reform, privatisation and economic empowerment. This requires joint registration of family land in the names of spouses and all dependent children. The offer letter should have a section for Plot Holder(s) which would encourage land beneficiaries to put names of both spouses on the farm document.

• Methods should be devised to inform women about their land rights and the avenues through which these rights can be enforced. These awareness and sensitisation activities would be effective and even more if they involve men.

• There is need for effective women representation in district and village land committees.

• In order to understand the impact of inheritance on gender land gap, surveys should trace the origins of inherited assets.

• The proposed land policy reform should focus on land titling so as to promote agricultural production efficiency and investment. This would provide security of tenure to the farmers and promote the development of an active land market. The land tenure
system should take into account issues of marriage and inheritance to avoid problems associated with land market and credit access to smallholder farmers.

- The residence element of A1 farmers is necessary to promote agricultural production and investment. Beneficiaries of the FTLRP should either resign from wage employment or they relinquish their plots. For those who choose to resign, the government should provide them with incentives in the form of inputs and seed for a fixed number of years.

5.7 Future Research Directions

Offer letters provide security to women’s land rights during the subsistence of the marriage. It might be interesting to know if the offer letter would guarantee women’s land rights in the event of divorce, abandonment or migration of the husband. Related to this is the distribution of land in polygamous marriages. What are the rights of the individual spouses in polygamy? How would the farm holding be distributed in the event of divorce of one of the wives or both? The offer letter protects land rights of a maximum of two wives and three legitimate children and is silent on how the farm holding should be distributed to the widows in the event of the death of the husband. Another area that needs further research is the impact of off-farm residence of A1 farmers on agricultural production and investment. The study had also sought to assess land use patterns in terms of agricultural infrastructure particularly irrigation between men and women. By completing this thesis, the researcher has not addressed this objective due to the unavailability of data. Further research may be undertaken towards finding out if women have less access to irrigation than men. Were some women discriminated along political lines? Further research will be required to confirm or refute such discrimination. Lastly, the researcher believes that the proposed household economic portfolio model on land acquisition and utilisation needs further development if it is to be used as a tool for analysing the distribution of land between
married partners. The researcher hopes that the evaluation of the distribution of assets including land would be just the beginning and constitutes a basis for further related research in terms of its contributions and insights.

5.8 Chapter Summary

The chapter provided a summary of the main findings and overall conclusion of the thesis. The study showed that the distribution of land under the FTLRP was not gender-based. Extra-household factors such as social assets had significant effect on the distribution of land between men and women in A1 resettlement areas. The chapter also presented specific policy recommendations on women empowerment through land reform and future research directions.
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APPENDICES
APPENDIX I

QUESTIONNAIRE FOR A1 FARMERS IN GOROMONZI DISTRICT, ZIMBABWE

Questionnaire No.: A1_____

Interviewer: .................................................................

Date of Interview: ................................................................

Time: ..............................................................................

District: ............................................................................

Area: ................................................................................

INTRODUCTION
My name is Tavonga Njaya. I am a Doctor of Philosophy candidate pursuing a Doctor of Philosophy in Development Economics at the Zimbabwe Open University.
I am carrying out a research on the distribution of land between men and women in A1 resettlement areas in Zimbabwe. It is hoped that the results of the research would influence policy on intra-household distribution of assets including land between men and women.

The objective of this questionnaire is to solicit your views and perceptions on the distribution of land between men and women in A1 resettlement areas. To this end, I kindly request you to spare approximately 15 -20 minutes to complete the questionnaire. Although your response is of utmost importance to me, your participation in this survey is entirely voluntary.

Your name or contact details are not required on this questionnaire and will remain anonymous. All information you give shall remain confidential and will be reported in summary format only. Feel free, therefore, to give as much information as possible in order to make this study a success. Your input and insights are gratefully acknowledged in anticipation.

SECTION A: HOUSEHOLD DEMOGRAPHICS

1. Please tell me a little about yourself.

   Sex   Male   Female

   Age
   Below 20yrs   21-30yrs   31-40yrs   41-50yrs   51-60yrs   above 60yrs
   □           □          □        □          □           □

   Marital Status
   Single    Married    Divorced    Widowed    Other
   □          □          □          □            □
2. How big is your household? [people]

3. What is your highest educational qualification to date?

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Tick(✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Seven</td>
<td></td>
</tr>
<tr>
<td>Zimbabwe Junior Certificate</td>
<td></td>
</tr>
<tr>
<td>Ordinary Level</td>
<td></td>
</tr>
<tr>
<td>Advanced Level</td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td></td>
</tr>
<tr>
<td>Degree</td>
<td></td>
</tr>
<tr>
<td>Other(s)</td>
<td></td>
</tr>
</tbody>
</table>

If other(s), please specify ………………………………………………………………………………………………………

4. What is your highest agricultural training to date?

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Tick(✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Farmer</td>
<td></td>
</tr>
<tr>
<td>Certificate in Agriculture</td>
<td></td>
</tr>
<tr>
<td>Diploma in Agriculture</td>
<td></td>
</tr>
<tr>
<td>Degree in Agriculture</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

If other, please specify ………………………………………………………………………………………………………

5. What is your agricultural experience?

- Below 5 years
- 6-10 years
- 11-15 years
- 16-20 years
- Over 20 years

SECTION B: A1 FARMERS’ PERCEPTIONS ON AND EXPERIENCES WITH THE FAST TRACK LAND REFORM PROGRAMME

1. How did you become aware of the fast track land reform programme?

<table>
<thead>
<tr>
<th>Channel</th>
<th>Tick(✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media (print or electronic)</td>
<td></td>
</tr>
<tr>
<td>Traditional leadership (chief, headman etc)</td>
<td></td>
</tr>
<tr>
<td>Local political leadership (councillor, local MP etc)</td>
<td></td>
</tr>
<tr>
<td>Church Leader(s)</td>
<td></td>
</tr>
<tr>
<td>Relative or friend</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

If other, please specify ………………………………………………………………………………………………………

…………………………………………………………………………………………………………………………………………

2. What was your main occupation before being allocated this farm holding?
### Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Tick(✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communal farmer</td>
<td></td>
</tr>
<tr>
<td>Worker in urban area</td>
<td></td>
</tr>
<tr>
<td>Civil Servant</td>
<td></td>
</tr>
<tr>
<td>Security Services</td>
<td></td>
</tr>
<tr>
<td>Business person</td>
<td></td>
</tr>
<tr>
<td>Former farm worker</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

If other, please specify ………………………………………………………………………………………………………………………………………………………………………

3. Are you a full time farmer?  Yes [ ]  No [ ]

If no, please specify nature of off-farm employment…………………………………………………………………………………………………………………………………………………………………………………………………..

4. Has your asset-holding increased as a result of the fast track land reform programme?

   Yes [ ]  No [ ]

If yes, which assets did you acquire after the fast track land reform programme which you could not acquire before?

…………………………………………………………………………………………………………………………………………………………………………………………………..

If no, why………………………………………………………………………………………………………………...

…………………………………………………………………………………………………………………………………………………………………………………………

5. How would you classify the soil quality of your farm holding?

<table>
<thead>
<tr>
<th>Very Good</th>
<th>Good</th>
<th>Average</th>
<th>Bad</th>
<th>Very bad</th>
</tr>
</thead>
</table>

### SECTION C: A1 FARMERS’ PERCEPTIONS AND BELIEFS ON GENDER RELATIONS ON LAND

1. Should there be individual land rights between men and women?  Yes [ ]  No [ ]

Briefly explain your answer……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………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3. In your view, what should be done to promote gender equality in access to and control over land?

SECTION D: INTRA-HOUSEHOLD ASSET DISTRIBUTION IN A1 RESETTLEMENT AREAS

1. What type of house (with roof type) does your household own?
   - Thatch
   - Improved thatch
   - Zinc
   - Asbestos
   - Pole and dugga
   - Other

   If other, please specify….

2. Which of the following assets does your household own?

<table>
<thead>
<tr>
<th>Asset(s)</th>
<th>Tick(✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycle</td>
<td></td>
</tr>
<tr>
<td>Motor cycle</td>
<td></td>
</tr>
<tr>
<td>Motor vehicle</td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td></td>
</tr>
<tr>
<td>TV set</td>
<td></td>
</tr>
<tr>
<td>Refrigerator</td>
<td></td>
</tr>
<tr>
<td>Sewing machine</td>
<td></td>
</tr>
<tr>
<td>Table and chairs</td>
<td></td>
</tr>
<tr>
<td>Sofas</td>
<td></td>
</tr>
<tr>
<td>Bed and mattress</td>
<td></td>
</tr>
<tr>
<td>Utensils</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

   Who decides acquisition and disposal of the above household assets?
   - Husband
   - Wife
   - Joint
   - Other

   If other, please specify….

3. Please indicate the type of farm holding your household owns.

<table>
<thead>
<tr>
<th>Land type</th>
<th>Tick(✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 villagised</td>
<td></td>
</tr>
<tr>
<td>A1 self-contained</td>
<td></td>
</tr>
</tbody>
</table>

4. How big is your farm holding? Ha

5. What type of tenure do you have on this farm holding?

   - Title deeds
   - Leasing
   - Inherited
   - Sub-Letting
   - Permit
   - None

   If none, please explain your status on the farm holding and how you acquired it.

6. In whose name is the farm document in 3 above?
7. Which of the following productive assets does your household own?

<table>
<thead>
<tr>
<th>Asset(s)</th>
<th>Tick(✓)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ox cultivator</td>
<td></td>
</tr>
<tr>
<td>Ox plough</td>
<td></td>
</tr>
<tr>
<td>Ox cart</td>
<td></td>
</tr>
<tr>
<td>Ox harrow</td>
<td></td>
</tr>
<tr>
<td>Ox ridger</td>
<td></td>
</tr>
<tr>
<td>Tractor</td>
<td></td>
</tr>
<tr>
<td>Tractor implements</td>
<td></td>
</tr>
<tr>
<td>Lorry</td>
<td></td>
</tr>
<tr>
<td>Wheelbarrow</td>
<td></td>
</tr>
<tr>
<td>Agricultural equipment (e.g. hoe, shovel, sickle etc)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

If other, please specify………………………………………………………………………………………

Who decides on the acquisition and disposal of the above productive assets?

Husband  □  Wife  □  Joint  □  Either husband or wife  □  Other  □

If other, please specify……………………………………………………………………………………

8. Do you use irrigation on this farm?  Yes  □  No  □

9. How many of the following livestock does your household own?

<table>
<thead>
<tr>
<th>Asset(s)</th>
<th>Total Number</th>
<th>Husband</th>
<th>Wife</th>
<th>Joint</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goats</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pigs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donkeys</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chicken</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fowls</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheep</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ducks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If other, please specify……………………………………………………………………………………

Who decides on the acquisition and disposal of the above livestock?

Husband  □  Wife  □  Joint  □  Either husband or wife  □  Other  □

If other, please specify……………………………………………………………………………………
10. Please indicate the types of crops grown on your farm holding.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Tick(√)</th>
<th>Cash or Subsistence</th>
<th>Hectares</th>
<th>Husband</th>
<th>Wife</th>
<th>Joint</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maize</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cotton</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mhunga</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rapoko</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sorghum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groundnuts (Nzungu)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roundnuts (Nyimo)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soya Beans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutrition garden(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

If other, please specify…………………………………………………………………………………………………………………………

11. Do you sometimes apply for loans from the banks?  
   Yes ☐  No ☐

   If yes, in whose name is the loan?…………………………………………………………………………………………………………………………

12. Do you have contact with agricultural extension activities?  
   Yes ☐  No ☐

   If no, please explain why………………………………………………………………………………………………………………………………
SECTION E: INTRA-HOUSEHOLD DIVISION OF LABOUR AND DECISION MAKING

1. Please indicate who in the household undertakes the following activities.

<table>
<thead>
<tr>
<th>Type of work (Task)</th>
<th>Husband</th>
<th>Wife</th>
<th>Boys</th>
<th>Girls</th>
<th>Community</th>
<th>Hired labour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Land preparation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weeding /hoeing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application of pesticides</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvesting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selling agricultural produce to the market</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tending livestock</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household chores (cooking, collecting firewood, water etc)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bee harvesting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mushroom harvesting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gathering wild fruits e.g. mazhanje</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. How much time do you spend on agricultural activities (per day)?

- [ ] 0-2 hrs
- [ ] 3-4hrs
- [ ] 5-6hrs
- [ ] More than 7 hrs

3. Who collects the money from the sale of agricultural produce?

- [ ] Husband
- [ ] Wife (Wives)
- [ ] Both Husband and Wife
- [ ] Either husband or wife
- [ ] Other

If other, please specify…………………………………………………………………………………………………………………………

4. Who decides on the use of the money from agricultural produce?

- [ ] Husband
- [ ] Wife (Wives)
- [ ] Both Husband and Wife
- [ ] Either husband or wife
- [ ] Other

If other, please specify…………………………………………………………………………………………………………………………

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SECTION F: INTRA-HOUSEHOLD CONFLICT OVER LAND IN A1 RESETTLEMENT AREAS

1. Have you been involved in any land conflict(s)? Yes ☐ No ☐

2. If yes, with whom have you had conflict(s) over land? .............................................................................................................

3. What was the source of the land conflict(s)? .........................................................................................................................

4. How was the conflict resolved?
.........................................................................................................................

THANK YOU VERY MUCH FOR YOUR TIME

Prepared by: Tavonga Njaya DPhil candidate, Zimbabwe Open University

Edited by: Dr. Lighton Dube Senior Lecturer, Zimbabwe Open University

Dr. Timothy Musankulen Kaputa Senior Lecturer, Zimbabwe Open University

and

Dr. Donald P. ChimaniKire Supervisor, University of Zimbabwe
Appendix II
Letter of introduction from the Director of Higher Degrees Directorate

ZIMBABWE OPEN UNIVERSITY

Ref: HD/16
13 February 2013

To Whom It May Concern

The bearer, Mr T. Njaya (P1036748M), Directorate Reference D/JAN/09/11/23 is a bonafide candidate of the Doctor of Philosophy Degree in Economics carrying out a research entitled:

AN ECONOMIC INTRA-HOUSEHOLD MODEL ON THE DISTRIBUTION OF LAND BETWEEN MEN AND WOMEN IN A1 RESETTLEMENT AREAS IN ZIMBABWE, 2000-2002

Any assistance offered to him to facilitate his research work will be most appreciated.

Dr A.S. Chikasha
Director, Higher Degrees

P. O. Box MP1119, Mount Pleasant, Harare, Zimbabwe
4th Floor, Stanley House, Jason Moyo/1st Street
Telephone Nos: +263-4-793002-9
Appendix III
Clearance letter from Goromonzi District Administrator

14 February 2013

TO WHOM IT MAY CONCERN

Re: CONFIRMATION LETTER FOR MR T NJAYA

This letter serves to confirm that Mr T Njaya is a candidate at ZOU University doing Doctorate in Philosophy Degree in Economics. The aforementioned cadre is undertaking a research on the distribution of land between men and women especially in A1 farms in ward 17 and 20.

Please kindly assist him with relevant information pertaining to his research.

Your usual cooperation is greatly appreciated.

Mateta V
For: DISTRICT ADMINISTRATOR: GOROMONZI

DISTRICT ADMINISTRATOR
P.O. BOX 43, GOROMONZI
ZIMBABWE

14 FEB 2013
APPENDIX IV
Interview Schedules for Key Informants

INTRODUCTION
My name is Tavonga Njaya. I am a Doctor of Philosophy candidate pursuing a Doctor of Philosophy in Development Economics at the Zimbabwe Open University.
I am carrying out a research on the distribution of land between men and women in A1 resettlement areas in Zimbabwe. It is hoped that the results of the research would influence policy on intra-household distribution of assets including land between men and women.
The objective of this questionnaire is to solicit your views and perceptions on and experiences with the fast track land reform programme and in particular the distribution of land between men and women in A1 resettlement areas. To this end, I kindly request you to spare approximately 30 minutes to answer my questions. Although your response is of utmost importance to me, your participation in this survey is entirely voluntary.
All information you give shall remain confidential and will be reported in summary format only. Your input and insights are gratefully acknowledged.

Section A: District Administrator and District Lands Officer, Goromonzi District
1. Why did the government embark on the Fast Track Land Reform Programme?
2. How did the government make people aware of the Fast Track Land Reform Programme?
3. Who were the target beneficiaries of the Fast Track Land Reform Programme?
4. What models of settlement were adopted here in Goromonzi District?
   • With reference to the A1 model: Who identified the beneficiaries? What criteria (if any) were used to identify the beneficiaries?
   • Are there any A1 self-contained farms in Goromonzi District?
5. Please tell me how offer letters were issued to the beneficiaries.
   • What documentation or information was required before an A1 farmer was issued with an offer letter?
   • Besides the beneficiary, who else is included on an offer letter? What is the status of these people?
   • Please explain what happens to an A1 farm holding if the permit holder dies.
6. What legislation governs or regulates tenure issues in A1 resettlement areas? Can an offer letter be used in courts of law? How are conflicts over land resolved in A1 resettlement areas?

7. Can an offer letter be ceded with a bank as collateral security when borrowing money?

8. Was gender an issue during the conception and subsequent implementation of the Fast Track Land Reform Programme? If so, what proportion was reserved for women? If not why?

9. Do you think there is gender balance in the distribution of land in A1 resettlement areas? Please explain your answer.

10. How many LSCFs are remaining in Goromonzi district?

Section B: Ministry of Women Affairs, Gender and Community Development

1. Please give me a brief background to your Ministry.

2. Please tell me about Zimbabwe’s Gender Policy.

3. What role did your Ministry play (if any) during the distribution of land under the Fast Track Land Reform Programme?

4. Do you think there is gender balance in the distribution of land in A1 resettlement areas? Please explain your answer.

Section C: Headman, Headwoman and Committee of Seven

1. Please give me the background to the identification and occupation of Bains Hope by land hungry people. What groups of people were involved and under whose leadership?

2. What was the relationship like between the occupiers and the farm owner?

3. How were roles allocated between men and women during the occupation of Bains Hope farm?

4. After the farm had been surveyed and demarcated, how were the plots allocated to the beneficiaries?

5. Who was conducting the allocation of plots?

6. How long did it take to get offer letters?

7. Were there any land disputes during the initial stages? How were these disputes (if any) resolved and by whom?
8. Do you think there is gender balance in the distribution of land in A1 resettlement areas? Please explain your answer.

Section D: Zimbabwe Women Resource Centre and Network (ZWRCN)

1. Please give me a brief background of ZWRCN.
2. What is the role of ZWRCN in Zimbabwe?
3. From your own research and investigations from other organisations, what can be said about the status of asset (in particular, land) distribution between men and women in A1 resettlement areas?
4. Were you involved in any advocacy work on gender equality in land access prior to the launch of the FTLRP? If yes, were your concerns and/or recommendations taken by the government? If not what could have been the reasons?
5. What are your recommendations on the way forward?

Section E: Farm Worker at Bains Hope

1. Please tell me the name of the former owner of Bains Hope Farm.
2. Where did he/she come from?
3. Please tell me the major farming activities at Bains Hope prior to 2000.
   - If crop cultivation, please list the crops grown.
   - If livestock rearing, please list the type of animals kept.
4. How many farm workers did he employ?
5. For how long did you work at this farm?
6. Please explain how this farm was occupied and subsequently allocated to A1 farmers.
7. What role did you play during the farm occupation?
8. Did you apply for land under the fast track land reform programme?
   - If yes, what do you think could have contributed to you being unsuccessful?
   - If no, why did you not apply?
### Section F: Specific Key Informant Interview Schedules

<table>
<thead>
<tr>
<th>Key Informant</th>
<th>Organisation</th>
<th>Date and Place of Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender Officer</td>
<td>Ministry of Women Affairs, Gender and Community Development</td>
<td>February 2013, Harare</td>
</tr>
<tr>
<td>Information Officer</td>
<td>Zimbabwe Women Resource Centre and Network</td>
<td>February 2013, Harare</td>
</tr>
<tr>
<td>Goromonzi District Administrator</td>
<td>Ministry of Local Government, Rural and Urban Development</td>
<td>March 2013, Goromonzi</td>
</tr>
<tr>
<td>Village Headman (Ingwenya), Village Headwoman (Bains Hope)</td>
<td>Ministry of Local Government, Rural and Urban Development</td>
<td>March 2013, Goromonzi</td>
</tr>
<tr>
<td>Committee of Seven</td>
<td></td>
<td>March 2013, Goromonzi</td>
</tr>
<tr>
<td>District Lands Officer</td>
<td>Ministry of Lands, Land Reform and Rural Resettlement</td>
<td>March 2013, Goromonzi</td>
</tr>
<tr>
<td>Former Farm Worker, Bains Hope</td>
<td></td>
<td>March 2013, Goromonzi</td>
</tr>
</tbody>
</table>

**Prepared by:** Tavonga Njaya  
**DPhil candidate, Zimbabwe Open University**

**Edited by:** Dr. Donald P. Chimanikire  
**Supervisor, University of Zimbabwe**
APPENDIX V

Sample Invitation Letter for Focus Group Participants

Dear Sir/Madam

My name is Tavonga Njaya. I am a Doctor of Philosophy candidate pursuing a Doctor of Philosophy in Development Economics at the Zimbabwe Open University.

I am carrying out a research on the distribution of land between men and women in A1 resettlement areas in Zimbabwe. In my study, Goromonzi District has been selected as a case study area. It is hoped that the results of the research upon publication would influence policy on intra-household distribution of assets including land between men and women.

As part of the study, I want to understand men’s and women’s experiences with the fast track land reform programme and their views on the distribution of assets including land between men and women in A1 resettlement areas.

I cordially invite you to join other A1 farmers in a focus group to discuss about this issue. Information collected will be treated with strict confidentiality.

The time and location of the focus group session is shown below.

Date: 
Time: 
Location: 

The group will consist of about eight other A1 farmers and a moderator. Refreshments will be served during the discussion.

Please send me a “Call me back” on 0772-969-719 so that I can phone you to know if you will be able to join us for this focus group.

Yours sincerely

Tavonga Njaya
APPENDIX VI
Focus Group Schedule for A1 farmers in Baines Hope and Ingwenya: Goromonzi District

1.0 Introduction by the Moderator
Hello everyone. My name is Beverley Dorcus Maboyi. I would like to start off by thanking all of you for taking time to come and take part in this focus group session. Our discussion will last for about an hour.

Ladies/Gentleman, the reason we are gathered here today is to understand your experiences with the fast track land reform programme and your views, opinions and attitudes about the distribution of assets including land between men and women in A1 resettlement areas. This is part of a research on the distribution of land between men and women in A1 resettlement areas in Zimbabwe. Goromonzi District was selected as a case study area because of its relative proximity to the researcher. It is hoped that the results of the research upon publication would influence policy on intra-household distribution of assets including land between men and women.

I am going to lead the discussion. My job is to ask questions and then encourage and moderate the discussion. I am not here to convince you of anything or try to sway your opinion. I would also like to introduce to you Tavonga Njaya who is carrying out this research. Today, Tavonga will be audio recording all the proceedings of this focus group session.

2.0 Code of Conduct during the Focus Group Session
In order to allow our discussion to flow smoothly, I would kindly request each of you to observe the following ground rules:

2.1 Only one person may speak at a time.
2.2 We should all speak through the Moderator. Please avoid side conversations.
2.3 You do not have to answer all questions. However, I expect to hear from each of you today as the discussion progresses.
2.4 This is a confidential discussion. Your names and what you say will not be revealed. Fictitious names will be used in the final report. We stress on confidentiality because we want an open discussion and we want all of you to feel free to comment on each other’s remarks without fear.
2.5 There are no “wrong answers” in this discussion but just different opinions.
2.6 Please do not shout others down.
2.7 Please let me know if you need a break.

3.0 Introduction of Participants
Before we start, for the purpose of this discussion, I would like to know a little about each of you. Please tell me:

• your name
• how long you have been in this resettlement area and
• crops you grow on your farm.
4.0 Focus Group Questions

4.1 General Questions

4.1.1 Does everyone here have an A1 farm holding?
The following questions are targeted to individuals in the group:
- How big is your farm?
- Do you have irrigation?

4.1.2 Motivation and Interest for owning the farm: Is owning a farm something you must have just because others have got?
The following questions are targeted to individuals in the group
- Why did you get an A1 farm holding?
- Which person do you know who has not bothered to get a farm but the government offered them one and why?

4.1.3 Who owns more farms between men and women and what are the reasons?

4.2 Specific Questions

4.2.1 In what ways has the fast track land reform programme affected your farming business?

4.2.2 How has the registration of permit or offer letter on the farm holding affected your access to and control over land?

4.2.3 In your view, who (between husband and wife) should have control over land and other assets on the farm and why?

4.2.4 What problems if any, do you think inhibit equal access to credits, inputs or subsidies between men and women in A1 resettlement areas?

4.3 Closing Question

How can gender balance be achieved in the distribution of land between men and women in A1 resettlement areas?

5.0 Closing the Focus Group Session

We have come to the end of our focus group discussion. I would like to thank you once again for coming and talking about gender relations in the distribution of assets including land in A1 resettlement areas. Your comments have given us lots of different perspectives on this issue.

I thank you for your time.

Prepared by: Tavonga Njaya DPhil candidate, Zimbabwe Open University

Edited by: Dr. Lighton Dube Senior Lecturer, Zimbabwe Open University
Dr. Timothy Musankuleni Kaputa and Senior Lecturer, Zimbabwe Open University
Dr. Donald P. Chimanikire Supervisor, University of Zimbabwe
APPENDIX VII

Informed Consent Form for A1 Farmers whom I am inviting to participate in research on the distribution of land between men and women

1.0 Introduction

The Informed Consent Form has two parts namely, general information and certificate of consent for signature if you agree to take part.

2.0 General Information

2.1 Introduction and Purpose

My name is Tavonga Njaya. I am a Doctor of Philosophy candidate pursuing a Doctor of Philosophy in Development Economics at the Zimbabwe Open University.

I am carrying out a research on the distribution of land between men and women in A1 resettlement areas in Zimbabwe. It is hoped that the results of the research would influence policy on intra-household distribution of assets including land between men and women.

I am going to give you information and invite you to be part of this research. There may be some words that you do not understand, please ask me to stop as we go through the information and I will take time to explain.

2.2 Participant Selection

I am inviting all A1 farmers in Goromonzi District to participate in the research on the distribution of land between men and women in A1 resettlement areas in Zimbabwe.

2.3 Voluntary Participation

Your participation in this research is entirely voluntary. It is your choice whether to participate or not.

2.4 Confidentiality

The identity of those participating in the research will remain anonymous and will not be shared with anyone. The information that I collect from this research will be kept confidential. The information about the participant will not be identified by your name but by a number or code.

2.5 Sharing the Results

The results of this research will be published in a refereed journal in order that other interested people may learn from the research.
3.0 Certificate of Consent

I have read the foregoing information or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to take part as a participant in this research and understand that I have the right to withdraw from the research at any time.

Name of participant:____________________________________________________________

Signature of participant:________________________________________________________

Date:______________________________________

Day Month Year

If illiterate

A literate witness must sign (if possible, this person should be selected by the participant and should have no connection to the researcher).

I have witnessed the accurate reading of the Consent Form to the potential participant and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

Name of witness:_______________________________________________________________

Signature of witness:___________________________________________________________

Date:____________________________________

Day Month Year

A copy of this Informed Consent Form has been provided to the participant.

Signature of Researcher:______________________________
Appendix A

Figure A1  Gantt Chart showing time scheduling for the study

Figure A2  A newly built modern house in Bains Hope, Goromonzi District
Figure A3  Livestock owned by A1 farmer in Bains Hope, Goromonzi District

Figure A4  Assets acquired by A1 farmer in Bains Hope, Goromonzi District
Figure A 5  Pigsty in Bains Hope, Goromonzi District

Figure A 6  A1 farmer sitting on baled tobacco in Ingwenya Farm, Goromonzi District
Figure A7  Tobacco Barn in Bains Hope, Goromonzi District
APPENDIX B

Table B 1 Chi-square test of the relationship between category of landholding and availability of offer letter in Mashonaland East Province

<table>
<thead>
<tr>
<th>Do you have an offer letter?</th>
<th>Under whose name is the farm holding registered?</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Household head</td>
<td>Spouse</td>
<td>Joint registration</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Yes (=1)</td>
<td>499 97.7 84.9</td>
<td>10 2.0 90.0</td>
<td>1 0.2 50</td>
<td>1 0.2 100</td>
<td>511 100 84.9</td>
</tr>
<tr>
<td>No (=0)</td>
<td>89 97.8 15.1</td>
<td>1 1.1 9.1</td>
<td>1 1.1 50</td>
<td>0 0.0 0.0</td>
<td>91 100 15.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>588 97.7 100</td>
<td>11 1.8 100</td>
<td>1 0.002 100</td>
<td>1 0.002 100</td>
<td>602 100 100</td>
</tr>
</tbody>
</table>

Pearson Chi-square=2.386 df=3 p=0.496

Table B 2 Chi-square test of the relationship between category of landholding and availability of offer letter in Mashonaland West Province

<table>
<thead>
<tr>
<th>Do you have an offer letter?</th>
<th>Under whose name is the farm holding registered?</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Household head</td>
<td>Spouse</td>
<td>Joint registration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes (=1)</td>
<td>157 87.7 84.4</td>
<td>21 11.7 87.5</td>
<td>1 0.6 100</td>
<td></td>
<td>179 100 84.8</td>
</tr>
<tr>
<td>No (=0)</td>
<td>29 90.6 15.6</td>
<td>3 9.4 12.5</td>
<td>0 0.0 0.0</td>
<td></td>
<td>32 100 15.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>186 88.2 100</td>
<td>24 11.4 100</td>
<td>1 0.004 100</td>
<td></td>
<td>211 100 100</td>
</tr>
</tbody>
</table>

Pearson Chi-square=0.338 df=2 p=0.845

310
Table B 3 Chi-square test of the relationship between category of landholding and availability of offer letter in Masvingo Province

<table>
<thead>
<tr>
<th>Do you have an offer letter?</th>
<th>Under whose name is the farm holding registered?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Household head</td>
<td>Spouse</td>
</tr>
<tr>
<td>Yes (=1)</td>
<td>147</td>
<td>94.8</td>
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<tr>
<td></td>
<td>94.8</td>
<td>3.9</td>
</tr>
<tr>
<td>No (=0)</td>
<td>15</td>
<td>88.2</td>
</tr>
<tr>
<td></td>
<td>88.2</td>
<td>5.9</td>
</tr>
<tr>
<td>Total</td>
<td>162</td>
<td>94.2</td>
</tr>
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</table>

Pearson Chi-square=3.947 df=3 p=0.267

Table B 4 Chi-square test of the relationship between category of landholding and availability of offer letter in Midlands Province

<table>
<thead>
<tr>
<th>Do you have an offer letter?</th>
<th>Under whose name is the farm holding registered?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Household head</td>
<td>Spouse</td>
</tr>
<tr>
<td>Yes (=1)</td>
<td>241</td>
<td>97.6</td>
</tr>
<tr>
<td></td>
<td>97.6</td>
<td>1.2</td>
</tr>
<tr>
<td>No (=0)</td>
<td>111</td>
<td>99.1</td>
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<td></td>
<td>99.1</td>
<td>0.0</td>
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<tr>
<td>Total</td>
<td>352</td>
<td>98.1</td>
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</table>

Pearson Chi-square=1.839 df=3 p=0.607
Table B 5 Chi-square test of the relationship between category of landholding and availability of offer letter in Matabeleland South Province

<table>
<thead>
<tr>
<th>Do you have an offer letter?</th>
<th>Under whose name is the farm holding registered?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Household head</td>
<td>Spouse</td>
</tr>
<tr>
<td>Yes (=1)</td>
<td>27 26.2 93.1</td>
<td>76 73.8 96.2</td>
</tr>
<tr>
<td>No (=0)</td>
<td>2 40 6.9</td>
<td>3 60 3.8</td>
</tr>
<tr>
<td>Total</td>
<td>29 26.9 100</td>
<td>79 73.1 100</td>
</tr>
</tbody>
</table>

Pearson Chi-square=0.461 df=2 p=0.497
Table B 6 Multinomial logistic regression parameter estimates

<table>
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<th></th>
<th>B</th>
<th>SEs</th>
<th>Exp(B)</th>
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<tr>
<td>household head</td>
<td>Intercept</td>
<td>-100.460</td>
<td>77068.282</td>
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<tr>
<td></td>
<td>d4ageown</td>
<td>2.215</td>
<td>32.103</td>
</tr>
<tr>
<td></td>
<td>SpouseAge</td>
<td>.304</td>
<td>59.746</td>
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<td></td>
<td>AraArea</td>
<td>-.207</td>
<td>14.134</td>
</tr>
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<td></td>
<td>HHsize</td>
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