

Development and Differentiation: The Case of TILCOR/ARDA Irrigation Activities in Sanyati (Zimbabwe), 1939 to 2000

By

Mark Nyandoro

A thesis submitted in partial fulfilment of the requirements of the Doctor of Philosophy

Degree in History

in the

Faculty of Humanities
Department of Historical and Heritage Studies
University of Pretoria
Pretoria
2007

Promoter : Prof. I. Phimister Co-promoter : Prof. A. S. Mlambo



"Don't sell the peasant short; he's more malleable than his image suggests, and his ancient ways contain a deal of folk wisdom that foreign innovators must stop scorning and start adapting" - C. M. Arensberg, "Upgrading Peasant Agriculture: Is Tradition the Snag?" 63.

Although "at the core of the world's problems of underdevelopment lies the modernization [sic] of agriculture...the literature available for serious study of this central problem is still very inadequate and in some measure reflects the relative lack of priority [African] farming has suffered in the elaboration of development strategy" – *Economist*, August 22, 1964, 273.



ABSTRACT

Development and Differentiation: The Case of TILCOR/ARDA Irrigation Activities in Sanyati (Zimbabwe), 1939 to 2000

 $\mathbf{B}\mathbf{v}$

Mark Nyandoro

In this study, two rather distinct forms of differentiation are examined, namely class differentiation that was associated with peasant production (1939-1964) and that which manifested itself with the inception of irrigation schemes in the northwestern part of the country in general and Sanyati in particular in the period 1965 to 2000. The study is, thus, divided into two major parts.

Using a case study approach, this work particularly explores and documents the extent to which the twin processes of development and differentiation took place in Sanyati communal lands in Zimbabwe under both dryland and irrigation conditions from the beginning of the Second World War up to 2000. Research on Tribal Trust Land Development Corporation (TILCOR) or Agricultural and Rural Development Authority (ARDA) schemes in Sanyati (Gowe and the Main Estate) reveals that differentiation as a process has been understudied. This is because of the tendency among scholars and government officials alike to construe ARDA schemes as being devoid of any signs of differentiation (i.e. as homogeneous societal entities) mainly because the plotholders (outgrowers) were allocated standardised or uniform sized plots averaging 3,5 ha which they farmed on a tenantry basis. However, this study challenges this basic assumption and argues that both dryland and irrigation farming in Sanyati facilitated commercialisation and the development of significant disparities in wealth among rural households. Clear patterns of socio-economic differentiation also emerge despite the proscribing effects of the Native Land Husbandry Act (NLHA) of 1950 and the adoption in the 1960s of a lease agreement structure by ARDA which in many ways threatened to incapacitate the irrigation plotholders' advance towards accumulation. The lease agreement was the contract outgrowers entered into in order to have the right to use government allocated plots for a specified period of time (i.e. 99-year leases) at all ARDA irrigation schemes in Zimbabwe. Although such state interventionist measures threatened to arrest rural differentiation, the study argues that Sanyati peasants still had abundant initiative to blunt both the colonial and post-colonial states' offensive.

Irrigation has been perceived in state policy circles primarily as a least cost means of famine relief and as a means of settling displaced farmers from Crown Land (government owned land) in the colonial period and other types of land categories after independence. This implies that the government developed schemes in the communal areas mainly on the strength of their social desirability alone. However, this study challenges scholarship which conceives the problem of rural development as no more than moving the rural population from a subsistence economy to a cash economy. It argues that such schemes



as Gowe, on the basis of cotton commodity production, at different stages in the period under review have transcended the social desirability objective and become a source of affluence and economic progress for some innovative and commercially oriented rural farmers. Indeed, the study demonstrates that the introduction of both cotton and irrigation in the 1960s deepened socio-economic inequalities among the plotholding households and dryland farming households in Sanyati.

The important questions the study will answer are:

- 1. What was the state of the peasant economy (based on dryland farming) in Sanyati prior to irrigation?
- 2. How far did peasant differentiation emerge in Sanyati prior to irrigation enterprise?
- 3. Did irrigation facilitate increased production of cotton and other crops as well as increased access to wealth/income?
- 4. To what extent did irrigation agriculture lead to the emergence of rural differentiation in the region?
- 5. Did the state (both colonial and post-colonial) promote rural differentiation?

Thus, the study evaluates peasant (especially dryland) agriculture from 1939 and irrigation farming from the 1960s and analyses how the relationship between ARDA-Sanyati and Gowe has developed since the Unilateral Declaration of Independence (UDI) up to 2000. At the same time, elements of continuity or change in the interaction of the two are addressed within the context of the colonial and post-colonial paradigms in order to demonstrate how Sanyati society was differentiated in the two major periods under review.



DEDICATIONS

This thesis is dedicated to my children, Mark (Jnr), Miranda and Mike who always kept me motivated in their own little ways. I will always remember their prayers. The thesis is also dedicated to my parents Mr and Mrs Nyandoro for bringing me up and directing my academic career.



ACKNOWLEDGEMENTS

I am unable to express in full my gratitude to my Supervisor, Prof. Ian Phimister, for his patient guidance of this study from beginning to end. He painstakingly went through all the drafts of this work and selflessly proffered invaluable advice and criticism as he ploughed through the formative and final versions of the thesis. Prof. Phimister has had the most profound impact on my doctoral studies. I want to extend my heart-felt gratitude to Prof. Phimister for being my Chief Supervisor and for the untiring assistance he has given me all the time. I thank him for his continued support and assistance throughout my research and for his attention to detail. I greatly appreciate the many and in-depth structural suggestions he made which have contributed immensely to giving this study its final shape. Professor Phimister deserves special thanks for his generosity and for the role he has played throughout my research which included ensuring that I secure financial support from the Ernest Oppenheimer Memorial Trust (EOMT) and a bursary from the University of Pretoria. Without him I might not have embarked on a PhD programme in the first place. The possibility of doing a PhD looked extremely remote given the difficulties of getting a sponsor for this project in my home country and other logistical problems. I am grateful to him for his encouragement, support and advice throughout this project.

I also owe a debt of gratitude to my Associate Supervisor, Prof. A. S. Mlambo, for going through all the drafts and making extensive editorial comments on them. Special thanks are due to him. His advice and guidance has been invaluable.

I would like to thank Prof. J. S. Bergh - Chairman of the Department of Historical and Heritage Studies - for his invaluable advice and for making his door open to me all the time when I needed his help. In a big way, he complemented my supervisors' role by keeping a keen interest in my work and proffered important advice whenever he could. He also played a big role in recommending me for a UP bursary award.

I would like to extend my gratitude to the University of Pretoria for offering me a bursary which catered for my fees for the duration of the programme. Without it this study would not have taken off.

The research leading to the production of this study would not have been possible, neither would it have progressed smoothly without the generous grant, renewable annually for 3 years, obtained from the Ernest Oppenheimer Memorial Trust (EOMT) based in South Africa. I am most grateful to the Trust for availing this grant and in particular, Ms Claire Digby with whom I was in constant contact regarding my financial requirements to cover research expenses, subsistence costs, accommodation and other needs. Ms C. Digby sometimes had to endure a lot of pestering from me for supplementary or top-up support due to runaway inflation in Zimbabwe where the greater part of my research was conducted. I also want to thank her and the Trust most sincerely for availing funds to purchase a printer, which went a long way towards lessening printing costs. I will always be thankful to Oppenheimer for fully funding my research.



My sincere gratitude also goes to all the lecturers in the Department of Historical and Heritage Studies and the Secretary, Mrs T. Van Rensburg. I am also deeply indebted to the many colleagues outside the university environment especially Mr Simon Pazvakavambwa whose rich and diverse knowledge, insight and experience greatly enhanced my own understanding of Zimbabwe's agricultural history, not least irrigation issues.

I would like to thank Dr. A. P. D. Masunungure for helping me formulate the hypothesis for my proposal and his unrelenting commitment in going through my early draft chapters (before his departure for the USA) and in the process making invaluable comments that helped shape this thesis. I also appreciate Prof. Sam Moyo's support and advice.

I am deeply indebted to Bishop Loveless Matarirano Manhango for his advice and spiritual guidance. As a member of the church he leads, I benefited a lot from his unwavering support. I also thank Mai Manhango very much for her kindness and generosity and all my friends for the support they gave me continually.

Many thanks too are due to Mr Malcolm Wallis of the Durban Institute of Technology for his assistance with books and papers on Zimbabwe agriculture. I am grateful to him and his wife (Ruth) for accommodating me in their house in Durban on my way to and on my way back from Ramsgate on the east coast where I had gone to see Mr Westcott (the former DC Gatooma) for an oral interview.

I also owe Ms Fiona Mubvumbi sincere thanks for the time she spent typing and printing the draft first chapter of my thesis as well as Mr Elton Gilbert for allowing me to interview him from his hospital bed at West End Hospital in Harare - a really touching moment for me in my academic career.

To my mate, Peter T. Kurauone, thanks for fixing all the tables and illustrations for me.

Furthermore, I feel a great obligation to all my key informants/respondents. These include, the plotholders on the Gowe Irrigation Scheme, Estate employees, Sanyati dryland farmers, the former DC for Gatooma, R. L. Westcott, for helping me understand how Gowe operated in the colonial period, former and present TILCOR/ARDA Estate management, especially the former General Manager of ARDA, Dr Liberty Mhlanga, who accepted my probings and inquisitiveness with a cheerful good humour and a fore-bearing tolerance.

At ARDA, I want to thank the Chief Executive Officer, Dr. J. Z. Z. Matowanyika, for authorising me to use ARDA Archives and documents in the Records Centre section of the National Archives of Zimbabwe. This research would have relied on limited information had this authority not been granted because the ARDA sources housed there are not yet public archives and this would have compromised the quality of this thesis. I also want to acknowledge the rare assistance I got from the Sanyati Estate Manager, Mr Henry Chiona, and other estate officials who always supported me in their different ways during the course of this project. Mr Chiona in particular gave me access to official



correspondence, which contributed immensely towards giving my study originality. His broad insight about the local community (Sanyati) and ARDA operations in the country in general was extremely beneficial to me.

On the whole, I would like to extend my heart-felt thanks to officials in the Ministry of Lands, Ministry of Agriculture, ARDA, DDF and AGRITEX/AREX officials, the DA's office (Kadoma), staff in the Department of Agricultural Economics at the University of Zimbabwe, staff of the National Archives of Zimbabwe, in particular the Records Centre (RC) Chief Archivist, Mr M. Kanji, and his staff, Parliament of Zimbabwe (POZ) Library staff especially Mr M. Munyoro (the Chief Librarian), and the staff of the University of Zimbabwe Main Library. Staff in the ARDA Library (Harare), History and Economic History Departmental Libraries at the University of Zimbabwe, Institute of Development Studies (IDS) Library at the University of Zimbabwe, Herald Library (Harare), the Surveyor General's office in Harare (especially the Principal Cartographer – Mapping, Mr Andrew Chihute), University of Pretoria Library, UNISA Library, the National Archives of South Africa/Union Archives (NASA/UA) and the Department of Agriculture in Pretoria were all very helpful.

Last but most importantly, this undertaking could not have progressed the way it did without the inspiration and motivation I derived from my wife, Lucy. She and our children Mark Tafadzwa, Florence Miranda and Mike Takudzwa were fantastic in bearing my many months of absence from home (Harare) during my three and half years of study in Pretoria. Even when I was at home, the work I was doing, at times, made me a stranger to my own family as I was always locked up in my study room where the slightest hint of noise made me highly irritable. I, therefore, thank my family for their encouragement and patience with the challenges that inevitably accompany an undertaking of this nature and magnitude especially in a foreign country.

It must be emphasised, though, that the people mentioned above should be absolved from any blame for the errors or shortcomings in the thesis. Unless, otherwise stated, opinions and conclusions expressed in this study are the sole responsibility of the author.



ABBREVIATIONS AND ACRONYMS

AAB Agricultural Assistance Board

ACCOR Associated Chambers of Commerce

ADA Agricultural Development Authority

ADC Agricultural Development Corporation

ADF Agricultural Development Fund/African Development Fund

AFC Agricultural Finance Corporation

AGRIBANK Agricultural Bank of Zimbabwe

AGRITEX Department of Agricultural Technical and Extension Services

ALF Agricultural Loan Fund/African Loan Fund

AMA Agricultural Marketing Authority

AMC Agricultural Marketing Corporation

ANC Assistant Native Commissioner/African National Congress

APAs African Purchase Areas

APLs African Purchase Lands

ARDA Agricultural and Rural Development Authority

AREX Department of Agricultural Research and Extension

ARnI Association of Rhodesian Industries

BIC Bantu Investment Corporation

BP Blood Pressure

BSACo British South Africa Company

BSAP British South Africa Police

CBZ Commercial Bank of Zimbabwe



CCC Cotton Company Committee

CCGA Commercial Cotton Growers Association

CDC Cameroon Development Corporation

CEO Chief Executive Officer

CFU Commercial Farmers Union

CID Criminal Investigations Department

CMB Cotton Marketing Board

CNC Chief Native Commissioner

CONEX Department of Conservation and Extension

COTTCO Cotton Company of Zimbabwe

CP Centre Party

CSC Cold Storage Commission

CTC Cotton Training Centre

DA District Administrator

DANIDA Danish International Development Agency

DC District Commissioner

DDF District Development Fund

DERUDE Department of Rural Development

DEVAG Department of Agricultural Development

DMB Dairy Marketing Board

DZL Dairiboard Zimbabwe Limited

ECGC Empire Cotton Growing Corporation

EEC European Economic Community



ESAP Economic Structural Adjustment Programme

ESC Electricity Supply Commission

EU European Union

FAO Food and Agriculture Organisation

FIF Farm Irrigation Fund

GDP Gross Domestic Product

GM General Manager

GMB Grain Marketing Board

ICC Irrigation Co-ordinating Committee

IDC Industrial Development Corporation

IIMI International Irrigation Management Institute

IMF International Monetary Fund

IMT Irrigation Management Transfer

IWMI International Water Management Institute

LAA Land Apportionment Act

LDO Land Development Officer

MDC Movement for Democratic Change

MEU Mechanical Equipment Unit

MOWD Ministry of Water Development

MP Member of Parliament

MWEA Kenyan Rice Project

NAD Native Affairs Department

NANGO National Association of Non- Governmental Organisations



NASA (UA) National Archives of South Africa (Union Archives)

NAZ (RC) National Archives of Zimbabwe (Records Centre)

NC Native Commissioner

NDF Native Development Fund

NDP National Democratic Party

NFAZ National Farmers' Association of Zimbabwe

NGO Non- Governmental Organisation

NLHA Native Land Husbandry Act

NPAs Native Purchase Areas

NRB Natural Resources Board

NRZ National Railways of Zimbabwe

PC Provincial Commissioner

PDO Primary Development Officer

PICC Provincial Irrigation Co-ordinating Committee

PM Prime Minister

PNC Provincial Native Commissioner

POZ Parliament of Zimbabwe

PTA Parents Teachers Association

RAEO Regional Agriculture Extension Officer

RBZ Reserve Bank of Zimbabwe

RDPU Rural Development Promotion Unit

RF Rhodesia Front

RNFU Rhodesia National Farmers Union



RTA Rhodesian Tobacco Association

SA South Africa

SADC Southern Africa Development Committee

SAP Structural Adjustment Programme

SGB Sudan Gezira Board

SLA Sabi-Limpopo Authority

TILCOR Tribal Trust Land Development Corporation

TTLs Tribal Trust Lands

UANC United African National Congress

UDI Unilateral Declaration of Independence

UK United Kingdom

UN United Nations

UNDP United Nations Development Programme

UNESCO United Nations Educational, Scientific, and Cultural

Organisation

USA United States of America

USAID United States Agency for International Development

VIDCO Village Development Committee

WADCO Ward Development Committee

WB World Bank

WENELA Witwatersrand Native Labour Association

WRMS Water Resources Management Strategy

WTO World Trade Organisation

WUAs Water User Associations



WW2 World War 2

ZANU (PF) Zimbabwe African National Union (Patriotic Front)

ZAPU (PF) Zimbabwe African People's Union (Patriotic Front)

ZBC Zimbabwe Broadcasting Corporation

ZBH Zimbabwe Broadcasting Holdings

ZESA Zimbabwe Electricity Supply Authority

ZFC Zimbabwe Fertiliser Company/Zimbabwe Farmers

Corporation

ZFU Zimbabwe Farmers Union

ZIMACE Zimbabwe Agricultural Commodity Exchange

ZIMBANK Zimbabwe Banking Corporation Limited

ZIMCODD Zimbabwe Coalition on Debt and Development

ZIMPREST Zimbabwe Programme for Economic

and Social Transformation

ZINWA Zimbabwe National Water Authority

ZISCO Zimbabwe Iron and Steel Company

ZNFU Zimbabwe National Farmers' Union

ZRP Zimbabwe Republic Police

ZUPCO Zimbabwe United Passenger Company



TABLE OF CONTENTS

Abstr	act of thesis	i-ii	
Dedic	eations	iii	
Ackn	owledgements	iv-vi	
Abbre	eviations and Acronyms	vii-xii	
Table	of Contents	xiii-xv	
List o	f Tables	xvii	
List o	f Maps	xvii-xv	iii
List o	f Appendices	388	
Chapt	ter One: INTRODUCTION		
1.1 1.2 1.3 1.4 1.5 1.6 1.7	Introduction Aims and objectives of the study Background and significance of topic (Justifications) Historical background of African irrigation schemes Historiographical survey (Literature review) Research methodology Methodological limitations Structure of thesis (Outline of the thesis)		1 5 6 10 18 36 39 40
	ter Two: PEASANT PRODUCTION AND DIFFERENTIATION: T YATI HINTERLAND (1939-1964)	HE	
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 2.10 2.11	Introduction State of peasant agriculture (pre-irrigation era 1939-1951) Peasant society and economy up to the promulgation of the NLHA The Legislative framework The immigrant factor (From Rhodesdale to Sanyati) The contradiction of implementation History of development and Federal agricultural policy (1952-1964) Development protocols: Settlement and resistance to the NLHA Agricultural development and the seeds of resistance (1954-64) Centralisation in Sanyati. Visit to Sanyati "Reserve" (1956)	(1951) 4)	53 60 78 81 81 82 84 86
2.122.13	Impact of immigration Opposition and resistance to government measures		90 93



2.14	Contours, dipping fees and peasant discontent	95
2.15	Opposition to conservation and peasant agency	101
2.16	Events leading to the abandonment of the NLHA in 1962	106
2.17	Peasant differentiation defies NLHA dictates	111
2.18	Introduction of cotton and socio-economic differentiation	115
2.19	Conclusion	116
Chapt	er Three: STATE POLICY/STRATEGIES (1965-1979).	
3.1	Introduction	120
3.2	Establishment of the smallholder scheme and its objectives	120
3.3	Gowe precedes TILCOR (Sanyati)	120
3.4	Colonial objectives	127
3.5	Formation of TILCOR and spectre of economic development	130
3.6	Emergence of Sanyati TILCOR Growth Point	134
3.7	TILCOR aims (1974-1980)	139
3.8	The DEVAG era (1976-1981)	141
3.9	Operational performance of Gowe (1970-1979)	144
3.10	High priority for Gowe	144
3.11	Emergence of Estate agriculture	148
3.12	Formation of ARDA	148
3.13	Parliamentary debates	148
3.14	Conclusion	180
Chapt	er Four: THE IMPACT OF STATE POLICIES/STRATEGIES ON THE	PEOPLE
	ANYATI (1965-1979)	
4.1	Introduction	182
4.2	The challenges of smallholder irrigation in the colonial period: The case	of Gowe
	(1967-1979)	183
4.3	The struggle to survive	183
4.4	Gowe: The role of the ADF, ALF and the Co-operative Society	190
4.5	Formidable problems: Lack of loans, imposition of fines and evictions	196
4.6	Birth of Sanyati Main Estate: Rationale, performance and interaction with	h Gowe
		210
4.7	Gowe: An attempt at settler hegemony	216
4.8	The erosion menace and conservation measures	219
4.9	Irrigation: Cotton cultivation and differentiation	221
4.10	Early efforts to introduce cotton cultivation	221
4.11	Cotton irrigation: socio-economic disparities among plotholders and	
	Gowe and dryland	224
4.12	Estate agriculture: Opportunity or benign neglect?	227
4.13	Impact of liberation struggle on ARDA activities	230
4.14	Conclusion	233



Chapter Five: POST-INDEPENDENCE ERA: CONTINUITY OR CHANGE (1980-1990)

5.1	Introduction	236
5.2	ARDA: Post-colonial objectives and opposition to irrigation leases	240
5.3	Irrigation agricultural development	252
5.4	Entanglement with grassroot development	252
5.5	Estate labour: Harmony or acrimony	264
5.6	Estate agriculture and Gowe settler performance: The post-colonial performance of the perf	
	1990)	270
5.7	The way forward: Changing basis after independence	270
5.8	Relationship between ARDA (Sanyati) and Gowe	272
5.9	Starved of loans: Limited facilities hamper smallholder irrigation	275
5.10	Cotton, profitability and the dilemma of loans	281
5.11	Crop yields: Measure of Estate and settler productivity	291
5.12	Erosion continues unabated: The need for more land	300
5.13	Land rent: Justice or injustice	302
5.14	Strained relations: The crisis of expectations	310
5.15	Continuity or change: Further crisis of expectations	311
5.16	Irrigation and rural differentiation	313
5.17	Sanyati: Cotton and new irrigation capitalists	314
5.18	Irrigation agriculture: Modernising impact	319
5.19	Conclusion	321
Chapt	er Six: IRRIGATION AND SOCIAL DIFFERENTIATION (1991-2000	0)
6.1	Introduction	325
6.2	Sanyati: Beyond the miracle (1991-2000)	328
6.3	The immediate post-1990 period	328
6.4	The introduction of ESAP	333
6.5	Background	333
6.6	Irrigation performance: Merits and demerits of ESAP (1991-1995)	339
6.7	ESAP: The "winners" and "losers"	343
6.8	Social impact of ESAP	345
6.9	Estate production (1991-1995)	350
6.10	Invasion of Estate land (1992-2000)	353
6.11	The post-ESAP era	355
6.12	Agricultural recovery or decline (1996-2000)	356
6.13	Estate performance (1996-2000)	361
6.14	The Millennium Recovery Plan: Did agriculture recover by 2000?	367
6.15	Irrigation Management Transfer (IMT)	371
6.16	Conclusion	374
Chant	er Seven: CONCLUSION	377
P'		_ , ,



Appendices	388
Bibliography	389



LIST OF TABLES

Table 2.1: Land Apportionment in Rhodesia, 1930	70
Table 2.2: Recommended allocations of land and stock under the Land	
Husbandry Act	72
Table 3.1: Provisional Construction Programme (Gowe Irrigation Scheme)	125
Table 3.2: Cost of production – wheat (1973)	146
Table 4.1: Crop production: Gokwe TTL – Copper Queen and Chenjiri Purchase	
Areas	190
Table 4.2: Average yields (kg/ha) 1970-1979 – Communal land	
irrigation schemes	232
Table 5.1: Gowe I Cropping Programme: Plot size 1,4 Ha	
(Total loan requirements: 1980/81 Season)	273
Table 5.2: Gowe II Cropping Programme: Plot size 1,2 Ha	
(Total loan requirements: 1980/81 Season)	274
Table 5.3: Debt position and production (1984-1987)	284
Table 5.4: Gowe, ZIMBANK-financed Winter Bean Production (1988/89)	288
Table 5.5: Gowe, AFC-financed Winter Bean Production (1988/89)	288
Table 5.6: Gowe I Maize Yield 1982/83	292
Table 5.7: Gowe II Maize Yield 1982/83	293
Table 5.8: Gowe I Wheat Yield 1982/83	295
Table 5.9: Gowe II Wheat Yield 1982/83	296
Table 5.10: ARDA Production Trend Versus National Performance (1982/84)	299
Table 5.11: Water Requirement Cost Distribution (1981) – Gowe I and II	310
Table 5.12: Cost (Of Water) Per PLOT (1981) – Gowe I and II	311
Table 6.1: ARDA Sanyati Estate: Crop Yield Analysis from 1991/92 to 1993/94	351
Table 6.2: ARDA Sanyati Estate: Crop Yield Analysis for 1994/95	352
Table 6.3: ARDA Sanyati Estate: Crop Yield Analysis from 1995/96 to 1996/97	361
Table 6.4: ARDA Sanyati Estate Wheat Yield (1997/98)	362
LIST OF MAPS	
Map 1: Administrative Provinces and Districts: Location of Sanyati Communal	
Land in Zimbabwe	461
Map 2: Sanyati Communal Land in relation to Kadoma District	461
Map 3: Sanyati Communal Land in relation to Mashonaland West Province	461
Map 4: Administrative Provinces and Districts - Location of Rhodesdale	461
Map 5: Position of Gowe in relation to Sanyati Estate	461
Map 6: Gowe (Sanyati Communal Lands)	461
Map 7: Tsetse map of Southern Rhodesia	461
Map 8: Map indicating boundary line between Chief Neuso and Chief Wozhele's	
areas	461
Map 9: ARDA's agricultural operations in Zimbabwe	461
Map 10: ARDA's agricultural and other activities in Zimbabwe	461
Map 11: Potential TILCOR growth points in Zimbabwe	461



Map 12. Established TILCOR/ARDA-promoted growth points in Zimbabwe	461
Map 13: Sanyati Town Location – Directions to Chenjiri and Copper Queen	461
Map 14: Location of proposed and existing GMB, CMB and Co-operative	
depots in Zimbabwe	461
Map 15: Zimbabwe - Natural Regions and provisional farming areas	461