

**SOCIO-ECONOMIC TRANSFORMATION
AMONG TRADITIONAL CATTLE KEEPERS
IN KAFUE FLOOD PLAIN IN NAMWALA
DISTRICT, ZAMBIA.**

By

KALAPULA SHEPANDE CHAABILA

**A DISSERTATION SUBMITTED TO THE UNIVERSITY OF ZAMBIA IN
PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE DEGREE OF
MASTER OF SCIENCE IN GEOGRAPHY, SCHOOL OF NATURAL SCIENCES.**

THE UNIVERSITY OF ZAMBIA

LUSAKA, 2012

DECLARATION

I, **Kalapula Shepande Chaabila**, declare that this dissertation has been compiled by me and that the work recorded is my own. The sources of all materials used have been specifically acknowledged and the dissertation has not been previously submitted for a degree at any University.

Signature.....

Name.....

Date.....

APPROVAL

This dissertation of.....has been approved as fulfilling the requirements for the award of.....in.....by The University of Zambia.

Name

Signature

.....

.....

Internal Examiner

Name

Signature

.....

.....

Internal Examiner

Name

Signature

.....

.....

Internal Examiner

.....

Date of Approval

DEDICATION

This dissertation is dedicated to my wife, Mrs K.M Kalapula and our two daughters Bulongo and Choompo for their great understanding and tolerance during the period of study.

ABSTRACT

A study was conducted in Namwala's Baambwe and Maala areas to assess changes in the value of cattle among traditional cattle keepers with respect to shifts in production goals, introduction of livestock markets, coping strategies and government interventions in the promotion of livestock sector. Questionnaires were used to collect data from respondents (cattle keepers) and interview schedules for key informants. Data were mainly analysed qualitatively to compute proportions in production goals and off-take rates. The results showed that although objectives for keeping cattle re-enforce each other, financial security was ranked the first and most important primary objective for keeping cattle. This is due to the changing economic environment resulting in an increase in the demand of money in the rural economy with available markets. In addition, following the establishment of commercial cattle buyers such as Zambeef and Starbeef, the socio-economic situation among the traditional cattle keepers has changed from mere accumulation of cattle for prestige and social standing in society to entering into the market economy. Increased cattle marketing has encouraged transformation in production goals for keeping cattle to acquiring universally accepted items such as solar panels, television sets, vehicles, dip tanks, iron-roofed houses, fencing and retail shops among others. However, livestock production remains below its potential due to the effects of recurrent cattle diseases and climatic variability. To this effect, the government and other stakeholders are helping in sustaining livestock production. It is concluded from the study that cattle keepers are rational economic actors whose production goals and strategies are determined, not only by cultural and ideological considerations, but by constraints and opportunities imposed by the wider social, political and economic environment. Transformation has occurred, particularly among successful cattle keepers, accumulating both money and assets. They have responded positively to the introduction of cattle markets by selling surplus cattle. And, in order to improve management practices among cattle keepers in Baambwe and Maala areas, the study established that there is need to increase the utilization of veterinary inputs and improving extension services in disease monitoring, treatment and surveillance while improving livestock marketing possibilities for all categories of cattle keepers.

ACKNOWLEDGEMENTS

The author thanks Mr. G.M Kajoba and Dr. I. Masialeti for their positive supervision and valuable contribution to this study. Their guidance in this study to make it reasonably uncluttered is greatly appreciated. May I also express my sincere gratitude to the staff in the Department of Geography, School of Natural Sciences, University of Zambia (UNZA), particularly Mrs. W. Nchito, for their constructive criticisms and suggestions.

I would also like to give thanks to all the informants, cattle keepers, Chiefs Mukobela and Mungaila, Headmen in Baambwe and Maala areas, all Government Officials and the people of Namwala who furnished me with the information used in this report. Particular thanks go to Dr Ndalama, Namwala District Veterinary Officer; Abattoir Managers Mr Nelson Mawani and Mr. Kharif for Zambeef and Starbeef respectively; Namwala District Agriculture Officer, Mr Mbozi; and the District Water Affairs Officer, Mr Mweene for their valuable information towards the production of this report.

I further wish to extend my sincere gratitude to my father, Mr Boaz Kalapula, for his financial assistance towards tuition fees during my course of study. Other special thanks go to my lovely wife Kennia for her support and understanding - once again thank you and continue being kind and helpful to the Kalapula Family at large. Also, to my two daughters Bulongo and Choempo, I'm greatly thankful for allowing me to abrogate my parental responsibilities for long stretches of time during my course of study.

Lastly, I am grateful to my classmates for providing me moral support: Mr Yasini Mulimba, Mr Kaite Felix, Ms Mbewe Agnes and our Lecturers Dr M.C. Mulenga, Dr G.P.A. Banda, Dr. G. Hampwaye and other members of the Geography Department too numerous to mention. To all these people and others who worked behind scenes, I'm greatly indebted and May God Bless You All.

TABLE OF CONTENTS

ITEM	PAGE
TITLE PAGE.....	I
DECLARATION.....	II
APPROVAL.....	III
DEDICATION.....	IV
ABSTRACT.....	V
ACKNOWLEDGEMENTS.....	VI
TABLE OF CONTENTS.....	VII
LIST OF TABLES.....	XI
LIST OF FIGURES.....	XII
ACRONYMS AND ABBREVIATIONS.....	XIII
A GLOSSARY OF ILA WORDS.....	XIV
CHAPTER ONE: INTRODUCTION.....	1
1.1 Introduction.....	1
1.2 Statement of the Problem.....	4
1.2.1 Aim.....	4
1.2.2 Objectives.....	5
1.2.3 Research Question.....	5
1.3 Significance of the study.....	5
1.4 Definition of terms.....	6
1.5 Organisation of the Dissertation.....	7
CHAPTER TWO: LITERATURE REVIEW.....	9
2.0 Introduction.....	9
2.1 The Role of Cattle in Agricultural Development in Rural Africa.....	9
2.1.1 Population Growth and Agriculture Development in Sub-Saharan Africa.....	10
2.2 Evolution and Development of Cattle rearing in Zambia.....	13
2.2.1 Cattle Development Programmes in the Colonial Period.....	13

2.2.2 Cattle Development Programmes during the First and Second Republics (1964-1991).....	13
2.2.3 Neo-Liberal Reforms and their impact on Agriculture and Livestock Sector (1991-2001).....	15
2.2.4 Interventions in the New Deal Administration on Agriculture and Livestock Sector [NDAALS] (2001 to-Date).....	15
2.3 Traditional Cattle Keepers in Zambia.....	16
2.3.1 The role of Cattle Industry in Namwala District.....	21
2.3.2 Management of Wetlands: The Kafue Flood Plain.....	25
2.4 Customary Land ownership in Namwala and the livestock sector.....	27
CHAPTER THREE: DESCRIPTION OF THE STUDY AREA.....	29
3.0 Introduction.....	29
3.1 Location of Baambwe and Maala areas in Namwala District.....	29
3.2 Climate.....	30
3.3 Soils.....	30
3.4 Vegetation.....	31
3.5 The Kafue River and Floods.....	31
3.6 Geology and Topography	32
3.7 Population.....	32
3.8 Socio-economic activities.....	33
CHAPTER FOUR: METHODOLOGY.....	34
4.0 Introduction.....	34
4.1 Selection of the Study Areas.....	34
4.2 Sample Size.....	34
4.3 Sampling procedure.....	34
4.4 Data Collection Methods.....	35
4.4.1 Secondary Sources.....	35
4.4.2 Primary Sources.....	36
4.4.2.1 Questionnaires.....	36

4.4.2.2 Interview Schedules.....	36
4.4.2.3 Observations.....	36
4.5 Limitations.....	37
4.6 Data Presentation and Analysis.....	37
CHAPTER FIVE: RESULTS	38
5.0 Introduction.....	38
5.1 Demographic characteristics of Cattle owners.....	38
5.2 Contemporary Agro-pastoral Production Goals among Traditional Cattle Keepers.....	39
5.3 Socio-Economic Transformation: Rural Livestock Markets and Contemporary changes in Cattle Management.....	41
5.3.1 Presence of Commercial Livestock Buyers.....	41
5.3.2 Capital Projects among Traditional Cattle Keepers in Baambwe and Maala...44	
5.3.3 Increased Cash Investments into the Herd.....	47
5.3.4 Withdrawal of cattle from internal redistribution to Individual accumulation.....	47
5.3.5 Inflating the Bride Price.....	47
5.3.6 Net flow of Livestock from Poor to Richer cattle keepers.....	48
5.3.7 Differences in Milking Strategies and Breeding.....	49
5.4 Constraints to cattle production in Baambwe and Maala areas in Namwala District.....	49
5.5 Coping Strategies to recurrent Cattle Diseases and frequent Droughts / Floods.....	53
5.6 Interventions by the Government to promote Sustainable Livestock Production in the study areas.....	57
5.6.1 Cattle Vaccinations and Restocking.....	57
5.6.2 Role of Non-Governmental Organisations in Promoting the Livestock Industry.....	59

CHAPTER SIX: DISCUSSION.....	60
6.0 Introduction.....	60
6.1 Transformation in the Production Goals, Value and Management Practices of cattle in Baambwe and Maala areas in Namwala District.....	60
6.1.1 Changes in production goals among traditional cattle keepers.....	60
6.1.2 Transformation in the traditional value of cattle and management practices...	63
6.1.3 Coping strategies to the challenges faced by cattle keepers in Baambwe and Maala areas.....	68
6.2 Government interventions in the promotion of livestock industry in Baambwe and Maala areas in Namwala District.....	69
 CHAPTER SEVEN: CONCLUSION AND RECOMMENDATIONS.....	 72
7.0 Introduction.....	72
7.1 Conclusion.....	72
7.2 Recommendations.....	74
 REFERENCES.....	 76
 APPENDICES	 82
<i>Appendix I</i> Interview Schedule - Socio-economic Transformation among Traditional Cattle Keepers in Baambwe and Maala areas in Namwala District.....	82
<i>Appendix II</i> Unstructured Interview Schedule - The Chief/Headman.....	85
<i>Appendix III</i> Unstructured Interview Schedule – Namwala District Veterinary Officer.....	86
<i>Appendix IV</i> Unstructured Interview Schedule – Abattoir Managers.....	87
<i>Appendix V</i> Unstructured Interview Schedule – Non-Governmental Organisations (NGOs).....	88
<i>Appendix VI</i> The Kafue Flats: A Dynamic Flood Plain in Central Zambia.....	89
<i>Appendix VII</i> Seasonal Flux is Productive: Rich Ecotones Nourished by Flooding in Baambwe area and Maala areas in Namwala District....	90

LIST OF TABLES

TABLE	TITLE	PAGE
Table 1	Population Growths in Sub-Saharan Africa, 1990-2025.....	10
Table 2	Livestock-Raising Households by Province and Types of Livestock in Zambia.....	18
Table 3	National Cattle Totals from 1994 – 2008 in Zambia.....	23
Table 4	Monthly Rainfall Distribution in Namwala in mm.....	30
Table 5	Household Population in Twelve Wards of Namwala District.....	32
Table 6	Area Planted (Maize), Production, Rainfall and Rain Days for past Seven seasons in Namwala District.....	33
Table 7	Objectives for Keeping Cattle in Baambwe and Maala areas.....	40
Table 8	Comparison between Zambeef and Starbeef operations.....	42
Table 9	Proportion of farmers selling cattle to briefcase buyers and Abattoirs.....	43
Table 10	Transportation of Livestock and Livestock Products to and from Namwala.....	43
Table 11	Number of cattle slaughtered from 2000-2009.....	43
Table 12	Capital Projects by Households in Baambwe and Maala.....	45
Table 13	Number of cattle demanded for bride price: 1980-2009 in Maala..	48
Table 14	Prevalence of Cattle Diseases in Baambwe and Maala areas.....	50
Table 15	Laboratory Diagnosis of Cattle diseases in Namwala District.....	51
Table 16	Coping Strategies among Traditional Cattle Keepers.....	54
Table 17	Frequency of Dipping/Spraying among Traditional Cattle Keepers.	54
Table 18	Routine Control Measures by Namwala District Veterinary Office.	57
Table 19	Namwala District Livestock Census in 2009.....	57
Table 20	Livestock Totals from 2006-2009 in Baambwe and Maala areas....	58
Table 21	NGOs Activities and Achievements in promoting the Livestock Sector.....	59

LIST OF FIGURES

FIGURE	TITLE	PAGE
Figure 1	Trends in traditional cattle numbers from 1961-2009 in Namwala...	22
Figure 2	Seasonal Changes in River level at Namwala Pontoon in 2007/2008 Season.....	26
Figure 3	Locations of Baambwe and Maala in Namwala District.....	29
Figure 4	Trends in traditional cattle sales from 2000 – 2009.....	44
Figure 5	A Satellite Dish (A) and Improved Breeds of Cattle (B) at Mr Kabuzu’s farm in Maala. Note a modern house (A) and Fencing (B) in the background.....	46
Figure 6	An Aerial for Television reception, Solar Panel, Land Cruiser vehicle and a newly constructed Iron-roofed house at Mr Naboonda’s farm in Baambwe area. Photo A shows a front view while photo B the side view of the farm.....	46
Figure 7	Factors contributing to Poor Livestock Health in Baambwe and Maala.....	52
Figure 8	Causes of Poor Cattle Nutritional Status in the Dry Season.....	53
Figure 9	Outline of different Resource Flows in Mixed Crop-Livestock Systems.....	55
Figure 10	Mixed Cattle-Sheep farming at Mr Shanyuka’s farm (A) and a boy in B escorting cattle towards the Kafue Flood Plain following receding flood water.....	56
Figure 11	Types of Livestock kept by households in Baambwe and Maala.....	56
Figure 12	Spatial Distribution of Cattle Population in Namwala District.....	58

ACRONYMS AND ABBREVIATIONS

ASVEZA	-	Assistance to the Veterinary services in Zambia
BSA	-	British South Africa Company
CBPP	-	Contagious Bovine Pleural Pneumonia
CSO	-	Central Statistical Office
CVRI	-	Cardiovascular Research Institute
DAIPH	-	Department of Animal Production and Health
DPT	-	Digital Pen Technology
DVO	-	District Veterinary Office
ECF	-	Extra Cellular Fluid
FAO	-	Food and Agriculture Organisation
FMD	-	Foot and Mouth Disease
FNDP	-	Fifth National Development Plan
GRZ	-	Government of the Republic of Zambia
HI	-	Heifer International
IFAD	-	International Fund for Agricultural Development
MACO	-	Ministry of Agriculture and Cooperatives
MMD	-	Movement for Multiparty Democracy
NFA	-	Namwala Farmers Association
NGO	-	Non-Governmental Organisation
NLSP	-	Namwala Livestock Support Programme
SLIP	-	Smallholder Livestock Investment Project
TADS	-	Trans-boundary Animal Diseases
TB	-	Bovine Tuberculosis
UNIP	-	United National Independence Party
UNZA	-	University of Zambia

A GLOSSARY OF ILA WORDS

<i>Chibwantu</i>	-	Traditional beverage drink
<i>Chifumo-fumo</i>	-	Morning
<i>Chiko</i>	-	Bride wealth or <i>lobola</i>
<i>Ibanda</i>	-	The Kafue Flood Plain where the Ila people practice transhumance and graze their animals after floods recede
<i>Ikubi</i>	-	Commemoration
<i>Ing'ombe</i>	-	Cattle
<i>Isaka</i>	-	Shrines where Shimunenga foretells fortunes and problems likely to occur in the community
<i>Kulomba</i>	-	Borrowing something from someone
<i>Kulutanga</i>	-	Cattle outposts on the Kafue Flood Plain where cattle keepers graze their animals in the dry season
<i>Kushisha</i>	-	Temporarily transfer of cattle to trusted associates
<i>Lubono</i>	-	Total assets owned by the family including cattle
<i>Mabishi</i>	-	Sour milk
<i>Mangolezha</i>	-	Late afternoon
<i>Masuntu</i>	-	Cattle slaughtered at a funeral
<i>Mukupu</i>	-	Milk
<i>Muunza</i>	-	Noon or mid-afternoon
<i>Shimunenga</i>	-	Ila traditional ceremony celebrated on the weekend of the full moon in September or October in Maala village of Chief Mungaila in Namwala district. It is also a name given to the spiritual man- Mr. Kaande.