From Plateau Pastures to Urban Fringe: Sedentarisation of Nomadic Pastoralists in Ladakh, North-West India

by

Sarah K. Goodall

A Thesis Submitted in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

Department of Geographical and Environmental Studies University of Adelaide

May 2007

Table of Contents

Contents	i
Declaration	v
List of Figures	vi
List of Tables	vii
List of Plates	viii
Abstract	ix
Acknowledgments	x
List of Abbreviations	xi
Glossary	xii
CHAPTER 1. INTRODUCTION	
CHAPTER I. INTRODUCTION	1
 1.1 The Decline of Nomadic Pastoralism 1.1.1 Defining Nomadic Pastoralism 1.1.2 The Origins of Nomadic Pastoralism and Contemporary Trends 1.1.3 Sedentarisation in Ladakh 	1 2 6 9
1.2 Aims and Objectives of the Study	13
1.3 The Study Area: A Brief Introduction	15
1.4 Migration Research in Ladakh	17
1.5 Outline of the Thesis	19
1.6 Conclusion	21
	NC OF
CHAPTER 2. SEDENTARISATION THROUGH THE LEIMIGRATION THEORY	
2.4. Introduction	00
2.1 Introduction 2.1.1 Defining and Measuring Migration 2.1.2 Parameters of the Study	22 23 26

2.2	Theoretical Approaches to the Determinants of Migration 2.2.1 Individual Behavioural Models 2.2.2 Historical-Structural Approaches 2.2.3 Multi-level Models: Working Toward Integration	27 28 31 33
2.3	Conceptual Framework for the Study of Out-Migration from Rupshu- Kharnak	39
2.4	Conclusion	46
Cŀ	APTER 3. DATA AND RESEARCH METHODS	48
3.1	Introduction 3.1.1 Methodological Approach 3.1.2 Ethical and Social Justice Considerations	48 48 49
3.2	Fieldwork: An Overview	51
3.3	Secondary Data	56
3.4	Primary Data 3.4.1 Selecting the Study Areas 3.4.2 Baseline Survey of Migrant Households 3.4.3 Case Studies and Household Migration Histories 3.4.4 Key Informant Interviews	59 60 63 70 73
3.5	Data Limitations 3.5.1 Primary Data 3.5.2 Research Assistants	74 75 78
3.6	Data Processing and Analysis	83
3.7	Conclusion	84
	IAPTER 4. POPULATION AND SOCIOECONOMIC CHANG LADAKH: A REGIONAL PERSPECTIVE	GE 86
4.1	Introduction	86
4.2	Ladakh: The Physical and Human Landscape 4.2.1 Physical Environment 4.2.2 Historical and Political Background 4.2.3 Socioeconomic and Demographic Indicators	87 87 90 93
4.3	Population Mobility and Development 4.3.1 Socioeconomic Change and Development 4.3.2 Rural to Urban Migration and Urbanisation	98 99 100
4.4	Conclusion	104

	CHAPTER 5. THE CHANGPAS OF RUPSHU-KHARNAK: COMMUNITY AND LIVELIHOOD CONTEXT	
5.1	Introduction	106
5.2	The Research Communities	107
	5.2.1 Samad	111
	5.2.2 Korzok	114
	5.2.3 Kharnak	118
5.3	The Livelihood Context	121
	5.3.1 Social Organisation	121
	5.3.1.1 The Household	122
	5.3.1.2 Polyandry	123
	5.3.1.3 The Pha-spun	124
	5.3.1.4 Local Governance	125
	5.3.2 The Pastoral Economy	126
	5.3.2.1 Land	126
	5.3.2.2 Livestock	128
	5.3.2.3 Labour	135
5.4	The Context of Change	136
5.5	Conclusion	142
MI	GRATION	144
6.1	Introduction	144
	Patterns of Mobility	145
	Patterns of Mobility 6.2.1 Rural to Urban Migration over Space and Time	145 145
	Patterns of Mobility	145 145
6.2	Patterns of Mobility 6.2.1 Rural to Urban Migration over Space and Time 6.2.2 Structural Characteristics Patterns of Selectivity	145 145 151
6.2	Patterns of Mobility 6.2.1 Rural to Urban Migration over Space and Time 6.2.2 Structural Characteristics Patterns of Selectivity 6.3.1 Characteristics of Individual Migrants	145 145 151 158 160
6.2	Patterns of Mobility 6.2.1 Rural to Urban Migration over Space and Time 6.2.2 Structural Characteristics Patterns of Selectivity	145 145 151 158 160
6.2 6.3	Patterns of Mobility 6.2.1 Rural to Urban Migration over Space and Time 6.2.2 Structural Characteristics Patterns of Selectivity 6.3.1 Characteristics of Individual Migrants 6.3.2 Characteristics of Migrant Households The Processes of Out-Migration	145 145 151 158 160 171
6.2 6.3	Patterns of Mobility 6.2.1 Rural to Urban Migration over Space and Time 6.2.2 Structural Characteristics Patterns of Selectivity 6.3.1 Characteristics of Individual Migrants 6.3.2 Characteristics of Migrant Households The Processes of Out-Migration 6.4.1 Case Studies of Migration	145 145 151 158 160 171 177
6.2 6.3	Patterns of Mobility 6.2.1 Rural to Urban Migration over Space and Time 6.2.2 Structural Characteristics Patterns of Selectivity 6.3.1 Characteristics of Individual Migrants 6.3.2 Characteristics of Migrant Households The Processes of Out-Migration 6.4.1 Case Studies of Migration 6.4.2 The Context of Migration Decision-Making	145 145 151 158 160 171 177 177
6.2 6.3	Patterns of Mobility 6.2.1 Rural to Urban Migration over Space and Time 6.2.2 Structural Characteristics Patterns of Selectivity 6.3.1 Characteristics of Individual Migrants 6.3.2 Characteristics of Migrant Households The Processes of Out-Migration 6.4.1 Case Studies of Migration 6.4.2 The Context of Migration Decision-Making 6.4.3 The Role of Women in Migration	145 145 151 158 160 171 177 177 184 185
6.2 6.3	Patterns of Mobility 6.2.1 Rural to Urban Migration over Space and Time 6.2.2 Structural Characteristics Patterns of Selectivity 6.3.1 Characteristics of Individual Migrants 6.3.2 Characteristics of Migrant Households The Processes of Out-Migration 6.4.1 Case Studies of Migration 6.4.2 The Context of Migration Decision-Making	145 145 151 158 160 171 177 177 184 185
6.2 6.3 6.4	Patterns of Mobility 6.2.1 Rural to Urban Migration over Space and Time 6.2.2 Structural Characteristics Patterns of Selectivity 6.3.1 Characteristics of Individual Migrants 6.3.2 Characteristics of Migrant Households The Processes of Out-Migration 6.4.1 Case Studies of Migration 6.4.2 The Context of Migration Decision-Making 6.4.3 The Role of Women in Migration	145 145 151 158 160 171 177 177
6.2 6.3 6.4	Patterns of Mobility 6.2.1 Rural to Urban Migration over Space and Time 6.2.2 Structural Characteristics Patterns of Selectivity 6.3.1 Characteristics of Individual Migrants 6.3.2 Characteristics of Migrant Households The Processes of Out-Migration 6.4.1 Case Studies of Migration 6.4.2 The Context of Migration Decision-Making 6.4.3 The Role of Women in Migration 6.4.4 Social Networks	145 145 151 158 160 171 177 184 185 188
6.2 6.3 6.4 6.5	Patterns of Mobility 6.2.1 Rural to Urban Migration over Space and Time 6.2.2 Structural Characteristics Patterns of Selectivity 6.3.1 Characteristics of Individual Migrants 6.3.2 Characteristics of Migrant Households The Processes of Out-Migration 6.4.1 Case Studies of Migration 6.4.2 The Context of Migration Decision-Making 6.4.3 The Role of Women in Migration 6.4.4 Social Networks Conclusion	145 145 151 158 160 171 177 184 185 188 190

7.2	Determinants of Out-migration: The Microlevel Perspective 7.2.1 Articulated Motives 7.2.2 Personal Traits of Migration	193 193 196
	7.2.2 Personal Traits of Migration	190
7.3	Contextual Analysis of Out-Migration: The Community-Level Perspective	198
7.4	Constraints to Migration 7.4.1 Scope for in-situ Adaptation	205 207
7.5	Cumulative Causation and Migration	208
7.6	Conclusion	212
CH	HAPTER 8. IMPLICATIONS AND CONCLUSIONS	.213
8.1	Introduction	213
8.2	Implications of Mobility for Development	214
8.3	Implications of Mobility for Those Left Behind	217
8.4	Impacts at the Destination 8.4.1 The Experience of Permanent Migrants 8.4.2 Impacts for Migrants Engaged in Non-Permanent Mobility	220 220 222
8.5	Summary of Main Findings 8.5.1 Determinants of Out-migration 8.5.2 Role of Household Structure 8.5.3 Socioeconomic Status and Migration 8.5.4 Social Networks and Chain Migration 8.5.5 Consequences of Out-migration	224 224 225 225 226 226
8.6	Implications for Theory and Further Research 8.6.1 Pastoralism versus Conservation 8.6.2 Population Mobility in Ladakh	228 229 230
8.7	Some Policy Implications 8.7.1 What Sort of Approach is Needed?	230 232
8.8	The Future of Nomadic Pastoralism in Rupshu-Kharnak	235
Ref	erences	.238
App	pendix 1. Household Survey Sheet	265
App	pendix 2. Interview Schedule - Informal Interviews	266
App	pendix 3. Interview Schedule - In-depth Interviews	268

Declaration

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy of my thesis, when deposited in the University Library, being made available in all forms of media, now or hereafter known.

...... 30 /05 /2007 Sarah Goodall

List of Figures

Figu	Figure	
1.1	Indigenous Nomadic Populations	7
1.2	Location of Ladakh in the Northern Indian State of Jammu and Kashmir	10
2.1	Basic Conceptual Approaches to Migration in the Social Sciences	28
2.2	Conceptual Framework of the Determinants of Out-Migration from Rupshu-Kharnak	41
4.1	Average Monthly Temperatures in Leh	88
4.2	Map of Ladakh, Jammu and Kashmir State	89
4.3	Administrative Divisions of Leh (Ladakh), Jammu and Kashmir	92
6.1	Reported Year of Migration from Rupshu-Kharnak to Leh 1962 – 2000	147
6.2	Out-Migration from Communities of Rupshu-Kharnak 1962-2001	149
6.3	Comparison of Sex Ratio of Migrant Population from Rupshu-Kharnak	162
6.4	Gender Selectivity of Migration from Rupshu-Kharnak 1960-2000	164
6.5	Population Profile of Migrants at Time of Migration	165
6.6	Age at Migration of Recent Migrants 1995-2000	166
6.7	Comparison of Sex Ratio by Type of Migration	167
6.8	Comparison of Dependency Ratios	169
6.9	Comparison of Household Structure at Time of Migration with Household Migration Strategy	174

List of Tables

Table		Page
1.1	General Classification of the Types of Pastoralism	4
3.1	Chronology of Fieldwork and Data Collection	57
3.2	Identifying and Locating Types of Respondents	61
3.3	Selection Criteria for Migrant Case Studies	73
4.1	Selected Development and Health Indicators 2001	93
4.2	Comparison of population growth rates and level of Urbanisation 1981-2001	94
4.3	Sex Ratios in India in 1981 and 2001	96
4.4	Literacy Rates in 2001	98
4.5	Percent of Total Population Aged 0-6 years by Location	101
5.1	Sources of Secondary Population Data for Samad	113
5.2	Number of children from Rupshu-Kharnak in boarding schools in Leh, November 2001	117
6.1	Migrant and Non-Migrant Population from Rupshu- Kharnak 2000-01	146
6.2	Number of Migrants from Rupshu-Kharnak 1962–2000	148
6.3	Description of Migrant Categories for Individual Migrants	151
6.4	Indicators of Migrants' Commitment to Origin and Destination	152
6.5	Comparison of Migrant Type by Community of Origin	154
6.6	Occupations of Seasonal Circular Migrants in Leh	154
6.7	Types of Household Migration	156
6.8	Types of Household Migration from Rupshu-Kharnak	157

6.9	Migrant and Non-Migrant Age and Sex Distribution at Time of Migration	164
6.10	Comparison of Age-Specific Dependency Ratios	170
6.11	Structure of Migrant Households Leaving Rupshu- Kharnak	172
6.12	Household Structure of Permanent and Divided Migrant Households	175
6.13	Employment of Male and Female Migrants of Working Age	187
7.1	Chaudhuri's Comparative Chart of Reasons for Leaving Kharnak	195

List of Plates

Plate		Page
3.1	Interview being conducted in Zara, Kharnak July 2000	72
5.1	Combing pashm from the Changra goats in Spangchen Kharnak July 2000	134

Abstract

The sedentarisation of nomadic pastoralists in Ladakh, north-west India, is taking place amidst a global trend toward settlement. Despite a few exceptions, where pastoralism either continues to thrive or is being revitalised by market reform, many nomadic pastoral communities are facing a period of unprecedented change, as they are increasingly drawn into national and international economies.

This study focuses on the migration of Ladakh's nomadic pastoralists from their traditional grazing lands to the rapidly urbanising capital Leh. Three separate communities were studied to determine their levels of out-migration and settlement and to explore the causes and consequences of the decision to settle. The research design encompassed both sending and receiving communities and uses a multi-level approach to assess the combined influence of macro-level (structural) and micro (individual and household-level) factors on the decision to migrate.

Data from a survey of 103 migrant households and in-depth interviews conducted in each of the three nomadic pastoral communities shed light on the complex nature of population mobility. The data reveal the communities to be characterised by distinct forms of mobility (large scale, permanent out-migration from one community, seasonal circulation from the second, and low-level traditional forms of out-migration from the third). It is argued that the community-level differences in out-migration are not indicative of a progressive decline of nomadic pastoralism in the region. The nomadic communities are facing substantial pressure from external socio-economic change and migration to the urban area is seen as a strategy for survival and security optimisation. However, the extent to which the communities utilise this strategy is influenced by locally specific normative and regulatory factors.

Acknowledgments

This study would not have been possible without the assistance and encouragement of many people. I am indebted to the people of Rupshu, Kharnak and Korzok who so generously took the time to share their thoughts and experiences with me.

I am indebted to my field assistants, Asmat, Thukjay, Chakdor and Yeshey. Numerous officials from the LAHDC and the J&K State government assisted the study. I also wish to thank the staff of Ladakh Nutrition Project (LNP) in Leh for sharing their wealth of knowledge and for showing me first hand what they do in the field.

I wish to thank the staff of the Department of Geographical and Environmental Studies at the University of Adelaide. I am especially grateful to my thesis supervisor Professor Graeme Hugo for his invaluable advice, support and critical reading of the thesis. I would like to thank staff members Mr Derek Smith, Associate Professor Lesley Potter, and Dr Marcus Lane for their valuable comments on draft chapters. Thanks must also go to Christine Crothers for providing cartographic assistance. Fieldwork was made possible through the generous financial support of the University of Adelaide through the Department of Geographical and Environmental Studies and the award of a bursary from the Australian Federation of University Women.

I thank the many scholars of Ladakh studies who have provided valuable feedback and critical discussions at various stages of my work. I would also like to thank a fellow doctoral student, Jacqueline Fewkes, for her companionship through a shared winter in Ladakh; as well as my Ladakhi family – Dolkar and Tsering – for their warmth and laughter and for making me feel so at home. Finally to my own family for their unwavering support. My parents Ken and Chris for their encouragement and especially my partner Andrew and our son Finn for their enduring patience and constant support.

List of Abbreviations

CMO Chief Medical Officer

CHW Community health worker

IALS International Association of Ladakh Studies

J&K Jammu and Kashmir State

LAHDC Ladakh Autonomous Hill Development Council

LBA Ladakh Buddhist Association

LEDeG Ladakh Ecological Development Group

LNP Leh Nutrition Project

MAC Medical Aid Centre

NGO Non-Governmental Organisation

PHC Primary health centre

PPP Purchasing Power Parity (used in tables in chapter 2) UNDP reports. An

attempt to adjust for price differences between countries. So \$US PPP1 in

the domestic economy has the same purchasing power as 1US\$ in the

US. Preferable measure to GDP per capita.

SECMOL Students' Educational and Cultural Movement of Ladakh

SC Scheduled Caste

ST Scheduled Tribe

Indian Currency

During the period of fieldwork, one Australian dollar was equivalent to 23 Indian Rupees (Rp).

Glossary Of Terms

Note about spelling: place names, Ladakhi words and people's names are based on the local pronunciation of the words rather than the written forms in the Ladakhi script.

Abi grandmother

Amchi traditional doctor using techniques based on traditional Tibetan system of

medicine

Brog-pa/

brok-pa literally high pasturage ones. Term used in reference to Tibetan nomadic

pastoralists

Changpa literally meaning northerner. Reference to semi and full nomadic

pastoralists who live in the Ladakhi Changthang.

Cho-lo dice Chomo nun

Chu river (literally water)

Drimo female yak Gompa monastery

Goncha traditional woollen overcoat worn throughout Ladakh

Go-ba village head-man, chief

-pa suffix added to a place name to signify a person's origin

(-ma for females)

rigs.nan 'low caste' or scheduled caste

khaun term used by Changpa of Rupshu-Kharnak to describe khang-chung

khang-chen big house (main house)

khang-chung small house (subsidiary house)

khag-gnyis break in two – reference to splitting of household into kaun and kangchen.

Khrel tax

- la pass eg. Taglang la

Lama monk Iha god

mani prayer ceremony

magpa husband – especially one brought into uxorilocal household

Meme grandfather

Pashm raw fibre combed from the undercoat of the pashmina goat

Pha-spun a specific form of social organisation

Pha Lha deity of the pha-spun

Phia marmot

phog-srod literally to take control Phu upper part of valley

Ralug combined term for sheep (lug) and goats (rama)

Rebo tent woven from goat and/or yak hair (as opposed to gur – white tent)

Sku rim religious ceremonies

Tshawo grandson Tso lake Yul Iha

Yul Yulpa Lha tho

territorial god / deity village 'villager' shrine to the yul lha. Cairn-like small heap of stones topped with twigs and prayer flags.