



## Changing Livelihoods, Risky Environments: Social and Economic Change among Pastoralists in East Africa

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*We are currently working on a book with the provisional title above. It summarizes our findings from our work with the GL-CRSP Pastoral Risk Management (PARIMA) project. This brief outlines the aim of the book, the approach in writing it, and the key findings that have emerged. The final volume is expected to be published in 2008. The book focuses on providing insights into how livelihood strategies operate currently and how they have changed over time in pastoral areas. We do this by placing the empirical evidence we gathered in the context of the research conducted previously in the PARIMA area. We do find livestock remain central to people's livelihoods, but also document other important sources of income that both reduce poverty and vulnerability to poverty. We present evidence on how people view the risks they face and their priorities for future development in their community. Importantly, we collected information from multiple sites, multiple households within a site, and multiple individuals within households, so we are able to identify patterns that are generated by inter community, inter household, or intra household differences.*

### Background

Given pastoralists' centrality to many environmental, security, economic and humanitarian concerns in Africa, there is a critical need for donors, policymakers and other researchers to obtain a detailed understanding of contemporary pastoralism. We draw on a decade of in-depth, interdisciplinary research in multiple ethnic communities across a broad swath of Ethiopia and Kenya to offer an unprecedented, evidence-based, nuanced perspective on contemporary pastoralism in east Africa. The core of the evidence on which we draw was generated by intensive fieldwork from 1997-2006 in six sites in northern Kenya and five sites in southern Ethiopia. These areas suffered the El Niño floods of 1997-98, a severe drought in 1999-2000, and a major drought again in 2005. In between, they enjoyed periods of recovery while coping with changing policies and project interventions and a constantly changing market environment. This field research platform provides in depth insight into how pastoralists manage the myriad risks they face, at individual, household and community levels and how they choose and adapt livelihoods to make the best of their existence on the ecological, economic and political margins of these two nations. We contextualize the evidence from our recent fieldwork within the broader historical record on pastoral practices in this area in order to identify emerging trends, and to stress how development policies could encourage the beneficial trends we find while addressing emergent negative trends. This book thus not only expands the research base on pastoralism, it also has important implications for policy at local, national and regional scales and touches on

a range of issues central to international development studies more broadly.

Missing from current literature and policy discussions is a sense of what pastoralism actually looks like across the full bust-and-boom cycle, how it has adapted past practices and institutions, and where it is likely headed in the future. How do pastoralists respond to the risks they face, including but not exclusively to crisis events, and how has this changed over time? What are they doing in non-crisis periods, and how has this changed over time? Do different types of households have different livelihood responses and, if so, why and with what consequence for their and others' well-being? To what degree do individuals within households (for example, wives, sons, and daughters) experience or perceive life in the arid and semi-arid lands (ASAL) differently? Who are the success stories within pastoralist communities and what has allowed them to create adaptable and successful livelihoods?

This book is the first interdisciplinary attempt to document how pastoralists and their communities have responded to an increasingly risky environment marked by climatic disturbances, armed conflicts, liberalized markets and politico-economic instabilities. We do so without losing sight of the fact that these are important but infrequent events in the lives of the pastoralists and argue there is much to learn from understanding the pastoralists' adaptations to change and their behavior in non-crisis periods that draw comparatively little attention.

## People, Livestock and Risk

The book's main premise is that notwithstanding the considerable, multidimensional risk pastoralists face, livestock are and will remain the foundation for livelihoods in the region for the foreseeable future. Animal husbandry represents the most economically efficient use of East Africa's rangelands and is thus a crucial element of any viable strategy to support the livelihoods of the tens of millions of people in the ASAL areas in Ethiopia and Kenya. Consequently, pastoral risk management today is about how herders can cope with increased economic and environmental pressures without jeopardizing their key non-human asset, livestock. The evolving strategies for accomplishing this and their tensions and contradictions are key subjects of this book.

While livestock are fundamental to the economy and cultures of the east African ASAL, however, the region's people are our focus. This reflects pastoralists' clearly expressed prioritization of basic human concerns – food security, education, health – ahead of livestock or other livelihood concerns. Despite considerable and costly interventions in marketing, range management, wildlife conservation and food aid over the years, our research shows most pastoralists favor interventions that address basic human needs: access to safe water, health care, and education. This finding has important implications for development programs, especially those that claim to focus on the needs and priorities of pastoralists. The high demand for the provision of basic human services shows just how marginalized pastoral areas remain in terms of public service provision and infrastructure. Although livestock are central to pastoral systems, they are of distinctly second-order concern behind elementary human needs.

The book's core strength arises from the rich empirical base we use to document patterns of well being and inequality in the study sites, the emergence of new livelihood strategies, marketing patterns and mechanisms and institutions for managing risk, intra household variation in well being and perceptions based on differences in gender and status, and other important topics. We collected detailed, longitudinal data that we use to develop our arguments, and present our analyses of pastoral economies and institutions at individual, household and community levels. The core of the data is individual level survey data collected quarterly over the period of 2000-2002 that followed up to three individuals in each of 30 households in each of eleven communities in the region. These individuals were interviewed annually from 2004-2006. In addition, survey data at the community level was collected monthly. This quantitative survey data combined with qualitative data collected throughout the region during this period provides an opportunity for analysis at numerous levels. While due attention is given to larger macro-structural and political contexts, the work largely concentrates on understanding and explaining micro-



*Treating sheep in East Africa. Photo by Chris Barrett.*

economic and social behavior under conditions of risk and uncertainty.

Other important features of the book further distinguish it from previous contributions. First is the book's spatial and cross-cultural coverage. Unlike most social science sources on East African pastoralists, this study covers several different ethnic groups, and its spatial scope extends well beyond a limited set of communities. This approach allows for generalizations about social and economic processes that are not possible with case studies of individual groups and communities regardless of how richly detailed and insightful they are. The northern geographic boundary of our study area is about 130 km north of the Ethiopia/Kenya border. The southern boundary is in north-central Kenya about 200 km north of Nairobi. The study region covers approximately 125,000 km<sup>2</sup> and includes several different ethnic groups – the Il Chamus, Rendille, Samburu, Ariaal, Boran, and Gabra in Kenya, and the Boran, Gabra and Guji in Ethiopia – spanning a range of livelihoods, from agro-pastoralism to more specialized pastoral systems. It also spans agro-ecologies, from semi-arid (650 mm/year) to very arid (150 mm/year). Some of these communities have some access to livestock and labor markets and to public services, while others have almost no access to markets. Consequently, we can compare and contrast emerging livelihood strategies across a range of cultural, market, and agro-ecological conditions.

Second, the book presents longitudinal data to capture both drought and post-drought periods over a ten-year period, 1997-2006. The detailed local economic and social data

demonstrate how shocks affect wealth accumulation and welfare, reducing some household herd sizes to low levels from which pastoral recovery is very difficult without external resources. While other accounts focus on crisis events themselves, rather than on the human actors, we document how local populations actively responded, often in extremely innovative ways, to a succession of different shocks. They commonly employ different economic and social strategies that often supplement rather than replace their main livelihood of extensive livestock production. Many strategies attempt to balance the cash demands of the modern market economy with the spatial and seasonal demands of mobile animal husbandry.

Third, because the study employed a random household sampling technique based on local administrative units in Kenya and Ethiopia, it includes many communities of former pastoralists who have now settled in the region. By including these people in our study, we gain considerable insights into the dynamics of poverty and economic change in the area. Many studies of East African pastoralism concentrate only on those who still actively herd semi-nomadically and avoid communities of settled ex-pastoralists which, ironically, are the fastest growing segment of the population in some pastoral locations. The livelihood strategies of ex-pastoralists and settled populations differ in important ways from those of mobile pastoralists and are thus crucially important to understanding the pastoral economy and to designing appropriate development policy for the region.

Fourth, by systematically collecting data at multiple scales, we cannot only make comparisons across communities, but also we can explore the behaviors and well being of different households within communities and of different individuals within households. Pastoralists are too often treated as a homogeneous mass of peoples and places. Our analyses reveal striking heterogeneity, especially over time and space, but also among households within specific pastoralist communities and, in certain dimensions, among individuals within households. We can consider gender issues both by comparing male and female-headed households and by looking within male-headed households to understand how the status within households affects both men and women. Such analytical detail is important in targeting policy and project interventions as well as in understanding the diverse experiences of common phenomena.

## Policy Relevance

Ultimately, this book thus offers not just an unprecedentedly detailed, nuanced and broad perspective on pastoralism as a subject unto itself. It also permits us to speak, indirectly and directly, to several contemporary global debates of consequence.

**Poverty Reduction.** This book makes a critical distinction between poverty in pastoral areas and poverty among those practicing pastoralism. It also offers rare documentation of the dynamics of poverty for households throughout the region during periods of drought and recovery that contribute to an understanding of the complexities of poverty and social and economic change in pastoral East Africa and inform policymaking and project programming for some of the poorest populations on earth.

**Humanitarian versus Long Term Development Assistance.** We provide evidence as to how aid donors might improve the effectiveness of their programs for this region, illustrate how the tension between short-term humanitarian and long-term

development goals can be reduced by improved policy design, and document the way humanitarian aid impacts different groups in the study area.

**C l i m a t e  
V a r i a b i l i t y .** Although extreme climatic variability has always been present in arid and semi-arid r a n g e l a n d s ,

growing concern that climate variability is increasing with climate change raises urgent questions about how best to manage risk among poor populations. A critical first step to ensure that residents of pastoral areas can cope with existing and potentially increasing uncertainty about climatic conditions is to investigate current risk management practices and to identify policies that support the most effective of these practices.

**Decentralization and Community Driven Development.** Drawing on evidence from a range of cases of decentralization in land management, conflict resolution, management of marketing institutions and services provision, we find some reason for optimism regarding increased local participation in decision-making, targeting and governance. There nonetheless exist real challenges, and one must guard against



*The Kemise Cattle Market, Ethiopia. Photo by Peter Little.*

a naïve belief in the inherent superiority of local management without adequate checks in place to resolve some of the tensions and contradictions that often emerge with the devolution and decentralization of resources and decision-making authority.

**Development and Insecurity.** National-level institutions are generally weak and unable to effectively control banditry and violence in the ASAL areas. In addition, our study region lies perilously close to areas where the state has effectively ceased to exist and where active armed insurrections are present. We illustrate in our study how people cope with these risks and identify the challenges and opportunities when trying to improve well being in an environment where basic physical security is not guaranteed.

### Anticipated Audience

This book will speak to a range of highly topical issues in contemporary international development studies and should

be of interest to academic audiences in African studies, anthropology, development studies, pastoralism, range science, as well as to a wide range of practitioners in development and humanitarian organizations in sub-Saharan Africa. Rooted in evidence gathered from ASAL areas, it provides critical information that can be used by this audience in addressing the development challenges posed in the region.

### Further Reading

McPeak, J. and P. Little, editors. 2006. *Pastoral Livestock Marketing in Eastern Africa: Research and Policy Challenges*. Warwickshire, UK: Intermediate Technology Publications.

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The Pastoral Risk Management Project (PARIMA) was established in 1997 and conducts research, training, and outreach in an effort to improve welfare of pastoral and agro-pastoral peoples with a focus on northern Kenya and southern Ethiopia. The PARIMA project is led by Dr. D. Layne Coppock, Utah State University, Email: Lcoppock@cc.usu.edu. LiTEK is a continuation of the PARIMA project as it enters the write up phase. The LiTEK project is led by Dr. John McPeak, Syracuse University. Email: jomcpeak@maxwell.syr.edu.



The Global Livestock CRSP is comprised of multidisciplinary, collaborative projects focused on human nutrition, economic growth, environment and policy related to animal agriculture and linked by a global theme of risk in a changing environment. The program is active in West Africa, East Africa, Central Asia and Latin America.

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