

The pastoral arrangement: How herders, animals, and soil sustain each other

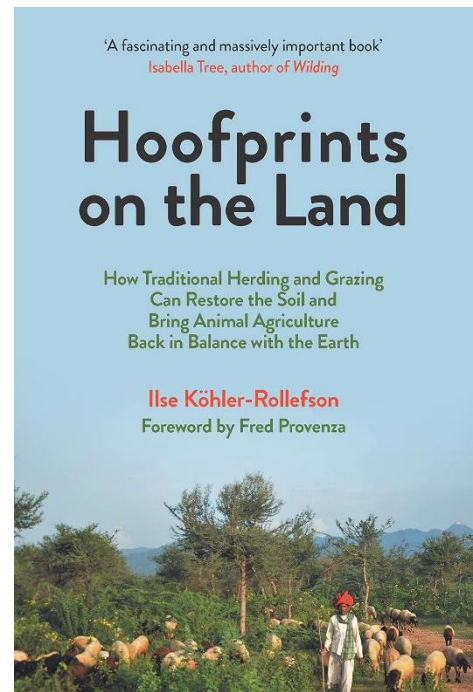
Book review by

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Review of *Hoofprints on the Land: How Traditional Herders and Grazing Animals Hold the Key to Restoring the World's Grasslands*, by Ilse Köhler-Rollefson. (2023). Published by Chelsea Green Publishing UK. Available as paperback and Kindle; 288 pages. Publisher's website:

<https://www.chelseagreen.com/product/hoofprints-on-the-land/>



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In *Hoofprints on the Land*, Ilse Köhler-Rollefson presents a persuasive and carefully researched argument that traditional pastoral herders are among the most important stewards of the world's

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ecologically significant landscapes. She demonstrates how pastoralists maintain seasonal grazing rhythms that have developed through generations of close observation and adaptation. At a time when scientific and policy discussions often focus on technology, efficiency, and optimization, this book encourages readers to consider a different mindset. Köhler-Rollefson argues that traditional pastoral practices do not conflict with sustainability and can instead support locally grounded, ecologically sound livestock systems.

Köhler-Rollefson writes with both scientific rigor and lived experience. Originally trained as a veterinarian, she shifted into archaeozoology after early fieldwork in the Middle East. She then spent decades living among the Raika camel herders of

Rajasthan in India, gaining intimate insight into pastoral livelihoods. As co-founder of the League for Pastoral Peoples, she brings not only academic expertise but also long-term engagement with herding communities. This combination of training and immersion gives her writing a balance that feels both informed and grounded.

The book is organized into two major sections. The first explores pastoral peoples themselves. Köhler-Rollefson describes who pastoralists are, how their knowledge systems function, and what is lost when they are displaced from communal lands. She explains how these communities protect cultural traditions, unique livestock genetics, and ecosystems that depend on mobility. One of her central points is that indigenous livestock breeds possess traits that allow them to thrive under harsh environmental conditions. These traits include heat tolerance, disease resistance, and the ability to utilize sparse forage. Modern development programs often replace these breeds with high-input commercial animals that require feed, water, and infrastructure that drylands cannot support. While high-input breeds may deliver impressive performance under ideal conditions, the costs associated with maintaining them can outweigh the benefits.

An insightful example of community-driven knowledge appears in her discussion of *Pathe Pathshala*, or the concept of a “university on the move.” During a conversation with a veterinarian from Odisha, she highlights the limitations of top-down technological interventions. The veterinarian notes that technologies promoted by outsiders often fail because they are expensive, inaccessible, or irrelevant to local contexts, highlighting that people should be the focus rather than the technologies themselves. *Pathe Pathshala* builds on local knowledge and emphasizes practices that are meaningful and successful in the community. This example reinforces the book’s central argument that pastoral knowledge is not outdated but finely tuned to local environments.

The second half of the book focuses on ecological and environmental research. Here, Köhler-Rollefson introduces the concept of the pastoral footprint, which refers to the ways in which coordinated herd movement improves soil

health. She explains that the hooves of grazing animals break up soil crusts, increase aeration, and distribute nutrients through manure and urine. She draws on ecological research to show how grassland plants and grazing animals co-evolved in a mutually beneficial relationship. When animals move seasonally at appropriate densities, the result can be improved soil structure, increased biodiversity, and enhanced water and nutrient cycling. Köhler-Rollefson takes care to differentiate this form of managed mobility from uncontrolled overgrazing, which is a valid concern in poorly managed systems. She acknowledges the scientific debates surrounding holistic planned grazing and notes that outcomes vary depending on rainfall, soil type, vegetation, and stocking rates.

The book’s geographic range is one of its strongest elements. Köhler-Rollefson moves from the Thar Desert of Rajasthan to the pastures of East Africa, from the steppes of Central Asia to the highland transhumance traditions of the European Alps. Each region supports her broader point that pastoral mobility is a sophisticated and adaptive strategy. It is not an absence of management but a form of land stewardship that modern agricultural development has often ignored or misunderstood. Her message is clear: Local adaptation is essential and sustainable.


One of the most compelling discussions in the book concerns the relationship between pastoralism and food sovereignty. Köhler-Rollefson argues that access to migratory corridors is not only a land use issue but also a matter of food security. When herders lose mobility, they also lose the ability to produce the milk, meat, fiber, and manure that support local economies and household nutrition. She critiques development frameworks that focus on easily measured commodities rather than the subsistence-level provisioning that pastoralists provide. This critique has implications for how researchers measure and model food production, particularly in dryland areas. Promising developments, such as the collaboration between Kenya’s State Department for Livestock Production and the International Livestock Research Institute to map migratory routes, water sources, grazing areas, and markets, relate directly to the book’s themes (Onyango,

2025). This work supports pastoral livelihoods and demonstrates that wider recognition of pastoral systems is emerging in both the global North and South.

Although the ecological argument in the book is comprehensive, Köhler-Rollefson does not explore gender inequities in livestock ownership and decision-making in depth. Additionally, her optimism about policy reform may feel aspirational in regions where land control and migration rights are deeply contested. While she provides thoughtful recommendations for legal recognition of migratory corridors and for revising subsidy structures, the political challenges involved are substantial.

Hoofprints on the Land successfully reframes the debate about sustainable livestock systems. Conversations about feeding a growing global population often focus on new technologies and

increased efficiency. Köhler-Rollefson suggests that an important part of the solution already exists within the accumulated knowledge of pastoral communities. These communities have adapted to challenging landscapes for countless generations, and their practices offer insights into how humans can work with, rather than against, ecological processes.

This book is highly recommended for academics, farmers, policymakers, and anyone engaged in food system research. It reminds readers that caring for soil, land, livestock, and local culture are intertwined responsibilities. Köhler-Rollefson captures this idea powerfully when she writes that livestock connect humans to the earth, and that a world without them would be not only ecologically impoverished but also diminished in terms of human identity. 

Reference

Onyango, P. (2025, August 27). *Mapping Kenya's livestock routes: The arteries of dryland pastoral economy*. International Livestock Research Institute (ILRI).
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