

BOOK REVIEW

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Book review of *Pastoralism – Making Variability Work* by Saverio Krätli and Ilse Koehler-Rollefson and a discussion of the inherent challenges of writing about pastoralists at the global scale

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Introduction

Last summer, the FAO published *Pastoralism – Making Variability Work*, a paper in its Animal Production and Health series. The FAO has historically given short shrift to pastoralism, and of this series' 185 papers, this is just the third with a specific focus on pastoralism. Given the importance of (agro)pastoralism for global food security, this paper is long overdue. As scholars of pastoralism, we are grateful for this paper's efforts to mainstream pastoralism within the FAO and glad that this task was taken on by two scholars whose work we admire.

Addressing pastoralism at the global scale is a daunting undertaking due to the incredible diversity of the world's pastoralists and pastoral systems. In our own work, we have focused on site-specific studies, and we fear that any global-scale treatments of pastoralism are perhaps doomed to mischaracterizations, no matter how competent the authors are. Our skepticism has been bolstered by several recent publications (Herrera et al. 2014; Davies et al. 2016, 2018; Rota et al. 2018).

However, we also share the authors' aims of advocating for pastoralists and—despite our misgivings about the genre—recognize the purchase of such pieces when seeking to advocate for and increase the visibility of pastoral livelihoods within the international development community. To be clear, while we address in this commentary the inherent challenges of pastoral advocacy at the global scale—abstracted from specifics of pastoral systems and the challenges pastoralists face—we do not wish to disregard it but hone it.

According to its abstract, the paper has two primary aims: first, to '[engage] FAO in the mainstreaming of pastoralism' and second, to present 'an evidence based narrative on pastoralism to a specialists' audience [*sic*]'. These two aims are difficult to accommodate in a single paper. When advocating for the mainstreaming of pastoralism, for example, it may be effective to flatten the diverse global community of pastoralists into a more homogeneous archetype that is easier for non-specialists to digest. In addition to such a simplification, it might be useful to focus solely on pastoralism's benefits and downplay any of its unique challenges. In contrast, specialists are most likely quite already aware of the importance of supporting pastoralists, and this audience would

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do better with an honest accounting of the challenges pastoralists face and potential ways forward. An evidence-based narrative for specialists would have to candidly acknowledge the diversity of the world's pastoralists (and the misguidedness of 'pan-pastoralist' interventions) as well as the challenges posed by the erosion of pastoral livelihoods and institutions in many places.

For the non-specialist audience, particularly one within an institution that has long ignored pastoralism as a rural livelihood, this paper does much good work. Within the FAO context, documenting the different material benefits of pastoral production is very useful, providing a strong counter-narrative to those who might view pastoralism as being inherently more degradative to the environment compared to other rural pursuits. A major focus of the paper is the advantages of pastoral production to address risks tied to climate change and variability. This is an important point, well known to specialists, but a necessary intervention in this era of climate smartness. Our concern though, as pastoralism specialists, is how in advocating for the flexibility of pastoralism this paper may oversimplify the human ecology of pastoralism while ignoring its institutional and land-use needs. The risk of such advocacy is that the diversity among pastoralists with respect to both their context-specific needs to be 'flexible' and costs of flexibility is not fully appreciated and that those pastoralists that deviate from flexible norms may be seen as not true subjects of pastoral development. These concerns are presented in the sections to follow.

Conflation/confusion of variability and unpredictability

This report explicitly identifies variability as an entry point to understand and advocate for pastoralist livelihoods. We appreciate this centring of variability and agree with it, in that it justifies calls to protect and facilitate pastoral mobility. Moreover, it is a framing that resonates with existing pastoral research world-wide, which has found variability to be manifested in diverse ways. While this report does a good job of recognizing the different types of variability that can be found in pastoral settings—using an even more expansive and inclusive definition of 'variability' than is commonly found in the pastoralism literature—we have some concerns that some distinct types of variability are not clearly defined, potentially leading to inaccurate characterizations of global pastoralism.

Variability has been a central concept in the academic literature about pastoralism for several decades, becoming more common over time among practitioners, as well. Most often, 'variability' refers to the changes over time in the distribution of either forage or the precipitation that allows for forage to grow. In this piece, however, the

authors take a non-traditional approach to understanding variability in pastoral contexts, seeming to draw directly from Emery Roe's typology of input, process, and output variance, originally developed to discuss critical infrastructure, but more recently applied to pastoral systems (Roe 2020). In this framework, the definition of 'variability' most often employed by pastoralism scholars is referred to by these authors as 'variability in inputs', but the report also stresses the importance of 'variability in operational processes' (management responses) in order to minimize 'variability of outputs' (animal productivity and health) (Krätli and Koehler-Rollefson 2021: 2).

This typology is one of the primary contributions the paper seeks to make; however, we are not sure what this adds to the more common framings of pastoralists' responses to environmental variability in the extant literature. Moreover, we believe that it creates some notable problems. First, it frames variability as something positive. Second, it conflates variability and uncertainty.

The authors argue in several places that 'variability' should not be seen as a problem or obstacle (Krätli and Koehler-Rollefson 2021: 4, 8, 9). While we can understand the motivation for making such statements, we disagree with their breadth. The authors even seem to contradict themselves at times on this point. Moreover, most pastoralists themselves would disagree with these statements, at least in the particular contexts we know well. The emphasis on reducing output variability to sustain pastoral communities implies that output variability *is* a problem, and the stated need to 'match' input variability with process variability implies that input variability *is* an obstacle to be dealt with. It seems that the spirit of their argument is not that variability is harmless, but that environmental variability is not an insurmountable obstacle, and it is best accommodated through land and livestock management techniques that harmonize with environmental variability rather than fight against it. This message is nothing new among pastoralism experts but may very well be necessary and beneficial for non-specialist audiences.

When writing about environmental variability, the report is imprecise and inconsistent with its descriptions. The authors *define* variability as 'short-notice and short-lived' (Krätli and Koehler-Rollefson 2021: 1-2, 3, 7) fluctuations that are unpredictable, borrowing a definition from a Kenyan policy document. Certainly, environmental variability in pastoral settings *can* be unpredictable, but there are also many types of environmental variability that are predictable, which the authors themselves recognize when describing how pastoralists work with cyclical seasonal variabilities, giving an example of how Sahelian pastoralists 'stretch the rains' by matching their movements to recurring climatic patterns (e.g. Section 1.1 on pages 4–5). As one of us has written recently for this journal, it is common for those writing about

pastoralism to conflate unpredictability and variability, and this mistake has significant consequences when it comes to designing development interventions or governance systems to facilitate pastoralists' management responses (Gillin 2021).

These different types of variability require different types of herder responses, the equivalent of the 'operational processes' in this report. While the authors refer to all responses by pastoralists to environmental variability as 'variability in operational processes', the responses themselves do not need to be variable unless the environmental variability itself is unpredictable; this is why distinguishing between unpredictable and predictable environmental variability is important (Gillin 2021). Despite this, they equate pastoralists' responses to 'flexibility' or 'optionality' (Krätli and Koehler-Rollefson 2021: 6), even though many examples they give for variability in the operational process—mobility, land tenure systems, crop-livestock linkages, and urban-rural linkages—do not need to be flexible when input variability is predictable.

Predictable mobility patterns and stable land tenure arrangements, as long as they facilitate mobility, are the most appropriate responses in certain pastoral contexts, though they admittedly are not appropriate in every context. By eliding the distinction between predictable and unpredictable variability, the authors miss the opportunity to show readers how to match these with the correct types of responses. Their characterizations of types of mobility also do not hold up to the internal logic of their framework: it is difficult to imagine how herders could *possibly* change their land tenure systems, herd composition, and urban-rural linkages nimbly enough to respond to short-notice and short-lived fluctuations in resources.

Why is precision important when talking about flexibility? More flexible responses tend to be more institutionally demanding: more difficult to design rules for and implement without conflict. Arguments in favour of maximizing flexibility might seem harmless when focusing exclusively on the environmental contexts, but political-economic and institutional constraints make it important to consider variability in a more nuanced way, and not imply that all the world's pastoral systems face the same types of variability and necessitate equally flexible responses.

Over-generalization of pastoral livelihoods

The discussion of variability shows a significant over-generalization of the world's pastoralists, despite the document's early recognition that pastoralism comprises a 'wide family' of 'highly diverse' 'livelihood and food production systems' (Krätli and Koehler-Rollefson 2021: 3). The report's text box on variability is an extract from a white paper that Krätli crafted for MISEREOR's work in Ethiopia (Krätli 2019), and one of its definitions of

variability is taken from a Kenyan policy document. The African—especially East African—pastoralist experience of environmental variability is being framed here as globally representative, much as it was in the recent video by the Coalition of European Lobbies for Eastern African Pastoralism (CELEP), which has been sub-titled in many different languages for international dissemination (CELEP 2021a). In fact, *Making Variability Work* appears to be an expansion of a short, written summary of CELEP's understanding of pastoralism (CELEP 2021b) which, itself, was based on the aforementioned work on Ethiopia by Krätli for MISEREOR.

Certainly, trying to craft a single narrative that adequately represents global pastoralism is a tall order. This report makes a visible effort to draw on examples from around the world. However, like most 'global' documents on pastoralism, it is overly influenced by the pastoralism of Africa's drylands. By our count, 75% of the site-specific pastoralism and rangeland sources listed in the references were focused on African contexts, compared to 17% of these focused on Asia (and none focusing on the Americas), even though the pastoralist population in Asia is estimated to be larger than that of Africa (Thornton et al. 2002).

As a result, the report creates a false sense of commonality among the world's pastoralists. Though pastoralists share some key attributes—livelihoods based on livestock, a need for mechanisms to facilitate livestock mobility, and a need for recognition from authorities that many governance solutions designed for cultivated agriculture will not work for them—the report implies that all pastoralists are multi-generational livestock keepers with deep received knowledge of how to work in harmony in their environment. But what do we call mobile livestock keepers who are new to the livelihood and not yet experts? What about those who may not be working 'with' their environments, either due to a lack of experience or because of severe land-use or political constraints on their abilities to do so? Are they not truly pastoralists and less worthy of attention and support?

Indeed, much of this paper implies that all pastoralists share a single 'pastoral' logic that conditions how they view variabilities and results in a unified set of livelihood strategies. There is also an implication that pastoral contexts are similar enough that all pastoralists *ought* to share the same knowledge and practices: that pastoral knowledge is 'portable'. Conveying these messages to non-specialists runs the risk of fueling inappropriate development interventions that displace context-specific knowledge and local practices. This outcome likely sounds familiar to those of us who are aware of, for example, deleterious privatization and sedentarization schemes in pastoral areas.

Imagine a development worker with no prior experience in pastoralism tasked with designing a project to help pastoralists in the mountains of Tajikistan. They do their due diligence, picking up a report or watching a YouTube video to gain the state-of-the-art knowledge on pastoralism. They learn that all pastoralists must regularly re-negotiate land access so that they can opportunistically travel to match the vagaries of unpredictable forage availability. When they go into the field, they see regular livestock movements between areas where access rules are stable. What should they think when they see this? Will they think the locals are doing it wrong? In the West African Sahel, the Fulani do display highly variable mobility patterns, as this publication would cause one to expect. However, this variability depends on a range of non-environmental factors such as herding labour availability, herd size, farming commitments, and agricultural pressures (Turner et al. 2014). Without understanding and accounting for these factors, it is difficult to know how development workers can seek to increase the resilience of (agro)pastoralism.

Non-environmental constraints and trade-offs of pastoralism

Perhaps to simplify pastoral livelihoods for non-specialists, *Making Variability Work* myopically discusses pastoralism as if it operates in a fictive environment composed of the herder, rainfall, pasture, and livestock with little recognition of the political-economic and institutional contexts within which pastoralists seek to remain 'resilient'. The authors are right to suggest that pastoralism is less threatened by climate change compared to other livelihood systems, but they ignore the threats that pastoralism faces with respect to competing land uses, erosion of social cohesion, and external systems of governance (to name a few). It is interesting how the discourse about the future of pastoralism has shifted from studies pointing to the decline of pastoralism due to these external factors (e.g. Fernández-Giménez and Le Febre 2006; Hobbs et al. 2008; Sayre et al. 2013) to its celebration as a new arena of entrepreneurship under climate change some 10 years later. Pastoralists were experiencing climate change 10 years ago, and they are experiencing even greater constraints on their mobility today. At one point, the authors defend this partial view of pastoralism by arguing that 'a true understanding of pastoralism' requires that the effects of and pastoralist responses to 'ill-informed policies and interventions' be considered separately from pastoralism's 'features and practices' (Krätli and Koehler-Rollefson 2021: 2). This may be true when the main goal is a convincing defense of the legitimacy of pastoralism as a livelihood, but we believe that the paper should have provided a more honest treatment of the types of

challenges pastoralists face in their various current political-economic contexts.

By adopting a climate-adaptationist framing, we fear that the piece could be seen to suggest that pastoral knowledge can be treated as something that can be distilled from and circulate outside the socioecological contexts where these knowledges have developed. These knowledges and their relevance are changing as not only biophysical but social contexts change. Resilience to the broader external and internal pressures experienced by pastoral groups does not necessarily lead to a persistence of different features of what is seen as pastoralism. There is a large pastoral specialist literature that points to declines of livestock mobility, privatization of commons, and departures from pastoral livelihoods across the world. We well recognize that pastoralism, in its many forms, is not doomed because of its 'primitive nature' but it is currently stressed due to broader social factors. Without recognizing these, the pastoral resilience to climate change that the piece describes so well will be severely eroded (if not already).

We are thus concerned by the failure of the document to address the institutional needs of pastoralism as well as its limited attention to the broader political-economic environments within which pastoralists operate. Is this simply a pastoralist specialist concern? We would argue not and that non-specialist development actors such as members of the Food and Agriculture Organization need to be aware of these issues. First, pastoralism does not operate without the effective operation of its own institutions that serve to defend pastoral resources from competing land uses; engage effectively with government actors and other communities; manage access to pasture, water, and minerals; adjudicate questions of livestock loans and labour contracts; and manage and resolve conflict. 'Pastoral wisdom' is embedded into the customary institutions, and these institutions need to be recognized and supported by governments and development actors. In addition, the demands of certain elements of pastoral 'resilience' need to be recognized, even if they are frequently offset by the benefits. For example, we can easily extol the benefits of mixed species husbandry and mobility and lose sight of the fact both have labour costs, and thus, there are trade-offs between different features of pastoralism that build resilience.

Without the recognition of the needs of pastoralism to be resilient, there is a tendency for pastoralism to suffer malign neglect. 'Just let pastoralists do what they do.' What they do requires commitments by not only local communities but broader systems of state governance. Recognition of diverse tenure systems (including, but not always, common property), addressing pastoral security, multi-level governance that provides checks and balances to local enclosures, and mechanisms for inter-

community conflict management are but a few of such potential needs. We have all seen the outcomes of ignoring these needs. The logic of pastoral mobility is 'recognized' by most development organizations while at the same time they promote common land enclosure to increase tenure security, decentralize resource management authority to agricultural communities, or promote agricultural expansion on marginal lands. Pastoral mobility is promoted by building corridors without a recognition of the institutions required to effectively use these corridors nor an understanding of the pasture and water needs of livestock moving along these corridors. In short, we find the embrace of pastoral flexibility as dangerous without a recognition that this flexibility is mediated by institutions and has material and political needs that require support from multiple levels of governance.

Conclusion: Suggestions for global-scale advocacy for pastoralists

With the FAO Conference's recent endorsement of an International Year of Rangelands and Pastoralists in 2026, we can expect to see even more global-scale discussions of pastoralism, perhaps with more material consequences for pastoral development than ever before. Many of these will not approach the quality of *Pastoralism — Making Variability Work*, reviewed here. The strength of this paper speaks for itself, and in this commentary, we have not sought to use it as a target of critique but instead have cautioned against pan-pastoral advocacy that abstracts from pastoral realities, no matter how persuasive the result may be. The paper persuasively presents an image of the pastoralist who guides his herd across a largely biophysical landscape of unpredictable patches of forage and water as shaped by climate variability. Abstraction is strategic in this case. To be persuasive in the global development discourse, it is easiest to present a pan-pastoralist view that treats all pastoral systems as operating under the same logics and facing similar constraints.

We believe, however, that the disadvantages of this approach outweigh its potential benefits. Not only is such a characterization misleading, but such abstractions lead to a portrayal that is not recognizable to those of us who work with pastoral communities. Climate change is altering precipitation and temperature patterns, but strong seasonalities and geographic variations in their values will persist. It is these somewhat predictable variations that often shape longer-distance livestock mobility. Conflating variability and unpredictability is dangerous to the degree that it suggests to development practitioners that pastoralism can and should operate within an institutional void. The pastoral landscape is not simply composed of patches of material resources but is also very much populated by social and political barriers and

incentives that strongly shape pastoralist responses to biophysical variability. In short, flexible responses of pastoralists most often occur within highly constrained 'choice sets'. To support pastoralists in the context of climate change, we must not simply advocate for their livelihood but expose and find solutions to challenges facing not only their climate response but their continued persistence.

There are benefits to searching for common ground among pastoralists in order to unite them into a critical mass that demands international recognition. We believe that future engagements with pastoralism at the global scale must deliberately consider the balancing act of presenting 'pastoralists' as a coherent bloc while still accurately representing the diversity of the world's pastoral systems. This, of course, is easier said than done. Clearly, there is a need to develop frameworks and language that accommodate both commonalities and differences more effectively than terms such as variability and flexibility are able to do. Moreover, we believe that more useful commonalities for an INGO audience may be found by identifying constraints and barriers to pastoral livelihoods.

In fact, there may be more commonalities among these constraints than among the pastoral livelihoods they affect. Examples include the role of national land tenure laws and governance regimes and how they systematically have worked to limit pastoral mobility. Because many of the ill-informed pastoral development policies and projects themselves actually do spring from the same set of globally circulating misunderstandings and false narratives, they ought to be considered together. As we seek to advocate for pastoralists and support their own causes, perhaps their collective pushback against such misunderstandings and policies can be a common denominator, as long as we acknowledge that the specific desired outcomes will vary depending on context.

Abbreviations

CELEP: Coalition of European Lobbies for Eastern African Pastoralism; FAO: Food and Agriculture Organization of the United Nations; IGO: Inter-governmental organization; INGO: International non-governmental organization

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Both authors contributed ideas and writing to all sections of the paper. KG did most of the writing for the first three sections, and MDT did most of the writing of the last two sections. All authors read and approved the final manuscript.

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