

Evolving Information Needs for Rangeland Resource Management Among Borana and Rendille Communities in Northern Kenya

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Introduction

- For centuries, pastoral livestock keepers have efficiently utilized the fast-changing resource availability of the rangelands
- Pastoralists rely on diverse information to make strategic herd movement decisions
- Information sharing is key to successful livestock husbandry in rangeland systems
- Yet, there is limited understanding of how these information systems have changed over time









Aims: Examine emerging information needs in pastoralist communities
Capture socio-technological changes shaping information access and relevance

Conclusions

- Land use change, climate variability, migration, and trade call for timely & relevant information
- Pastoralists need broader information types: markets, roads, networks, restrictions (dry season reserve), weather, and veterinary services
- Sources expanded: from elders & scouts to phones, radios, government updates
- Actors (e.g., NGOs and government institutions) shape information access & flow
- Technology improves speed & access but reduces trust and social cohesion

Results

Means of information acquisition and categories of information

Current information acquisition	Initial information acquisition			
	Observation	Elders gathering	Face-to-face inquiry	Herders gathering in satellite camps at night (Kular)
				
	Initial: Animal health, body condition	Initial: Water, pasture Current: Restricted grazing area (dry season reserves), veterinary services	Initial: Animal condition, pasture distribution, rainfall, market prices Current: Weather	Initial: Pasture Current: Security, veterinary services
Current information acquisition	Photo	Radio	Phone calls	Scouting on motorbike
				
	Current: Animal health, pasture, water, rainfall, drought severity	Current: Animal loss, security, weather	Current: Pasture, water, restricted grazing area (dry season reserves), security, weather	Current: Pasture, water, road & mobile phone network

Information systems features in the past and today

	Initial	Current
Strengths	<ul style="list-style-type: none">Herders extensive knowledge on livestock keepingTrustworthy information from known peopleAccurate & detailed information by scouting on footScouts covered long trekking distances covered	<ul style="list-style-type: none">Timely informationEase in access – e.g., phone callTrustworthy information with evidence of photos
Weaknesses	<ul style="list-style-type: none">Delayed information – Long trekking distances and the possibility of meeting trusted personsCumbersome to gather information – Long distances	<ul style="list-style-type: none">Trustworthy – Difficult to check on the sourceExperience – Less intergenerational learningRestricted sharing – Exclusion of users

In the past, scouting was done only by foot but now people use motorbikes to do scouting faster. The scouting information that is gathered by foot is far much accurate and complete than the information collected by motorbikes, this is because the motorbikes only follow the road and will not be able to capture everything.
(FGD Lower Laisamis , 03/2025)



Study Area

- Marsabit County, Northern Kenya
- Lower Laisamis: Rendille Community
- Sololo: Borana Community
- Main livelihood: Pastoral livestock production
- Bimodal rainfall pattern
- Rainfall average: 200 - 600mm/year

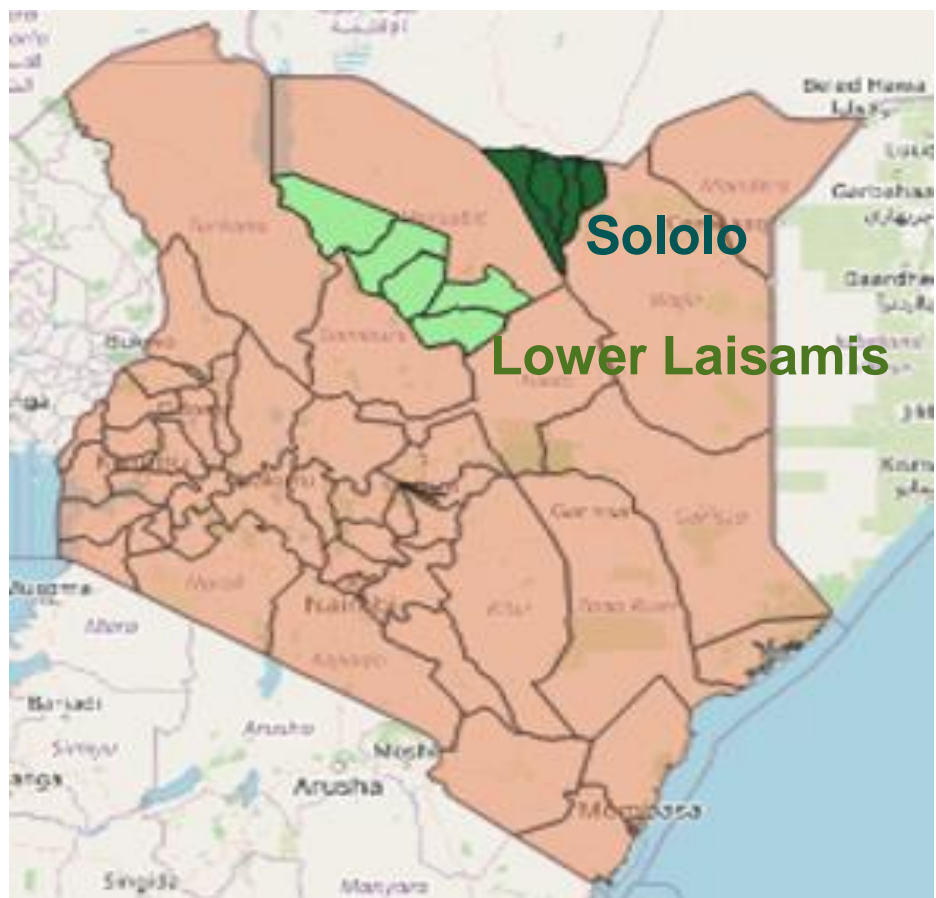


Figure 1: Map of Kenya with the study area
Source: M. Restrepo

Methods

- November 2024 to March 2025
- Focus Group Discussions (FGD): n=5 Elders & n=5 Youths
- Semi-Structured Interviews (SSI): n=8 Elders & 8 n=Herders



Figure 2: FGD with Elders in Sololo – Borana pastoralists



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Acknowledgments:
As part of the ATSAF Academy, this research was funded by the Junior Scientists Tandems project (JST). JST, commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ), is being carried out by ATSAF (Council for Tropical and Subtropical Agricultural Research) e.V. on behalf of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.
Rendille and Borana Pastoralists in Lower Laisamis and Sololo.
Raphael Gudere for support in community facilitation and research activities coordination within the Rendille community

