



Policy brief 20th novembre 2025

From risk to resilience: grounding innovation in pastoralist realities

This study investigates pastoralists' perceptions of the risks they face and how this influences adoption of innovations.

Éditeur SPARC

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Humanitarian and development often encourage pastoralists to adopt innovations they believe will benefit pastoralists. Despite a multitude of innovations being introduced each year, sustained adoption by pastoralists is limited. Introduced innovations often reflect limited understanding of adaptations used by pastoralists. Innovations that include feedback mechanisms and iteration during the design and testing phase experience greater adoption when introduced in new areas.

SPARC researchers have carried out 23 studies on innovations. We reviewed these studies and interviewed research leads to identify common findings on pastoralists' perceptions of risk.

Findings include:

- Pastoralists in arid and semi-arid areas prioritise locally-developed adaptations. Despite good intentions, innovations introduced by external actors to help pastoralists manage risks typically address a single issue without accounting for the complex, overlapping challenges pastoralists face. Such narrow focus frequently results in limited adoption by intended end-users.
- Before developing effective innovations, it is essential to understand how pastoralists perceive, interpret, and prioritise the risks they encounter. This includes how individual pastoralists and households make sense of the reasons for these risks. This informs how they evaluate their threat exposure and what they prioritise to protect (e.g. relationships, cash, assets) before adapting, absorbing, or recovering from threats.. Doing so can give insight as to their adaptation priorities and the resources they may need to adapt.

Policy implications include:

- Externally introduced innovations will only be relevant if designed to complement the many existing ways that pastoralists gather information, prioritise their needs, and make use of their social networks.
- By understanding both pastoralist perceived risks and what they seek to protect, innovators and external actors can better identify solutions that will genuinely support pastoralists to adapt to hazards.

Recommendations include:

- Investment in innovation requires timelines and financing that supports end-user feedback and product / process iteration. Without iteration and contextualisation, innovations struggle to reach target end-users beyond an initial pilot phase.
- Reconsider single purpose innovations. Innovations that have multiple uses or can be adapted by pastoralists or end-users have the highest adoption rates.
- Build on existing de-risking approaches that are prioritised by pastoralists. For example, digital communications that support access to or expansion of social networks.
- Invest in activities that build end-user trust in innovations; especially innovations designed to improve access to information. End-users must trust the information before they continue to use an innovation.



Woman travelling to market to sell goat. Degehabur, Somali Region, Ethiopia
Credit E. Millstein 2024