

Risk, behavior asymmetries and willingness to adopt co-produced climate-informed advisory for pastoralists and agro-pastoralists in Senegal

Prosper Houessionon, Derek Chan, Omonlola Nadine Worou, Abdrahmane Wane, Anthony Whitbread

Objectives

This study aims to develop tailored and context specific climate advisories that engage community perceptions, local knowledge and livelihood patterns for climate risk and uncertainty management in livestock farming.

Methods

A willingness to adopt survey conducted with 1000 randomly selected respondents.

Domain specific self-stated risk preferences were measured via Likert scaled contextualized self-assessment questions on attitude to risk taking in four domains: production, market and prices, external financing and agriculture in general.

Conclusions

A bottom-up approach to co-develop climate advisory services ensures usability for beneficiaries

Including market information as well as advisories on pastoral resources will increase adoption of climate information services.

Implementation

A Community of practices (CoP) is implemented between experts and livestock producers' organizations for the co-development of climate informed-advisory services, which are then disseminated every ten days through cell phone calls.

Pilot study with dissemination of climate advisory services to 1400 livestock farmers, in 80 villages of the region of Louga, Senegal.

Implementation of cluster randomized control trials for impact assessment (baseline studies already conducted, midline planned for November 2023, and end-line in October 2024).

Findings will be used to promote evidence-based scaling of best solutions across the country and region.

Findings

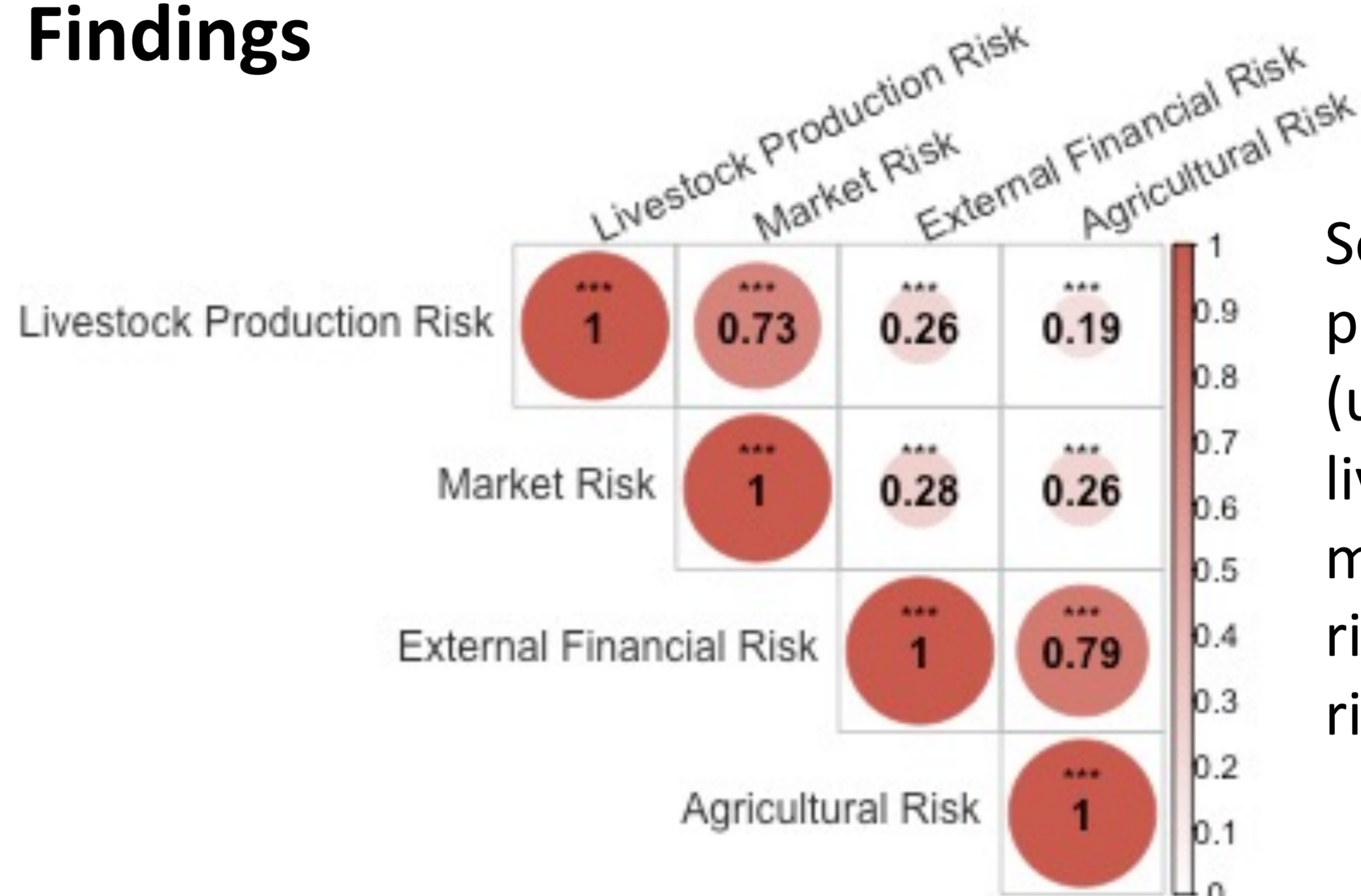


Figure 1: Correlation of risks across different domains as reported by livestock farmers. All significant to 1%.

Self-reported risk preferences highly correlated (up to 0.79), particularly livestock production risk and market risk, and agricultural risk and external financial risk.

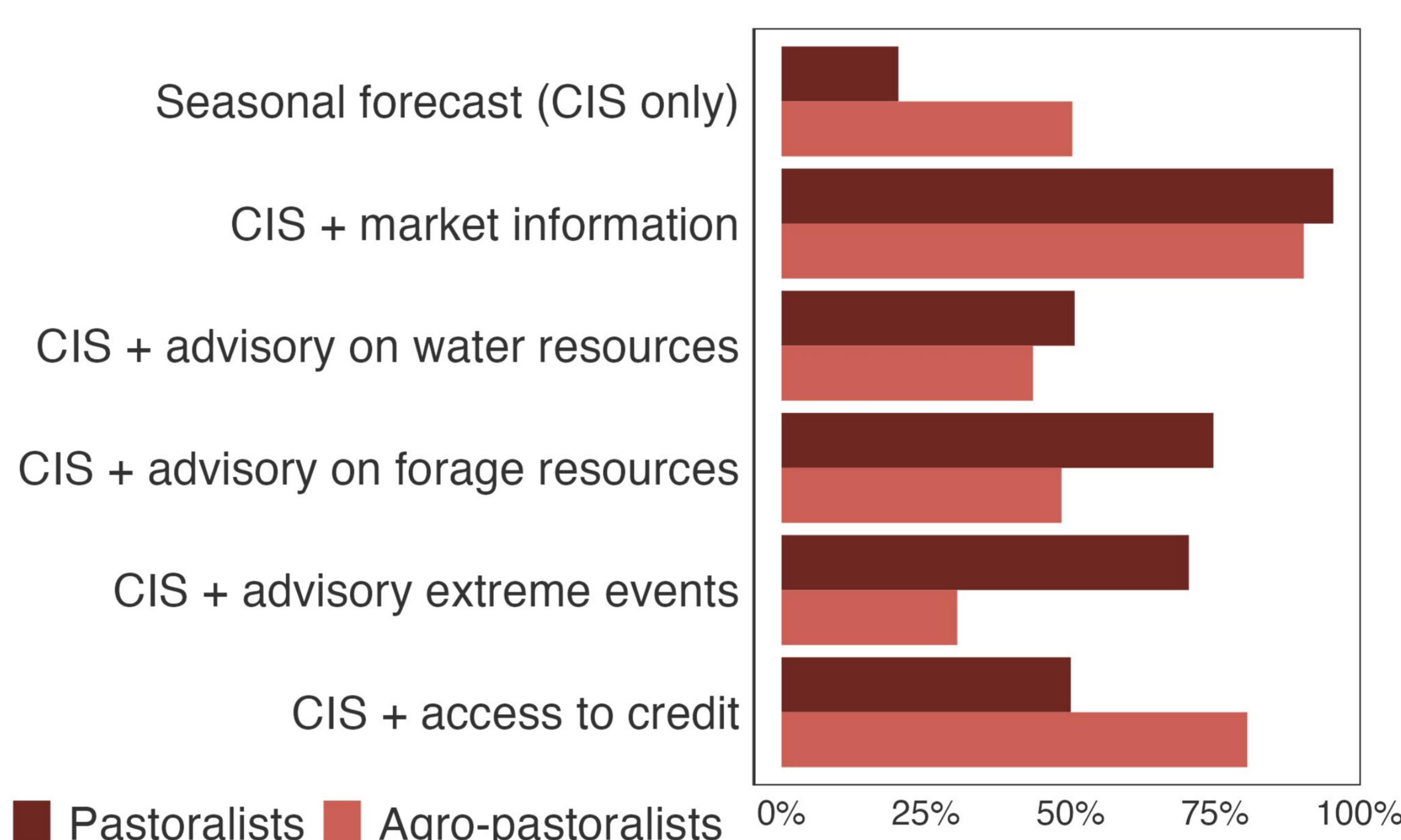


Figure 2: What advisories would improve the usability of CIS?

Results show behavior heterogeneity between pastoralists and agro-pastoralists in their willingness to adopt, with pastoralists more oriented to advisories on forage and water resources. Market information and access to credit are particularly important for both.

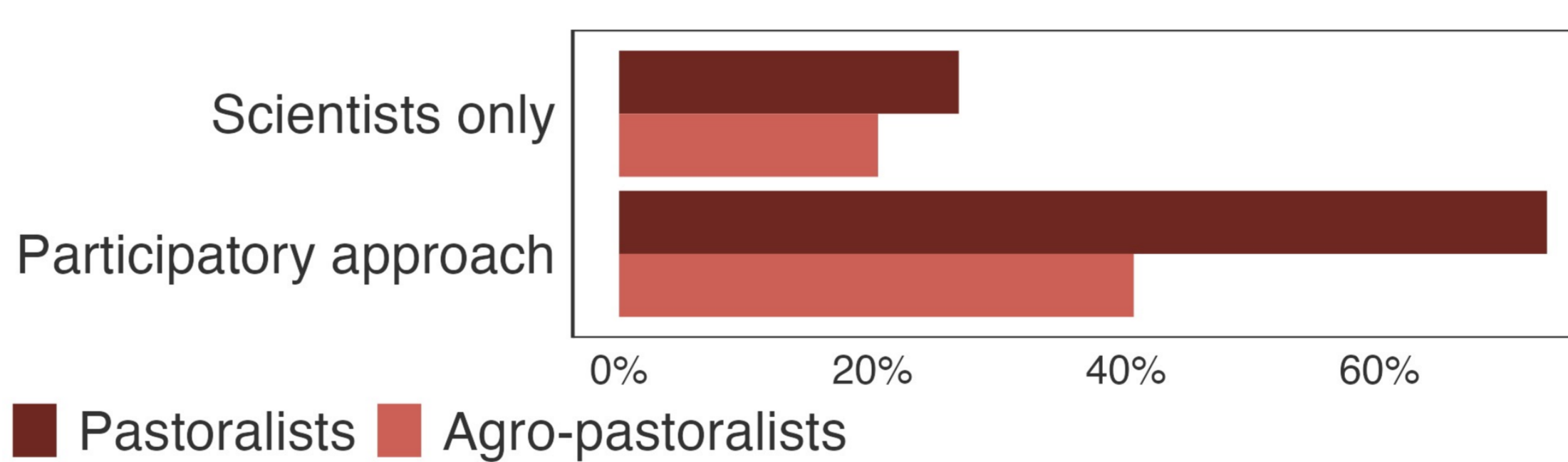


Figure 3: What mechanism is best suited to generate climate advisories?

Co-development of climate advisories through a participatory approach is particularly suited.



Prosper Houessionon • International Livestock Research Institute
 p.houessionon@cgiar.org • c/o AfricaRice rue 18 Cité Mamelles Dakar, Sénégal
 +221 33 860 07 06 • ilri.org
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