

SUMMARY

15/05/2025 - Individual, Collective, or Both? Testing Payment Mechanisms to Enhance Adoption of Sustainable Land-Use Systems.

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The adoption of sustainable land-use systems (SLUS) remains low among smallholder farmers in Sub-Saharan Africa, mainly due to immediate costs and risks outweighing short-term benefits. This study examines how different payment for environmental services (PES) mechanisms can incentivize SLUS adoption among smallholder farmers in Zimbabwe, assuming critical mass adoption would enhance environmental services.

Using a framed field experiment with 588 farmers, we modeled SLUS adoption as a threshold public good game and compared three PES mechanisms: individual payments unconditional on reaching an adoption threshold, collective payments conditional on reaching adoption threshold, and a combined approach incorporating both payment types. We also investigated policy framing effects on adoption decisions and explored prosocial and risk preferences' role in decision-making.

Results show only the combined payment scheme successfully achieved the SLUS adoption threshold. When the same payment structure was implemented without explicit explanation of the additional payment, contributions dropped to control group levels, highlighting policy framing's crucial role. Social preferences and risk attitudes showed minimal correlation with adoption decisions, although farmers exhibiting other-regarding preferences in the dictator game contributed more to the threshold public good game. These findings advance our understanding of PES design by demonstrating that combining individual and collective payments can overcome coordination challenges in SLUS adoption, while emphasizing clear communication in program implementation.