

Title: A gender-differentiated analysis of climate smart agriculture adoption by smallholder farmers: Application of the Extended Technology Acceptance Model

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Low adoption of climate-smart agriculture (CSA) technologies by smallholder-farmers in regions where negative impacts of climate-related hazards already threaten agrarian livelihoods remains a concerning enigma. Adoption patterns are not commensurate with merits of CSA on food security and climate resilience and attention to gender in relation to behavioural and attitudinal patterns in CSA adoption remains underexplored. An exploratory-sequential mixed methods study was conducted, using a socio-psychological theoretical lens to test applicability of the Extended Technology Acceptance Model in predicting CSA adoption among at-risk smallholder farming communities in Malawi and Zambia. Spearman's *rho* correlation results show relationship strengths between socio-psychological factors; perceptions on ease of use, usefulness and climate risk, differed between men and women householdheads. Results also show that social processes are central in influencing decision-making on CSA adoption. For practitioners and policy-makers these findings reflect critical need for gender-specific behavioural change communication strategies and inclusive participatory engagement. This will promote dialogue with diverse groups of smallholder-farmers aimed at changing negative, and leveraging on positive, behaviour and attitudes towards new CSA technologies. CSA technology development for smallholder-farmers needs to appreciate role of socio-psychological factors in adoption decisions. Further scientific research is required to establish causality between related socio-psychological factors.

Keywords: gender, climate-smart agriculture, technology acceptance model, resilience-building, socio-psychological behaviour

Biography

Sizwile Khoza holds a PhD in Disaster Risk Science from the North-West University in South Africa. She has also worked in programme management in the NGO sector in marginalised communities in Zimbabwe for close to ten years. She is also a 2015 Mandela Washington Fellow, a United States of America based fellowship for young African leaders supported by the US Department of State. Her research interests include disaster risk reduction and climate change adaptation in agriculture, gender and sustainable development. Some of her work has been published in reputable international journals.

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