Smallholder Intentions towards Climate-Smart Agriculture: An Application of decomposed Theory of Planeed Behavior

Shamima

Islam School of Life and Environmental Sciences, Deakin University, Australia

Statement of the Problem: Climate-Smart Agriculture (CSA) offers a crucial pathway towards sustainable agricultural systems and enhanced farmer resilience, particularly in those regions most vulnerable to climate change. While promoting the initial adoption of these practices is a well-documented challenge, ensuring their sustained use, expansion, and diversification is equally critical and often driven by complex socio-psychological factors that remain underexplored for smallholder farmers. Methodology & Theoretical Orientation: This study addresses this research gap by investigating the intentions of 350 smallholder farmers in Bangladesh's flood-prone haor wetlands to continue, expand, and diversify their use of CSA, applying the Decomposed Theory of Planned Behavior (DTPB) as its analytical framework. The relationships between the decomposed constructs were tested using Structural Equation Modeling (SEM). Findings: The model explained 81.3% of the variance in these intentions, with attitude, subjective norms, and perceived behavioral control all being significant predictors. Attitude was the most dominant direct influence, primarily shaped by the perceived usefulness and easiness of CSA. Subjective norms were strongly determined by extension services and technical training, while perceived behavioral control was chiefly a function of personal efficacy, with perceived resources not playing a significant role. Conclusion & Significance: These results indicate that promoting deeper CSA engagement requires strategies focused on demonstrating ongoing benefits, strengthening institutional support, and systematically enhancing farmers' self-efficacy. Understanding these sociopsychological drivers is vital for designing targeted interventions that promote effective climate adaptation, accelerate deeper and broader CSA practice, and improve livelihoods for smallholder farmers vulnerable to climate change.

Biography

Shamima Islam is a dedicated PhD Candidate in the School of Life and Environmental Sciences at Deakin University, Australia, where her PhD thesis focuses on Climate-Smart Agriculture practices by smallholder farmers. With prior experience as a Lecturer in Agricultural Economics at Gazipur Agricultural University in Bangladesh, she has a strong background in teaching, research, and curriculum development. Her current research aims to broaden her expertise in environmental sciences and contribute to academic excellence by exploring agricultural sustainability in climate-vulnerable regions

s.islam@deakin.edu.au