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Improving perception to achieve intention-action consistency of green manure adoption among smallholder farmers in Guangxi, southern China

by Yixin Nong, Changbin Yin, Xiaoyan Yi, and Hsiaoping Chien

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Improving perception to achieve intention-action consistency of green manure adoption among smallholder farmers in Guangxi, southern China

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Abstract: Studies on the farmers' sustainable farming practices behaviors usually focus on willingness (intention) and behavior (action) separately without considering the gap between them and factors that improve intention-action consistency. This study explores the consistency among adoption intention, action, and perception of green manure crops (GMC) regarding soil conservation and sustainable farming among smallholder farmers in southern China. The main factors that affect farmers' intention and action of green manure adoption (GMA) were identified using a bivariate probit model based on 240 samples from Guangxi, southern China. Despite the current adoption rate of only 12%, the survey reveals that 68% and 73% of the respondents had a positive perception and intention of GMA, respectively. The empirical results show that perception positively and significantly affects the intention and action of GMA and effectively improves the intention-action consistency. Female farmers, mixed crop-livestock farming, subsidies, and opinions from neighbors positively impact GMA intentions. Rice cultivation, agricultural training, and conservation training have significant effects on GMA action. Positive perceptions of GMC, rice cultivation, and agricultural and conservation training are key factors for achieving intention-action consistency. This study addresses the challenge of high intention and low action of GMA among smallholder farmers and highlights the importance of perception in improving both intention and action of GMA.

Keywords: perception, green manure adoption, intention-action consistency, bivariate probit

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