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## Adoption of Crop Insurance as a Risk-Transfer Mechanism among Smallholder Farmers: A Micro-level Study in Assam, India

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## **ABSTRACT**

Risks related to crop yield are significantly affected by weather-related events. This renders risk transfer methods, such as crop insurance, increasingly essential for smallholder farmers. The present study aims to identify the demand for crop insurance as a climate risk mitigation strategy by smallholder farmers in Assam, a flood- and drought-prone state in north-eastern India. Using a multistage sample technique, 600 participants were surveyed across three highly vulnerable districts. The factors affecting the adoption of crop insurance are analyzed using a probit model. The results reveal that of the total respondents, about 42 percent have opted for crop insurance. Several factors were significant predictors of adoption, particularly education level, landholding size, incidence of floods, and membership in social groups. These findings highlight the necessity of improving farmers' understanding and strengthening social networks to facilitate the adoption of crop insurance. This study elucidates how smallholder farmers respond to climate risks, underscoring the potential of targeted policy interventions to enhance resilience and sustainability among vulnerable farming communities.

Keywords: Climate risk; Extreme events; Insurance; Mitigation; Probit