Looking out for a Better Mitigation Strategy: Smallholder Farmers' Willingness to Pay for Drought-Index Crop Insurance Premium in the Northern Region of Ghana

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Abstract

As the impacts of climate variability on livelihoods of smallholder farmers in Northern Ghana become severer, crop insurance has been advocated as the appropriate way of assisting such farmers to cope with production risks. By multistage sampling procedure, we obtained data from 315 farmers in 15 communities of Tolon and Kumbungu districts and Savelugu-Nanton municipality and applied Contingent Valuation method (CVM) to examine the willingness of maize farmers in Northern Region to pay for crop insurance in a hypothetical market-based drought-index insurance scheme and identified the determinants of their WTP by a binary probit model (BPM). The results revealed that the average premium a maize farmers is willing to pay for crop drought-index insurance is GHS 70.10/per acre/annum. Sex, level of education and perception index unexpectedly reduce farmers' wiliness to pay crop insurance. Women's contributions to agriculture, previous farm income, and landownership are factors that significantly enhance farmers' WTP. We recommend that crop insurance programs should first build communication capacity of Agricultural extension agents to sensitize farmers with, especially women, on the need to ensure their crops before presenting the insurance packages to the farmers. Further research to understand the risk facing crop insurance companies and how educated farmer perceive insurance in general are also recommended.

Key words: Climate Change, Willingness to Pay, Drought-Index Insurance, Northern Region