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Index-Based Insurance for Cocoa Production in Ghana: Just a Mirage?

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Abstract

Index-based rainfall insurance is a financial adaptation option that pays out benefits based on a predetermined index e.g. rainfall level. It is a measure that has the potential to improve cocoa farmers' resilience and enhance their adaptability to climate change induced risks. However, the complex nature of the cocoa sector and the organisational structure of Ghanaian farmers create uncertainty about the adoption and successful implementation of index insurance. This paper presents results of a study on factors impacting farmers' willingness to pay for index insurance as well as organisational and institutional factors that can influence its demand and adoption in Ghana. Primary data were collected through structured surveys with 313 households in 20 communities in Bia East and Dormaa West districts. In addition, five insurance companies were interviewed to determine their interest in and potential challenges for the establishment of a market for index insurance products for farmers. Key informant interviews were conducted with representatives of the Ghana Cocoa Board to determine the factors that can affect adoption of index insurance.

Econometric analysis of the data reveals that indeed the vast majority of cocoa farmers are willing to pay the equivalent of 10% of the value of a 62 kg of bag of cocoa as insurance premium. Insurance companies will be willing to provide index insurance packages to cocoa farmers provided there is time series yield and meteorological data available to help them structure the premium. Insurance companies, however, are concerned about farmers' level of education and organisation and how index insurance can be sold to them. The main policy recommendation based on these findings is to advance the concept of index-based insurance by training the cocoa extension service division with support of the Ghana Cocoa Board to educate farmers on index insurance. However, with no clear structures and resources allocated for adoption and implementation for index insurance, its future remains unclear.

Keywords: Cocoa farmers, Ghana, index-insurance, willingness-to-pay