



[S1] Agriculture and Climate Change - Adapting Crops to Increased Uncertainty (AGRI 2015)

Farmers Awareness, Perception of Climate Hazards and their Willingness to Participate in Crop Insurance Schemes in Southwestern Burkina Faso

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Abstract

Innovative financing arrangements such as index-base crop insurance (IBCI) schemes are increasingly becoming popular in West Africa for managing catastrophic agricultural risks. Recently, an IBCI pilot project was launched in Burkina Faso by PlaNet Guarantee[†]. However, similar to many existing IBCI schemes in the region, the enrolment rate is still very low. One possible explanation for this is based on the fact that remote sensing data is used as the basis for the design. Although the use of remote sensing data is appealing in many respect, it has several limitations. One major limitation is that it fails to take into account sensitive phases of the crops cycle, which may be more prone to climate and other environmental stresses (Muller, 2014).

In this paper, we highlights the importance of using field facts in the design of innovative IBCI schemes in rural Burkina Faso. Farmers' awareness and perception of climate hazards in relation to crop productivity and their willingness to participate (WTP) in IBCI in South-western Burkina were captured through household surveys and focus group discussions. Empirical findings indicate that farmers are aware of the effects of climate hazard on farm productivity and consider mid-season dry spells, during sowing, flowering and ripening depending on the crop type, as the most significant climate risk affecting local crop productivity. Specifically, 98% of the sampled farmers are willing to insure maize, cotton and sorghum, but only if the most sensitive periods of these crops to dry spell are taken into account in designing the crop insurance contracts. Furthermore, Probit regression analysis indicates that the probability to participate increases with years of farming experience, past experience of climate hazards, educational attainment of household head and insecurity to climate hazard, and decreases with farmer's age and household size.

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