Strengthening Climate Change Adaptation: Are Farmers Willing to Pay for Related Agricultural Extension Services?

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Abstract

Adapting to climate change is one of the most important challenges for agricultural development in Sub-Saharan Africa. In such context, the agricultural extension institutions are expected to provide additional climate related information to raise farmers’ awareness on climatic uncertainty to some extent. This study analysed the farmers’ willingness to be informed and to pay for agricultural extension services related to climate change. It was conducted in four agro-ecological zones in northern Benin through a survey method on respondents, using structured interviews based on a questionnaire. A total of 336 small-holder farmers were randomly sampled in the study area. As a result, farmers were aware of climate change and adapt their farming system. They were very willing to be informed about both climate change predictions and documented adaptation strategies. However, they were willing to pay more for documented climate change adaptation strategies than for climate change predictions. The Heckman Probit and the Seemingly Unrelated Regression models highlighted that age, respondent’s level of education, experience in agriculture, access to credit, contact with extension service, perception of and adaptation to climate change, farm size, and organisation membership have significant and differentiated effects on the farmers’ willingness to be informed and to pay for agricultural extension services related to climate change. As policy recommendation, climate change information generated by provided by the scientific community should be widespread. The extension institutions need to be reinforced by hiring personnel and providing them with valuable information in order to fulfil the needs of farmers. This raised the extension officers’ capacity building issue which should be addressed as well.

Keywords: Benin, climate change, extension services, willingness to be informed, willingness to pay

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