ABSTRACT

Modeling the Adoption and Intensity of Climate smart Maize Varieties in Embu County, Kenya: Double Hurdle Approach

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This paper examines the determinants of adoption and intensity of climate-smart maize varieties (CSMVs) in Embu county of Kenya using primary data. A total sample of 550 respondents were sampled through a multistage and systematic random sampling techniques. Data were analyzed using descriptive statistics and a double hurdle model. The results indicated that the level of awareness was 86 percent while the adoption rate was 63 percent. The results further indicated that land size, land ownership, size of the family, contact to extension officer, and previous yield had a significant influence on the intensity of adoption. Thus the results justifies the need for promotion of not only awareness but also widespread adoption of climate-smart maize varieties both locally and nationally. It is therefore recommended that, adequate policies and development programs for promoting use of climate-smart maize varieties in Kenya should be directed towards input and output delivery, land under climate-smart maize varieties, extension service provision, affordable credit, education and age mechanism that are more effective and youth oriented initiatives.

Keywords: Adoption, climate-smart maize varieties,intensity, double hurdle.