Abstract

A study was conducted in the arid and semi-arid lands of Kitui and Kajiado counties to determine factors that influence farmers' adaptation to climate change and variability. Quantitative and qualitative approaches were applied in the study to gain insights into the adaptation strategies used by farmers to cope with climate change and variability and factors that influence their adoption. A mix of purposeful and multistage stratified random sampling methods were used to select households which formed the unit of analysis in the study. Results of the Chi-square test for independence indicated that there was an association between the adoption of different adaptation strategies to climate change and variability and the study sites ($p < 0.05$). In addition, scrutiny of the results of logistic regression analysis showed that gender, education level, farming experience, age, and county of the respondent significantly ($p < 0.05$) influenced the adoption of adaptation strategies to climate variability and extremes in the study area. The study identified the need for increased agricultural extension training and sensitisation on climate change among farmers to ensure that feasible adaptation strategies are promoted and factors influencing their adoption are leveraged