

Abstract

Climate change and inefficient water utilization have led to marked fluctuations of the mean rice crop production in sub-Saharan Africa. In order to improve food security and households' income, adaptation strategies to climate change such as the adoption of new rice varieties are inevitable. This study examined the farmers' perception and adoption of climate change friendly New Rice for Africa in Mwea West Sub-county. The study applied the descriptive survey design with questionnaires being administered to a sample of 376 farmers. Key informants included four officers from Mwea Irrigation Agricultural Development and the Ministry of Agriculture. Quantitative data were analysed using Statistical Package for Social Sciences whereas qualitative data were analysed through establishing the categories and themes, relationships/patterns, and conclusions drawn in line with the study objectives. Results indicated a highly significant difference in adoption between farmers affiliated to Mwea Irrigation Scheme and the out-growers ($X^2 = 18.5$, $df = 2$, $p = 1.67 \times 10^{-6}$). The study concluded that the adoption of New Rice for Africa varieties in the Mwea West Sub-county is low and slow. This is mainly caused by inadequate information among the farmers as well as low market demand for the rice varieties. There is a need to enhance these rice varieties by intensifying efforts to sensitize farmers.