

Abstract

The study aimed at studying the factors that influence the utilization of specific rainwater harvesting technologies in Kauwi sub-location, Kitui County. The study adopted a survey design. Random sampling was used to identify the villages and households systematically sampled to be interviewed. The target population was 1600 households, 10 per cent of the target population was obtained to get the representative sample size of 160. Kauwi Sub- Location was clustered into 23 villages and 50 per cent of the villages were then randomly selected for the purpose of the study. The results revealed that socioeconomic factors such as level of education, membership to farmers' group, access to credit, age, gender and the type of soil influenced the utilization of the technologies. Smallholder farmers need awareness of the various technologies in order to maximize on its utilization. The findings shall help farmers in prioritizing factors that influence decisions on utilizing technologies and policymakers in developing agricultural policies. The study recommended that the government should shift focus on more public participation rather than state involvement in awareness creation on investment of rainwater harvesting technologies in arid and semi-arid lands so as to increase acceptance of the technologies hence increase agricultural productivity thus improving food security. The households' heads should be educated about farmers groups and their importance in gaining information and its ability in enabling them to access credit hence will enable them in investing in various suitable and sustainable rainwater harvesting technologies