

ABSTRACT

Agricultural production among smallholder farmers in Tharaka South sub-county is on decline and this is associated with effects of climate change. Research has shown that climate-smart agricultural practices (CSAPs) adoption has a unique potential to mitigate impacts of weather shocks and increase agricultural production. Adoption of CSAPs by smallholder farmers as a means of curbing the effects of climate change has been quite low. This low adoption may have been influenced by factors such as farmers' education level, access to capital, extension visit and training, and climate risk awareness. Some of these factors have received considerable attention by researchers. However, not many studies exist in Kenya documenting how religious institutions and gender influence the adoption of CSAPs. Therefore, the purpose of the study was to establish the influence of religious institutions and gender on adoption of CSAPs among smallholder farmers to improve their adoptive capacity for better agricultural outputs in Tharaka South sub-county, Kenya. The research utilized a descriptive survey design. The target population was 16,437 smallholder farmers in Tharaka South sub-county. Using stratified random sampling, 375 smallholder farmers were selected in three wards of study area proportionately. Semi-structured questionnaire was used to collect data. A pilot study was carried out at Mukothima ward in Tharaka North Sub-county. Pilot study data was utilized to check reliability and validity of the instrument. A Cronbach alpha coefficient was used to estimate reliability of research instrument items. The Cronbach alpha coefficients for study variables were: religious contribution ($\alpha = 0.99$), gender ($\alpha = 0.85$), membership ($\alpha = 0.98$), and adoption of CSAPs ($\alpha = 0.76$). Statistical Package for Social Sciences (SPSS V25) was used for data analyses. Inferential statistics (t-test) and descriptive statistics (frequencies, percentages, mean and standard deviation) were employed in data analysis. The findings indicated that religious institutions had been creating awareness on adoption of CSAPs ($M=3.14$, $SD=1.60$). This was achieved through organizing field days on CSAPs, demonstrations, as well as facilitating access to resources outside the communities to enhance adoption of CSAPs. Gender of household head was found to have significantly influenced adoption of CSAPs ($p < 0.05$). However, membership to religious institution had no significant influence on adoption of CSAPs ($p > 0.05$). The study recommended that Religious institutions should commit much more resources to create awareness on climate change and encourage their members to adopt CSAPs as intervention measure for increased agricultural production. The religious institutions should more often deliver sermons relating to environmental conservation, invite extension agents to train Christians on CSAPs, and facilitate network with CSAPs promoters. Agricultural stakeholders including religious institutions should accord both women and men equal opportunities in participation and engagement in CSAPs.