

Adoption of climate smart agricultural technologies towards achievement of food security in Kenya

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Abstract

The agriculture sector has experienced a decline in growth. Global disruptions like the Covid-19 pandemic and conflicts have further strained the economy, leading to food and energy supply crises. The study was guided by the following objectives: how adoption of CSA practices helps in attainment of food security and to examine the impact of climate change towards achievement of food security. Adoption of climate smart agricultural technologies provides the potential to meet the food demand for the rapidly growing population, despite the adverse effects posed by climate change. The adoption of the CSA technologies is key towards eradication of hunger among the people and taking key measures to combat climate change. The use of the CSA practices is crucial towards addressing the challenge of declining agricultural production on majority of the agricultural commodities. The study emphasized on the essence of adopting climate smart agricultural technologies such as irrigation, mulching, water harvesting and crop rotation to increase productivity and food sustainability. In addition, given the climate variability, the study examined how the climatic changes influence productivity of the agricultural commodities. The findings of the study were beneficial to researchers and policy makers in developing good strategies which would help enhance food security in the face of climate change.

Key words: climate smart, agricultural technologies, food security