

## **Abstract**

The importance of bananas cannot be underestimated worldwide. The specific objectives included determining socio-economic, environmental and policy factors affecting adoption of tissue culture (Tc) bananas in Kalawa, Thaana and Kithimani clusters using 176 respondents randomly selected. The data collected was analyzed using the SPSS version 17. The study found that adoption of Tc bananas was the following: The major socioeconomic factors affecting adoption of Tc bananas were: gender ( $p=0.0150$ ); education ( $p=0.0380$ ); total land size ( $p=0.0110$ ); farmer's experience ( $p=0.0168$ ); Tc bananas knowledge ( $p=0.0100$ ) and Tc bananas market ( $p=0.0030$ ). Environmental factors mentioned as important factors included: availability of a fence by 64 percent; soil and water conservation measures (92 percent); use of borehole water for irrigation by 22 percent of the respondents. Policy factors were: source of Tc planting materials by 32 percent indicating Kenya Agricultural and Livestock Research Organization as the main source; access to either public or private extension services by 35 percent of the respondents; Tc multiplication by government or stakeholders within the clusters by 77 percent; awareness and acquisition of credit services for farm activities from the financial services by 64 percent. Recommendations from the study included: improvement and access to extension services; ways of availing Tc bananas plantlets closer to farmers ; policy to reduce the effect of wild life on Tc bananas ; farmers' education and general capacity building on Tc banana growing; and irrigation for Tc banana growing.