

ABSTRACT

Development of improved technologies is one of the critical ways of enhancing agricultural productivity for economic growth and improved livelihoods. Improved sugar cane varieties have been developed and promoted in Kenya for enhanced productivity. However, majority of farmers prefer to grow traditional varieties that occupy 90 percent of the total area under sugar cane in Kenya. Their continued production has resulted to yield decline with subsequent low returns, which has made farmers unable to sustain their livelihoods. Many factors may have influenced acceptance of improved varieties by farmers. Among these, could be the processes used in their development and dissemination. This study evaluated these processes to establish their relationship with the acceptance of these improved varieties by farmers in Kakamega County. A Cross- Sectional Survey research design was used. The target population was 137,355 sugar cane farmers from the county, from which a sample of 384 farmers was randomly selected. Valid and reliable questionnaires were used to collect data. Statistical Package for Social Sciences Version 20.0 was used in data analysis. Hypothesis testing was done using chi-square at 0.05 significance level. Results established that farmer perception on sugar cane varietal attributes is related with varieties under production. High yielding, early maturity and pest resistance were the most preferred attributes identified and varieties compatible with these attributes were highly produced. Farmers characteristics, seed sources, variety choice, lack of information on improved varieties and facilitating resources were also identified as factors related to farmers' acceptance of improved varieties. The study established existence of significant relationships between farmers' participation in the development and dissemination processes of the improved sugar cane varieties and their acceptance by farmers for production. Researchers and extension service providers therefore need to enhance total participation of farmers in these processes as they have potential to facilitate acceptance of the improved varieties by farmers. Extension service providers and sugar millers need to provide farmers with adequate information on improved sugar cane varieties, facilitating resources and supportive services in effort to enhance production of these varieties by farmers.