

ABSTRACT

The study will determine the use of the big data concept to enhance communication of smart climate agriculture in West Pokot County. Notably, the study will investigate the communication gaps between Kenyan farmers and agricultural research institutes in an attempt to implement smart-climate agriculture, assess the challenges that farmers experience when attempting to access agricultural information, investigate the aspects of the big data concept that enhance communication of agricultural research and assess the climate-smart agriculture elements that can be harnessed through the big data concept tools. The study will be anchored on three theories, namely; Diffusion of Innovation Theory, Technology Acceptance Model and Knowledge-based theory. These theories are deemed ideal in explaining the study objectives. The study will employ a mixed-methods design and specifically convergent parallel mixed-methods design. The target population of this study will comprise the county meteorological staff, county agricultural extension officers, County ICT personnel, representatives from KALRO and small-scale farmers. The researcher will purposively pick 8 county meteorological staff, 6 county agricultural extension officers, 10 County ICT personnel, 36 from KALRO and 274 small-scale farmers, yielding to 362 respondents. The data will be obtained through the administering of the questionnaires and interview guides. A pilot study will then be carried out to check the validity and reliability of the questionnaires in collecting the data required for the study. The data will be analyzed using descriptive and inferential statistics. The descriptive statistics will be presented in mean, standard deviation and frequencies, while the inferential statistics will include the Pearson correlation and multiple linear regression model. Before the study's commencement, the respondents will be asked to give the consent of their willingness to participate in the study voluntarily. Simultaneously, the researcher will assure them that the information provided will be only for academic purposes. The respondents will also be asked not to give or write their names in the research instruments for confidentiality reasons