

## ABSTRACT

The role of extension service in agriculture is changing necessitated by the challenges in addressing problems of the farming community and a shift from top-bottom approaches to pluralistic and participatory approaches. This requires that the training of agricultural extension agents be aligned to address emerging competency requirements. The agricultural undergraduate curricula of universities need to be reoriented to meet the educational and training needs of professionals in the agricultural sector. The purpose of this study was to investigate education and training needs of extension agents in public and private extension organizations and determine their perceptions toward the undergraduate agriculture curricula in Kenya. A cross-sectional survey design was used in the study and the population consisted of all extension agents working with the national extension system and those in the private sector. The study involved purposive sampling of six counties and five private extension organizations. Stratified random sampling of extension staff in the counties and private extension organizations was done to select respondents for the study. The extension agents were categorized as; Front-line Extension Workers (FEW) and Subject Matter Specialist (SMS). The study was guided by eight objectives and five hypotheses. Qualitative data was collected using the Critical Incident Technique, which was used to identify behaviours critical to the success or failure of extension service. Quantitative data was collected using the Training Needs questionnaire from which training needs were determined and prioritized using Borich's Needs Discrepancy Model. The data was analyzed using SPSS Version 17.0 and inferential statistics were tested at  $\alpha = 0.05$ . It was concluded that all courses in the undergraduate agricultural curricula were relevant and necessary in the training of agricultural extension agents. Technical courses with the highest training need were Agricultural Economics, Horticulture and Animal Science. Extension professional core competencies in Management and Communication and Information Technology had the highest training need. Significant differences were observed in some courses between public and private extension agents and between FEW and SMS. These differences should be used to design relevant in-service courses and align the curricula toward emerging training needs in the public and private extension service to close the training gap. It is recommended that basic skills and extension professional competencies be integrated into the curricula at the universities. Therefore, there is need to develop a standardized set of generic competencies required by all agricultural professionals that is reviewed periodically by stakeholders in the agricultural sector.