

**MAKERERE**



**UNIVERSITY**

**EFFECT OF AN INTEGRATED AGRICULTURE-NUTRITION  
EXTENSION PROGRAM ON NUTRITION KNOWLEDGE AND  
DIETARY DIVERSITY OF FARMING HOUSEHOLDS IN  
CENTRAL UGANDA.**

**BY**

**ASIIMWE ELIZABETH**

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## ABSTRACT

Most studies which have measured the effect of nutrition education on change in nutrition knowledge and dietary diversity have not gone further to identify factors that influence the change. Using an integrated nutrition-agriculture extension program as a case, this study assessed the effect of the program on nutrition knowledge and dietary diversity; and determined factors that influence the change in nutrition knowledge and dietary diversity of targeted farmers and households respectively in Central Uganda. The effect was measured by comparing nutrition knowledge and dietary diversity in intervention and non-intervention areas. Data were collected from 206 rural farmers and analyzed using frequencies, independent sample t-tests and multiple linear regression. Respondents in the intervention area had higher nutrition knowledge scores than those in the non-intervention area (mean knowledge=6.16±1.70 versus 4.34±1.02 respectively,  $p < .01$ ); and households in the intervention area consumed more diverse diets than their counterparts in the non-intervention area (mean HDDS=8.6±1.91 versus 7.2±1.42 respectively,  $p < .01$ ). Nutrition knowledge was significantly influenced by age, sex of individual that received training and perception of training materials as attractive. On the other hand, dietary diversity was significantly influenced by nutrition knowledge, number of age groups in the household, access to multiple sources of nutrition information and sex of individual that received training. Although males who were trained acquired higher nutrition knowledge scores, dietary diversity in their households was low. Access to multiple sources of nutrition information did not influence nutrition knowledge but had a negative influence on household dietary diversity. If agricultural extension is to impact nutrition knowledge and dietary diversity, training materials and messages should be designed to suit the needs of men and women in various age groups, and pluralistic extension systems should establish mechanisms for harmonization of nutrition messages so as to enhance application by farmers.

**Key words: Agriculture extension, nutrition education, knowledge, dietary diversity, Uganda.**