AGRICULTURAL LAND USE AND ITS IMPLICATIONS ON HOUSEHOLD FOOD SECURITY IN KISII CENTRAL SUB-COUNTY, KENYA

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A PhD Thesis Submitted to the Graduate School in Partial Fulfillment of the Requirements of the Degree of Doctor of Philosophy in Geography of Egerton University

EGERTON UNIVERSITY

SEPTEMBER, 2015
DECLARATION AND RECOMMENDATION

DECLARATION
This is my original work and has not been presented for a degree in any other university.

Signed …………………………… Date…………………………

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RECOMMENDATION
This PhD. Thesis has been submitted for Examination with our approval as the University supervisors.

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DEDICATION

This thesis is dedicated to my late parents, Mr and Mrs Gideon and Hellen Kumba who laid the foundation for my education.
ABSTRACT

Agricultural land is an important resource for farm households as it forms the base for their livelihoods. Therefore, the manner in which households utilize this resource influences to a large extent their food security situation. This study sought to establish the impact of agricultural land use on household food security in Kisii Central sub-County, Kisii County. To achieve this objective the study focused on the following; examination of the various land use activities, assessment of the food security situation of households, establishment of the relationships between agricultural land use and household food security and finally determination of the influence of household socio-economic characteristics on agricultural land use and household food security in the study area. Agricultural land use was conceptualized as consisting of four categories namely; cash crop, food crop, fruits and vegetables and pasture and napier grass while household food security was assessed using Experience-based method. The sampling frame comprised all rural farm households in Kisii Central sub-County within the LH1, UM1 and LM2 agro-ecological zones. The sub-Location with the highest population density within each agro-ecological zone was selected and a stratified random sample of 209 respondents was picked. A structured questionnaire was used to collect data from farm household heads. Data was analyzed using the Statistical Package for Social Sciences (SPSS version 17.0). Descriptive statistics provided statistical summaries while Pearson’s Chi-square test was used to establish the relationship between agricultural land use and household food security and also analyze the influence of household socio-economic characteristics on agricultural land use and household food security. Results from the study showed that agricultural land was allocated as follows; food crop (65%), cash crop (25%) and others (10%). Most households were food secure (77.5%). Cash crop ($p=0.000$) and pasture / napier grass ($p=0.002$) were found to be significantly related to household food security. The socio-economic characteristics that had a significant influence on agricultural land use and household food security were the level of education of household head, farm size and household income. The study recommends that efforts should be put in place to boost household income through efficient utilization of the land resource in the production of both food and cash crops in order to ensure household food security within the study area.