

## ABSTRACT

This study was conducted in a rural setting of the populous hilly Kathiani Sub-location in Machakos County and aimed to address specific objectives as follows: determining the current household land sizes and uses; examining the impacts of household land size and uses on household food security; establishing the factors that influence household land size and use as well as profiling the intergenerational transfer of land rights and uses in the study area. Agriculture is globally relied upon as the main source of food and livelihoods. Household land sizes and uses have been determined as among the factors influencing household food security. Notably, food security is a widespread challenge world over. Globally, governments have struggled to feed their citizens. This state of affairs is prevalent in the third world countries with Sub-Saharan Africa and Kenya in particular suffering severe food shortages arising from overdependence on rain-fed agriculture, an ever-growing population in the wake of diminishing land sizes and continuously changing climatic conditions. The study adopted a cross-sectional survey design that aided data collection. Proportionate and stratified simple random sampling together with systematic sampling methods were applied in the household data collection of the studied twelve villages of the sub location and a sample of 183 respondents identified. Secondary data was obtained from review of existing scholarly materials and research reports. Primary data was obtained by administration of household questionnaires to the sampled households. Further, key informant interview schedules, focus group discussions guides, observation list and photography aided collection of additional primary data. The study found that original land sizes before subdivision ranged from one acre to slightly above nine acres with an average of 5 acres. Results show the current land sizes range from zero for those without land at all to slightly above nine acres with an average of 1.5 acres. Agriculture was the leading land use at 94% of the respondents. Paired T-test results  $t = -1.713$ ,  $p = 0.089$  and independent T-test of  $t = -1.638$ ;  $p = 0.115$  indicated lack of a significant relationship between land size and household food security. Land inheritances at 54% together with acquisition by purchase at 46% were the leading contributors to land subdivision. Such land subdivisions were fueled by cultural practices such as inheritance of land to on average 4 heirs with 46% of respondents having brothers who inherited their parents land, selling of land due to poverty and to meet education needs, population growth and to resolve land related conflicts. The effect of the subdivisions was a decrease in yields as reported by 58% of the interviewed households. Adoption of high-rise cluster settlement pattern, enforcement of land subdivision policies, establishment of minimum agricultural land sizes and education on adoption of other forms of wealth that can be bequeathed to children and alternative survival mechanisms were recommended as viable solutions to food security challenges in the study area.