ABSTRACT

In developing countries, 70% of the population lives in rural areas and of these 75% are smallholder producers who derive their livelihoods primarily from agriculture. Kenyan smallholder dairy producers constitute 80% of the dairy producers and they produce about 80% of total milk production and 70% of the total milk marketed. Therefore, smallholder dairy producers have their livelihoods majorly dependent on dairy farming. Thus, commercializing smallholder dairy value chain will be an important pathway out of rural poverty and will be a powerful tool for the improvement and sustainability of livelihoods of smallholder dairy producers. In Uasin Gishu County, the proportion of smallholder dairy producers in the commercialization scale is 70% subsistence, 20% semi-commercialized and 10% commercialized. This therefore, indicates that commercialization level is still low and variable. This is contributed by the influences of socio-cultural characteristics, socio-economic characteristics, market access factors and competitiveness of dairy production. The general objective of the study was to assess the influence of socio-cultural and socio-economic characteristics of smallholder dairy producers, market access factors and competitiveness of dairy production on commercialization of smallholder dairy value chain development. The specific objectives were to: establish the influence of socio-cultural characteristics on commercialization of smallholder dairy value chain development; examine the influence of socio-economic characteristics on commercialization of smallholder dairy value chain development; assess the influence of market access factors on commercialization of smallholder dairy value chain development; and establish the influence of competitiveness of dairy production on commercialization of smallholder dairy value chain development. The study was guided by the theory of profit maximization. The study was undertaken using social survey research design. The population of the study was 50,457 smallholder dairy producers spread across the Sub-Counties of the County. From the population, a sample size of 384 smallholder dairy producers was determined. The primary data was collected using structured questionnaires, focused group discussions, and key informants. Sampling procedures included: stratified simple random sampling techniques and simple random sampling technique in each of the strata. The following techniques of data analysis was utilized: Firstly, descriptive statistics namely mean and standard deviation was used to describe the characteristics of the sample population. Secondly, inferential statistics namely the Pearson correlation coefficient, Spearman's rank correlation coefficient and multiple regressions were used to determine the relationship between the influencing factors and commercialization of smallholder dairy value chain development, measured as average Household Commercialization Index (HCI). Thirdly, Cobb-Douglas stochastic frontier production and cost functions were used to estimate the technical and economic efficiency of smallholder dairy production. Finally, the profit function was used to measure the competitiveness of smallholder dairy production. Results indicate that the influences of socio-cultural characteristics, socio-economic characteristics, market access factors and competitiveness of dairy production have significant influence on commercialization of smallholder dairy value chain. It is therefore recommended that the National and County Governments in conjunction with other relevant stakeholders in the dairy value chain development should formulate policies, and design programs that address these factors in order to achieve sustainable rural development in Kenya.