Abstract

Dairy production is a biologically efficient system that converts large quantities of roughage in the tropics to milk. Milk production level is determined by the levels of technologies applied to the dairy enterprise. However, information on levels of adoption of dairy technologies especially in the arid and semi-arid areas (ASALs) of Kenya is scanty. This study thus sought to evaluate the extent of adoption of modern dairy technologies and its impact on milk production in Nzaui Sub-County of Makueni County, one of the ASAL counties in the country. The study was guided by the following specific objective: to assess effect of social economic characteristics of farmers to the level of adoption to modern dairy technologies; A cross-sectional descriptive survey design involving the use of questionnaires was used to collect relevant data from sampled households. The study showed that factors which influenced farmer rearing of improved animal types included gender (p=021), marital status. p=007), and income levels (p=000), with respect to fodder conservation technologies, the most important factors included marital status (p=032), training (p=030) and extension (p=026).The adoption of animal supplementation was influenced to a great extent by income levels (p=013), training (p=000) and occupation (p=008) rather than household endogenic factors. In regards to milk yield, this was influenced to a great extent by marital status (p=050), land size (p=000), income (p=000) and training (p=000). This implied that farmers with larger farm sizes, more incomes and training access were better placed to achieve high milk yields than those with lesser of those characteristics. It was concluded that there is need for gender-specific interventions to enhance increased adoption of improved livestock technologies by farmers especially in regards to access to improved germplasm by all farmers. Access to improved livestock is the first step to enhancing milk yield, followed by other interventions. Other areas of interventions include enhanced access to training and awareness in improved livestock technologies, especially fodder conservations technologies.