

ABSTRACT

This study assessed the extent of seasonal fodder scarcity influence on milk production in smallholder farms (n=130) in the north rift region of Kenya. A cross-sectional survey to obtain primary data was conducted through face-to-face interviews using a structured questionnaire. Data processing was done in excel, thereafter, data was analyzed in Statistical Package for Social Sciences (SPSS version 21). Results indicated that the farms experienced 60.5% fodder deficit and milk yield gap of 117%. The deficit was greater during the rainy season (77.6%) than in the dry season (37.4%) but milk yield gap was relatively smaller in the rainy season (113%) than in the dry season (131%). Seasonal fodder scarcity was associated with low milk production, with an increase in fodder deficit resulting in a decline in milk yields ($\beta=-6.33$, $p=0.007$). The results indicate a persistent fodder scarcity and overstocking in these farms. Interventions on fodder scarcity will need empowering farmers to plan fodder production and conservation and to match their stocking with fodder supply, especially for those with diminishing landholdings. The farmer organizations have a role in fodder improvement for their members by investing in bulk fodder production utilizing improved varieties of certified seeds and offering storage facilities.

Key words: Feed requirement, feed supply, fodder scarcity, milk yield gap