Abstract

Dairy farming is becoming an important livelihood support activity in the semi-arid regions of Kenya. However, it is becoming clear that the dairy farmers are challenged and in the recent past, milk production has not kept up with the demand. This has been linked to poor adaptations and innovativeness of the dairy farmers in these regions. In endeavours to offer solutions and help the dairy farmers improve their production and become resilient, different stakeholders have advocated for adoption of milk and forage production-enhancing innovations by the dairy farmers. This study sought to establish the kind of innovations and adaptive measures carried out by the peri-urban dairy farmers in south eastern Kenya to improve their milk production and their significance to milk production. A sample of 150 farmers from the peri-urban environs of Wote and Machakos towns was used. A semi-structured questionnaire was used and data analysized using descriptive and inferential statistics. Findings show that adoption of dairy technology, Artificial Insemination (AI), fodder crops and crop residue, Tumbukiza Method, stall-feeding, feedstuff chopping, water harvesting, hay barn technology, hay and silage making significantly improved milk production at $p<0.05$. Co-operative concept had insignificant influence on milk production. It is recommended that the dairy farmers continue to adopt the production-enhancing, forage production-enhancing and forage utilization-enhancing innovations. Mitigation measures should include establishing reliable sources of the dairy cattle, reduction of AI charges and more extension services to the dairy farmers.