

ABSTRACT

East Coast fever prevalence is variable and causes economic loss to smallholder farmers. A cross-sectional survey involving 1038 cows on 164 farms stratified by agro-ecological zones, production systems and prophylactic strategies conducted. Acaricide use was dominant (79.9%) on sample farms and disease prevalence of cows examined on standard symptoms 18.7%. This did not differ ($p \geq 0.05$) between prophylactic strategies, different grazing systems and the agro-ecological zones. The estimated economic loss due to disease per farm per year on acaricide 1.8 times higher than acaricide and/or vaccine and 48.8 times high than vaccine loss. Disease prevention loss on farms using acaricide and/or vaccine (0.68), acaricide (0.43). Non-veterinary cost on vaccinating farms (0.54) while treatment costed a quarter of the economic loss. Use of any of the three prophylactic strategies hardly expose farmers to risks of disease. Vaccine is cheaper, effective and access to farmers should be beneficial in the smallholder dairy development.

Keywords: Agro-ecological strata, Control strategies, Economic loss, Tick-borne-Diseases, grazing systems.