

## Abstract

Grazing cattle in the tropics and especially in Uasin Gishu district depend on a variety of plant species for their mineral supply. One area of concern is that the grazing cattle may be experiencing mineral imbalances due to lack of proper mineral mapping of the region to ascertain the levels of imbalance. A study conducted in the Uasin Gishu region revealed severe deficiencies of mainly Cu ( $3.30 \pm 0.90$ ) and Zn ( $6.70 \pm 0.40$ ) in soils, the elements Na ( $1.00 \pm 0.39$ ), K ( $11.80 \pm 5.00$ ), Ca ( $0.57 \pm 0.19$ ), Mg ( $1.35 \pm 0.72$ ), P ( $6.34 \pm 3.22$ ), Fe ( $56.00 \pm 0.53$ ), Cu ( $5.32 \pm 2.84$ ), Zn ( $19.50 \pm 8.20$ ) in pasture species and the elements Fe ( $2.43 \pm 1.53$ ), Mn ( $0.26 \pm 0.14$ ), Cu ( $0.60 \pm 0.17$ ), Mg ( $0.02 \pm 0.01$ ) in animal blood. The study recommends immediate mineral supplementation schemes to grazing cattle in the region and encouragement of certain pasture species in the region.