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ASSESSMENT OF MINERALS IN NATURAL PASTURE AND SOIL IN RELATION TO LIVESTOCK REQUIREMENTS IN META-ROBI DISTRICT, WEST SHEWA ZONE, OROMIYA REGIONAL STATE, ETHIOPIA

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ABSTRACT

The study was carried out in Meta Robi district, West Shewa Zone, Oromia Regional State,Ethiopia to determine the mineral status of natural pasture and soil samples in relation to livestock requirement. The district was stratified into upper, mid and lower altitudes. Samples of feed and soil were collected from three altitudes during the dry and wet seasons and their mineral concentrations were determined for macro minerals (Ca, Mg, K, P, Na and S) and micro minerals (Mn, Fe, Cu and Zn). The results of the study indicated that the concentrations of most minerals in the soil were above the critical level of plant growth and most macro minerals in the feed were below the requirement of dairy animals while micro minerals were above the requirement of dairy animals. To compensate the mineral deficiency of natural pasture, improved forages with better yield and mineral contents should be provided for livestock and provision of common salt and/or locally available natural soil as mineral source should also be encouraged.

KEYWORDS: Macro Minerals, Micro Minerals, Natural Pasture, Soil