

## **Abstract:**

Parasitism is among the causes of continuous ill-health and lowered productivity in livestock in Tanzania and sub-Saharan Africa as a whole. The present study was carried out at urban and peri-urban of Mwanza city in Tanzania to determine the prevalence of parasite infection in cattle kept by livestock smallholders. A random sample of 27 urban farmers with a total 175 diary cattle and 29 peri-urban farmers with a total of 283 mainly zebu cattle were selected and faecal, ectoparasites and blood samples were collected from each cattle. Direct smear floatation and sedimentation methods were employed to detect protozoa and helminths in the faeces while Giemsa stain was used for the identification of haemoparasites. In all areas management system was assessed. The prevalence of different types of helminths, protozoa, haemoparasites and ectoparasites in diary cattle of urban Mwanza city were Strongylid nematodes 12%, Fasciola 5.1% Entamoeba spp 18.2%, Giardia spp 4.6%, Anaplasma marginale 4.2%, Anaplasma centrale 3.4% and Theileria piroplasma 2.5% respectively. No ectoparasites were found in urban areas. In the peri-urban areas the parasites found were Strongylid nematodes 28.6%, Fasciola 44.2%, Paramphistomum 6.4%, Entamoeba spp 42.4% Giardia spp 15.2%, Schistosoma bovis 0.35%, Anaplasma marginale 6%, Theileria piroplasms 2.5%. Ectoparasites found were, Rhipicephalus appendiculatus 12.4% Amblyomma variegatum 9.5% and Boophilus decoloratus 4.2%. The difference in the livestock management system in the two areas clearly explains the observed high prevalence of parasite infection in the peri-urban areas compared to the urban areas of city. The negative impact of these parasites on livestock productivity and their public health importance since some of them are zoonotic in nature cannot be overemphasized. The study validates the need to bring awareness to the farmers and the public at large so that they may embark on development of control strategies.