

The following findings were established from the current study:

1. Livestock keeping is still perceived as an important enterprise by farmers in Busia District, although diseases continue to constrain productivity.
2. Trypanosome infection in cattle is one of the most important constraints of productivity in both local Zebu and exotic/crossbred cattle in Busia District, with adults and heifers from Budalang'i and Funyula Divisions experiencing significantly high trypanosome-recurrence rates.
3. *Glossina fuscipes* and *G. pallidipes* are the two tsetse species found in Busia District, transmitting pathogenic trypanosomes to cattle, and posing the risk of transmitting sleeping sickness to man.
4. Tick-infestation and infection with TBD-parasites are prevalent in both local Zebu and exotic/crossbred cattle from all the six Divisions of Busia, and control strategies should take into consideration the establishment of epizootic stability.
5. Helminthosis is a serious disease condition in calves throughout Busia District, especially in Budalang'i and Funyula divisions, where it significantly compromises their growth rate, increases mortality rates and reduces productivity in cows and heifers.
6. Shedding of trematode eggs is prevalent in cattle from Budalang'i and Funyula divisions of Busia District, and it is more prevalent in Budalang'i than in Funyula Division in free-grazed and free-grazed/tethered Zebu as opposed to zero-grazed exotic/crossbred cattle.

Although a cost-benefit analysis was not undertaken, ISMM prophylaxis at 1mg/kg bw in cattle every three months resulted in significant improvement of performance of cattle. Albendazole treatment of cattle at 10mg/kg bw every three months also significantly improved various performance parameters in cattle. However, even better results were obtained in animals that received combined albendazole/ISMM treatment every three months. Untreated control animals performed the poorest in all aspects that were examined. It can therefore be concluded that, trypanosome- and helminth-infection significantly constrain cattle productivity in Busia District, and that approaches to control should avoid dealing with each disease in isolation, but rather

employ an integrated approach. Such control programmes should take into account the age and breed of the animal, husbandry practices and the time of the year. Under the current situations, it is recommended that use of the sanative pairs of trypanocides and minimisation of drug use by vector control and/or by decreasing vector-host contacts be applied in the area. It is further recommended that albendazole be administered every three months for calves and biannually for adults and heifers (if economically viable). It is also recommended that an assessment of the sensitivity of trypanosome populations to ISMM be conducted to establish whether there is any drug resistance problem in the area. Cost-benefit analysis of these interventions should also be established to avoid obvious losses.