

## Abstract

I conducted an extensive literature review on the effective tsetse and trypanosomiasis eradication method strategies in Africa in 2010 as I embarked on my research that coincided with the formulation of the Tsetse and Trypanosomiasis Eradication Strategy for Kenya spearheaded by Pan African Tsetse and Trypanosomiasis Eradication Campaign (PATTEC), Kenya. Trypanosomiasis is a zoonotic disease transmitted mainly by tsetse flies, *Glossina* genus and affects humans and domestic animals. Tsetse flies are an important livestock disease pest infesting over 138,000 square kilometers in Kenya. Trypanosomes are protozoan blood parasites that cause animal and human trypanosomiasis (sleeping sickness). Effective control methods are based on:

- Parasite control which involves chemotherapy (use of trypanocidal drugs) to kill the trypanosomes inside the body of the animal. Regular active surveillance (screening) involving case detection and treatment of human /animal trypanosomiasis is necessary in parasite control. Systematic vector control which is done through spraying with insecticides, targets and traps technique and the sterile insect technique which targets to kill the tsetse fly in its natural habitats.
- Exploitation of trypano-tolerant livestock through active selection for trypanosomiasis resistant traits in livestock and subsequent breeding.

Over the past 100 years a whole range of control strategies for tsetse and trypanosomiasis control have been deployed in the Eastern, Central and West Africa including Kenya. Unfortunately, none of the methods or a combination of them has led to a lasting solution to the problem of the disease in humans and animals. Consequently, gains made are often lost mainly because land use practices cannot cope with rate of reclamation. Integrated use of the various control methods is the most certain strategy to guarantee trypanosomiasis eradication. Long term commitment rather than supporting crisis management by governments of endemic countries and international community to trypanosomiasis control/eradication programs is essential for sustainability since trypanosomiasis affects the poorest of African countries.