

ONE HUNDRED YEARS OF RINDERPEST IN UGANDA (1890 - 1990)

LAKER, C. D.

Rinderpest is a highly contagious disease of cattle and buffalo. Natural infection has been proved in a number of other domestic animals and wildlife. The disease is characterised by inflammation, haemorrhages, erosions and necrosis of mucous membranes of the digestive tract. Morbidity approaches 100% and mortality rate may exceed 90% in fully susceptible animals. Recovered animals remain permanently immune.

Since rinderpest first entered Uganda in 1890, almost all the country's veterinary resources have been allocated to control and eradicate the disease. In this poster I will summarize the history of rinderpest in Uganda into the following eras: 1) Initial outbreak, 2) Early methods of veterinary control, 3) Vaccine era, and 4) Present.

Captain Lugard described the introduction of rinderpest into East Africa in 1890. Cattle populations were decimated and the disease traversed from Somali land through Kenya into Uganda within months. In fact, Lugard attributed the military success of the British against east African pastoralists to rinderpest's devastation of their herds.

The veterinary service in Uganda was first established in 1910. The service's first documented outbreak of rinderpest occurred at Mbale in May 1911. Anti-rinderpest serum, rushed from South Africa was used to control the outbreak. Over the next 40 years, the simultaneous injection of virulent blood and anti-rinderpest serum were the main rinderpest control tools. On average, treated animals experienced mortality rates of only 20%, compared to 70% in control animals. During this era, rinderpest outbreaks traced to illegal movements of animals, movements of hides and skins traders, and the movement of infected carcasses (often floating in rivers and lakes) were constantly occurring.

During World War II rinderpest was endemic throughout the Eastern and Northern Uganda. Vaccines were introduced in 1941. The first, Kenya Attenuated Vaccine (KAG) proved too virulent for the highly susceptible Ankole and Nganda cattle (over 70% of Ugandan cattle). In 1949, Kenya Lapinized Vaccine (KLV) was introduced for these breeds and for cattle chronically infected with trypanosomes. The original KAG was used in less susceptible cattle. In 1962 these vaccines were replaced by tissue culture vaccine (TCV). TCV vaccination was so effective that Uganda was declared free of rinderpest by 1967. Follow-up vaccination in 1968, as part of the JP-15 programme, provided further protection against reintroduction of rinderpest into Uganda.

However, rinderpest has returned. This reintroduction is due to poor vaccine delivery and cattle movements by the Karamajong and other cattle raiding tribes along the common borders of Uganda, Sudan, Ethiopian and Kenya. Although thermostable vaccines will help the logistics of vaccine delivery and the control of cattle movements still loom as major obstacles for rinderpest eradication.

Ministry of Animal Industry and Fisheries, P.O. Box 7003, Kampala, Uganda.