

**ECONOMIC ANALYSIS OF TRANSBOUNDARY ANIMAL DISEASE CONTROL IN
NTUNGAMO AND RAKAI DISTRICTS, UGANDA. A CASE OF FOOT AND MOUTH
DISEASE AND EAST COAST FEVER**

BY

BAYIYANA IRENE

BSc. AGRIC. (MAK)

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ABSTRACT

Transboundary animal diseases (TADs) are a major threat to livestock keepers affecting growth and productivity. This study was therefore conducted specifically to: characterise agro-pastoralists in Ntungamo and Rakai districts; evaluate the farm level benefits and costs associated with the control of TADs; and determine the factors influencing farmers' willingness to pay for TADs control. A sample of 176 farmers from Rakai and Ntungamo districts was used to generate responses. Data were collected using pretested questionnaires and analysed using EXCEL, SPSS and STATA software. Analytical tools used included descriptive statistics, Cost Benefit Analysis and the Logit model. The study revealed that 61% of the farmers were willing to pay for TADs control. Spraying and vaccination were the most commonly used methods of TADs control costing UGX 8,867 and UGX 500 per animal per year respectively. Total annual avoided losses per animal were 64% higher if TADs were controlled than if they were not controlled. The Benefits of TADS Control outweighed Costs with BC ratio of 1.4. Training in disease control, farmer's annual income, herd size and household size were key factors influencing farmers' WTP. Richer farmers had a higher probability of paying for TADs control compared to low income farmers. In order to ensure effective TADs control, Vaccination should be provided at a lower cost to encourage farmers' WTP for TADs control. Farmers need to be trained in disease control and sensitized on the importance of their payment towards TADs control as this boosts their incomes & livelihoods.

Keywords: *Transboundary animal diseases, Agro-pastoralists, Cost Benefit Analysis, Willingness to pay*