



Tropentag, September 15-17, 2021, hybrid conference

“Towards shifting paradigms in agriculture  
for a healthy and sustainable future”

## Supply Chain Planning of Breeding Inputs on the Quality of Animal Breeding Services of Uganda

CHARLES LAGU<sup>1</sup>, SYLVESTER KUGONZA<sup>2</sup>, PROSS NAGITTA OLUKA<sup>2</sup>, MORGAN ANDAMA<sup>3</sup>

<sup>1</sup>*National Animal Genetic Resources Centre and Data Bank (NAGRC&DB), Breeding, Uganda*

<sup>2</sup>*Uganda Management Institute (UMI), Civil Service and Public Administration, Uganda*

<sup>3</sup>*Muni University, Uganda*

### Abstract

The study on supply chain planning of breeding inputs (liquid nitrogen and frozen semen) on the quality of animal breeding services of Uganda aimed to explain the effect of supply chain planning of liquid nitrogen and frozen semen on the quality of animal breeding public services in the selected cattle corridor districts (Mbarara, Mubende, Luwero and Soroti) of Uganda. The research filled the gap of supply chain planning in ensuring proficient and viable supply of animal breeding inputs from supply chain points of view compared to the traditional core science orientation which tend to focus on the biological processes of reproductive technologies in animal production and management. The study adopted cross-sectional survey design embracing both qualitative and quantitative approaches. Data was captured using structured questionnaires, review of records, focus group discussions (FGDs) and key informant interviews (KIIs) for farmers, staff of the National Animal Genetic Resources and Data Bank (NAGRC&DB), artificial insemination (AI) technicians, and Field Extension workers. The study points to gender disparity as a key concern at household levels when it comes to land and animal ownership in the selected cattle corridor districts of Uganda. The study established that there was positive relationship between planning ( $\beta=4.270$ ;  $p = 0.039$ ;  $2 \text{ critical}=3.841$ ) and animal breeding services in selected cattle corridor districts of Uganda. The study recommends that genetic centres to put in place systems for coordinated and integrated planning to facilitate outreach for AI services in Uganda. Furthermore, studies on effect of supply chain sourcing on the quality of animal breeding services in the selected cattle corridor districts needs to be undertaken to guide extension workers on efficient and effective breeding services delivery.

**Keywords:** Animal resources, artificial insemination services, breeding inputs, gender disparity, genetic centre, quality