



Tropentag, September 20-22, 2023, hybrid conference  
“Competing pathways for equitable food systems transformation:  
Trade-offs and synergies”

## Analysis of dairy farmer’s willingness to pay for targeted extension and advisory services in Kenya

JULIUS GITHINJI<sup>1</sup>, GABRIEL MWENJERI<sup>2</sup>, JAMES RAO<sup>1</sup>

<sup>1</sup>*International Livestock Research Institute (ILRI), Policies, Institutions and Livelihoods Program, Kenya*

<sup>2</sup>*Kenyatta University, Agribusiness Management and Trade, Kenya*

### Abstract

The dairy subsector plays a crucial role in the Kenyan economy, contributing to employment, food security, and agricultural productivity through manure provision. With approximately two million Kenyans relying on the dairy industry for their livelihoods, the sector has experienced consistent growth, driven by increased demand for value-added products, commercialisation, and adoption of zero-grazing practices. The growing domestic population and in the region coupled with the increasing middle-income class offers an even more promising future for the dairy industry in Kenya. However, despite this growth, dairy farmers often struggle to achieve profitability, facing challenges such as low milk productivity and high production costs. To enhance productivity, the adoption of new technologies and management practices is essential. Extension and advisory services are crucial in facilitating technology adoption among smallholder dairy farmers, empowered and well-informed farmers embrace innovation. Traditionally, the government has provided extension services, but the system has faced challenges, including an unsustainable ratio of government personnel to farmers, leading to criticism of its effectiveness and insufficiency. In response to these shortcomings, private extension and advisory services have emerged in the dairy sector, offering targeted and responsive support to farmers.

This study aims to estimate dairy farmers’ willingness to pay for targeted private extension and advisory services in Nandi County using a discrete choice experiment, Kenya. The specific objectives are (1) to determine the socioeconomic and institutional factors of dairy farmers in Nandi County, (2) to establish the highest price farmers are willing to pay for targeted extension and advisory services, and (3) to identify the factors influencing farmers’ willingness to pay. Employing a quasi-experimental design, the study compares the differences in willingness to pay between participants and non-participants of targeted extension services. A purposive sampling approach will be used to select pre-existing groups, and equal sample sizes will be allocated to participants and non-participants through random selection. Primary data will be collected from Lessos Dairy in Nandi County, with approximately 240 respondents. Descriptive analysis, discrete choice analysis, and a probit model will be employed to analyze the objectives. The study’s findings will provide valuable insights for policymakers considering the use of dairy farmer assistants to deliver targeted extension and advisory services.

**Keywords:** Dairy subsector, extension and advisory services, willingness to pay