

# ANALYSIS OF DAIRY FARMERS WILLINGNESS TO PAY FOR TARGETED EXTENSION AND ADVISORY SERVICES IN NANDI COUNTY, KENYA

Julius Githinji<sup>1</sup>, James Rao<sup>1</sup>, Gabriel Mwenjeri<sup>2</sup>

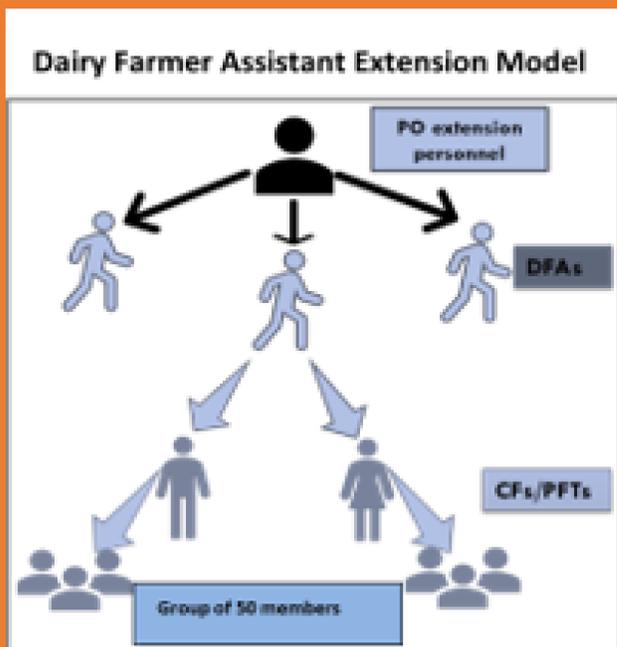
## Introduction

- Over 80% of Kenya's milk supply is mainly produced in small holder farming systems, each of these farmers typically have one to three dairy animals
- However, profitability of the dairy sector is still low with most of the farmers making little or no profit
- Smallholder farmers to turn a profit would require investment in new technologies that are suited for their farms
- Extension and advisory services are crucial in facilitating technology adoption among smallholder dairy farmers

## Objective

The aim of this study is to estimate Dairy Farmers willingness to pay for targeted private extension and advisory services.

## The DFA Model



## Methods

- Quasi-experimental design to explore differences in willingness to pay (WTP) for targeted extension and advisory services between participants and non-participants
- Scoping study Sep-Oct 2022
- Household survey of smallholder dairy farmers
- Sample included two categories of farmers (Farmers linked to Dairy Farmer Assistant and those not Linked)



## Results

- **Access to check off** services increases probability of a farmer paying for DFA extension by 50.5% which is statistically significant at 1% level of significance implying that access to check off is important in influencing WTP
- **Increment in milk production** increases the probability of a farmer to pay for DFA extension service by 63.5% which is statistically significant at 1% level of significance implying that milk increment is important in influencing WTP
- **Increment in revenues** increases the probability of a farmer to pay for DFA extension service by 39.6% which is statistically significant at 1% level of significance implying that increment revenue is important in influencing WTP
- **Monthly cost of the DFA** cost the DFA has a negative coefficient implying that as the cost the DFA increases, the probability of farmers paying for DFA extension decreases. which is statistically significant at 1% level of significance implying that cost of the DFA is important in influencing WTP
- An increase in the **frequency of visits** by a DFA increases probability of farmers willing to pay for DFA increases, however this is not statistically significant. This is significant in that in designing the DFA model, frequency of visit is not a significant attribute influencing WTP

## Conclusion

- In development of private sector led extension system, payment mode of the services has a significant impact on the WTP
- Perceived benefits influence WTP positively and should be incorporated in the design.
- It is worth noting, frequency of the visits does not impact significantly on the WTP

## Mixed logit results on effect of different attributes on willingness to pay for DFA extension services

Dependent Variable	Coefficient	p-value
Check off payment mode	0.5051983	0.000***
Increment in Monthly profit	0.396208	0.002***
Increment in daily milk production	0.6355524	0.000***
Frequency of visit	0.1646364	0.199
Monthly Cost of DFA	-7.15306	0.000***

\*\*\*statistically significant at 1% level of significance

