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“Bridging the gap between increasing knowledge and decreasing resources”

## Room to Adapt: Enhancing Food Security in East Africa

SILVIA SILVESTRI<sup>1</sup>, PATTI KRISTJANSON<sup>2</sup>, MARIANA CRISTINA RUFINO<sup>3</sup>, SABINE DOUXCHAMPS<sup>4</sup>,  
MAREN RADENY<sup>1</sup>, WIEBKE FÖRCH<sup>1</sup>, JOASH MANGO<sup>2</sup>, IANETTA MUTIE<sup>1</sup>, ANTHONY NDUNGU<sup>2</sup>,  
CARLOS QUIROS<sup>1</sup>

<sup>1</sup>*International Livestock Research Institute (ILRI), Kenya*

<sup>2</sup>*World Agroforestry Centre (ICRAF), Kenya*

<sup>3</sup>*Center for International Forestry Research (CIFOR), Kenya*

<sup>4</sup>*International Livestock Research Institute (ILRI), Burkina Faso*

### Abstract

What is the room to adapt? Can we learn from the food secure households? Are there factors that have more control over food security? What are the agricultural options and management strategies that are likely to benefit smallholders? This study aims at giving an answer to these questions by exploring the differences in food security between farmers. In doing so we use a gender lens, targeting female-headed households in particular. This analysis is based on a detailed farm characterisation survey carried on in three sites and 600 households in three countries of East Africa (Kenya, Uganda and Tanzania) across a range of agricultural systems and environments. This unique dataset allows us to explore a wide range of indicators that capture different aspects of household performance and well-being and differences in these measures between households, including food security, activity diversity, market orientation, assets, income, and labour use.

We found that food-secure farmers appear to be the ones that diversify the most, have a variety of crops on their farms, and are engaged in a range of income generating activities. In addition, a different range of covariates explains the food security status of men and female head of household. Yet, different livelihood portfolios are pursued by male and female head of household, with women less likely to grow high-value crops than men and with a less diversified crop portfolio. These findings will inform the targeting of national and regional policies to enhance adaptation in agricultural smallholder systems of East Africa.

**Keywords:** Adaptation, climate change, crops, food security, livestock, smallholders