



Tropentag, September 18-21, 2016, Vienna, Austria

“Solidarity in a competing world —  
fair use of resources”

## Regional Market Integration and Price Transmission in Supply and Consumer Markets

SCHOLASTICA LEAH MUSYIMI, SIEGFRIED BAUER

*Justus-Liebig University Giessen, Inst. of Farm and Agribusiness Management - Project and Regional Planning, Germany*

### Abstract

The study gives an overview of spatial market integration investigated for grain white maize markets in Eastern Africa, namely Kenya, Tanzania and Uganda. Following food surges, prices of most staple food commodities in most developing countries mirrored the surges suggesting global price transmission. However, volatile prices act as disincentives for producers' agricultural investment and consumers purchasing decisions with impact on sustainable agricultural productivity. The study seeks to explore market failures, investigated whether prices in rural and urban deficit and surplus markets of selected countries of Eastern Africa are co-integrated. Despite maize being staple food commodity and the most traded, in Kenya its demand outweighs supply due to increasing population and climatic impacts contributing to food insecurity and poverty. In food policy, economic theory affirms that markets allocate scarce resources from surplus to deficit regions absorbing demand and supply shocks arising from uncertainties. Eight markets were selected for the study from three countries based on data availability of monthly wholesale white grain maize prices and the correspondence CPI and exchange rates for the period between 2006 and 2014. Using bivariate equation, threshold error correction model was used to investigate consumer and supply price responses within and across selected Eastern Africa markets. Prices were found to be volatile in the region whereby Kenyan markets had highest wholesale prices while Uganda had the least, suggesting possibility of high transaction costs. The study also found out that rural and urban consumer and supply markets are co-integrated in Eastern Africa with estimated price shock adjustments between surplus and consumer markets ranging between 2 to 11 weeks. However, the study found economic agents respond faster in case of demand shock compared to supply shock. In the short run, the study gives useful insights for production and consumption decisions. In the long run, to lower transaction costs, policy formulations in Kenya should promote investment in infrastructure, mainly road network, agriculture, marketing and information for sustainable agricultural productivity and economic growth.

**Keywords:** Deficit, grain white maize, key words-regional market integration, price transmission, rural, spatial, surplus, urban