Barriga, Alicia: University of Connecticut
alicia.barriga@uconn.edu
Authors: Alicia Barriga, UConn
Nathan Fiala, UConn

Title: The supply chain for seed in Uganda: Where does it all go wrong?

Improving agricultural output and food security is a major concern in sub-Saharan Africa, but many efforts to help farmers improve yields have failed. Recent research has shown that agriculture inputs are often of very low quality, which may explain sub-optimal yields and low adoption of inputs. Researchers and policy makers have focused on two main explanations for this low quality: sellers purposefully faking or adulterating inputs, and poor storage processes along the supply chain. We present the results of testing seeds along the maize supply chain in Uganda for purity, germination and genetic similarity. We obtain two main results. First, we find no evidence that quality of seeds deteriorates along the supply chain. As soon as the seeds leave the breeders, the quality drops significantly and is the same across all geographic areas and types of suppliers, including wholesalers, retailers and major company outlets. Second, we do not find evidence of serious seed faking or adulteration. In fact, we find high levels of seed purity across all levels of the supply chain. Quality appears to be the main issue, not whether the seeds are pure. The results are consistent with mishandling and poor storage of seeds, possibly related to temperature control once the seeds leave the breeders. These results have potentially significant implications on agriculture policy and programming in sub-Saharan Africa, which has tended to focus on certification to reduce the possibility of adulteration rather than improve handling of inputs.