



Feed the Future Country Fact Sheet

Online Version: <https://feedthefuture.gov/article/virtual-system-makes-connection-between-agriculture-buyers-and-sellers>

Virtual System Makes the Connection Between Agriculture Buyers and Sellers



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Quality maize flour successfully makes its way from farm to shop shelves.

Picture the scene: Shops are sparsely stocked with expensive, though basic, food products. Meanwhile, 50 miles away, farmers sit with crops and farm products that have gone to rot because they're unable to find buyers for them.

In developing countries, situations like this are common and can lead to food shortages and even famine. Such circumstances exist where markets for agricultural products don't function effectively.

In Uganda, a project funded by the Feed the Future Innovation Lab for Assets and Market Access, led by the University of California, Davis, is underway to build sustainable, private sector mechanisms to get inefficient food markets in Africa to work better—so that smallholders get higher prices for their crops, consumers pay lower prices for their basic foods, and the movement of food from farm to table becomes more reliable.

Driving the project is a collaborative team of Information and Communication Technology (ICT) entrepreneurs, economists, computer scientists, and agri-business professionals. The centerpiece of the project is Kudu, a digital food trading platform developed by computer scientists at Uganda's Makerere University. Using a distance- and price-based matching algorithm, Kudu acts as a virtual matchmaker, putting farmers with crops to sell into direct contact with major buyers so the two parties can then enter into contracts with each other.

Through Kudu, farmers and buyers can establish links with each other on the basis of crop types, price levels, distance, the asking prices sought by sellers, the bids offered by buyers, and other data.

The project has also launched a high-frequency survey of market prices. Every 2 weeks, this survey gathers price information for the three major food crops: maize, beans and rice. The detailed crop-price information from the survey results is then "blasted" back to both the farmers and commodity traders via SMS-based tools that have been developed specifically for this project. With this information, the farmers can then seek out the best possible opportunities for selling their harvests.

The project is still ramping up, but already shows great promise. So far this season, only its second, 400 tons of food goods have been transacted. This early momentum includes a partnership with Uganda's leading private sector agricultural broker, who is willing and able to bring products such as Kudu to scale.

In a short time, the project has demonstrated how information and communication technology can improve market efficiency and, more broadly, how partnering with local entrepreneurs and supporting them can lead to great innovation.