



Partnering for Innovation

Commercializing Sweet Potato in Malawi

SITUATION ANALYSIS

In Malawi, 60 percent of children under the age of five are vitamin A deficient, which can lead to compromised immune systems, blindness, and is associated with stunted growth. Orange fleshed sweet potato is one important food that can contribute to reducing this deficiency. However, despite these nutritional advantages and the promotion of sweet potato by development organizations, very little scaling up has been achieved.



In Africa, sweet potatoes are primarily grown by smallholders, who farm on less than one hectare of land, as a subsistence food consumed in the household. While there is fast-paced growth of sweet potato production (according to the UN Food and Agriculture Organization, sweet potato production grew from 200,000 tons in 1993 to 1.7 million tons in 2003), the market is flooded at harvest time with few opportunities for processing or storage, and tons of nutritious sweet potatoes go to waste.

To address the production glut in Malawi, Universal Industries Limited is partnering with the International Potato Center (CIP) to strengthen the sweet potato sector. By adding new sweet potato product lines to their existing operations, Universal Industries is using sweet potato puree and flour in affordable, shelf-stable products such as chips and biscuits. They are now a major sweet potato buyer at harvest time, using sweet potatoes that otherwise may have gone to waste. These business innovations are resulting in reduced sweet potato post-harvest losses, new market opportunities for smallholder farmers, and nutritional food products for rural and urban consumers.

FEED THE FUTURE PARTNERING FOR INNOVATION

In 2015, the USAID-funded Feed the Future Partnering for Innovation program invested \$1,072,496 in Universal Industries. The investment is resulting in an expanded market for sweet potatoes, higher incomes for farmers, and increased accessibility to nutritious foods. It is a clear example of how the private sector can address both market and nutrition gaps in emerging markets.

PROGRESS TO DATE

As the three and a half year partnership comes to a close in July 2018, 8,500 farmers have access to improved sweet potato vines, agricultural training, and access to new market opportunities.



Universal Industries has sold \$20,000 worth of value-added sweet potato chips, bread, and other products, and developed new sweet potato cookie and puree product lines for commercialization. Going forward, Universal Industries will continue to work with CIP and local vine multipliers, technology firms, and traders to improve their supply of sweet potatoes from smallholder farmers and address farm-level constraints that could prevent the company from keeping up with growing demand. For example, the USAID-funded Feed the Future Malawi Ag Diversification Activity expressed interest in helping Universal Industries to invest in irrigation systems for sweet potato producers. Such an investment will lower Universal Industries' risk in sourcing from smallholder farmers by ensuring that farmers can increase production of sweet potato varieties suited to the company's processing needs.

CHALLENGES

Due to external factors such as erratic rainfall and resulting maize shortages, smallholder farmers consumed most of their sweet potato yields in 2016 in the household rather than selling them on the market. As a result, Universal Industries faced insufficient volumes of its preferred varieties of sweet potatoes, and was unable to keep up with the market demand for its processed sweet potato products. This muddled their marketing and promotional campaigns for new products, and stifled their ability to effectively compete with similar imported products. However, since farmers had grown more sweet potatoes in 2016, households were better prepared to overcome the maize shortage by consuming more of the nutrient rich sweet potatoes that they grew.

LESSONS LEARNED

❖ **Developing Strategic Partnerships to Inform Commercialization Strategies**

Universal Industries requires sufficient volume and specific varieties of sweet potato in order to coordinate pick-up from farmers up to three to four hours away from their processing plant. During the design of this partnership, Universal Industries identified CIP as a research institution with expertise in sweet potato varieties in Malawi and with existing farmer networks. Through these networks, farmers produce on their individual plots and then aggregate their sweet potato yields in nearby village centers for pick-up and purchase by Universal Industries. By facilitating a partnership with CIP from the beginning, Universal Industries was able to address some of the aggregation and purchasing challenges they were facing and promote the preferred sweet potato varieties for value-added processing.

❖ **Marketing and Nutritional Messaging is Key to Behavior Change**

As part of this partnership, Universal Industries assessed their existing brand and explored how to compete in the Malawi market. For example, they pursued consumer and stakeholder testing for their sweet potato products and marketing messages. A key finding that shaped their commercialization plan was to change the way consumers perceive sweet potato from a poor person's crop to a nutritional, tasty food choice.

❖ **Sustaining Supply Chain Interventions**

Feed the Future Partnering for Innovation

One of the biggest challenges going forward is ensuring that Universal Industries maintains its supply chain and can purchase the required volume of sweet potatoes to meet processing needs. Because their supply is sourced mainly from smallholder farmers far from the processing plant, who experience increasingly unpredictable weather patterns, Universal Industries will need to continue its partnership with CIP to ensure farmer training and support continues after the collaboration with Partnering for Innovation ends. Opportunities also exist for other sweet potato value-added products, including for sale to the World Food Program.