

FEED THE FUTURE INNOVATION LAB FOR LEGUME SYSTEMS RESEARCH

The Feed the Future Innovation Lab for Legume Systems Research is a five-year research capacity building development program managed by Michigan State University that focuses on grain legumes in West and Southern Africa. Legumes are a nutrient-dense staple crop that have multifunctional roles in smallholder farm systems in developing countries including food and nutrition security, generating income, providing livestock feed and fodder, and contributing to the sustainability of soil systems through their nitrogen-fixing capabilities. Cowpea and common bean are the focal crops of the Legume Systems Innovation Lab.



The Legume Systems Innovation Lab goals include:



Inclusive and sustainable agriculture-led economic growth



Strengthened resilience among people and systems



A well-nourished population, especially among women & young children

The strength of the Legume Systems Innovation Lab's design lies in its innovative and vibrant research to scaling strategy using a systems approach. Supported projects are diverse in research focus and address both the development and placement of innovative technologies with a thorough understanding of the systems they will impact thus leading to successful adoption. Projects are focused in three areas of inquiry:

- Integration of legumes into sustainable smallholder farming systems and agricultural landscapes
- Integration of legumes within local and regional market systems, including trade
- Analysis of sociocultural and/or economic motivators or barriers to legume utilization at various stages and scales within production and market systems

In addition, the Legume Systems Innovation Lab will focus on opportunities that address nutrition; the unique needs of women and youth; ensure greater resilience of people and systems under stress and shocks; and contribute to the development of human and institutional capacity for a resilient agricultural innovation system. Project activities are focused in the Feed the Future target and aligned countries of Benin, Burkina Faso, Ghana, Mali, Malawi, Mozambique, Niger, Nigeria, Senegal, and Zambia.

The Legume Systems Innovation Lab is funded by USAID under the Feed the Future Initiative.

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PROJECT OVERVIEW:

Promoting Trade Integration in Regional Legume Markets with Mobile Technology



Principal investigator/Lead institution
[Dr. Michael Olabisi, Michigan State University](#)

Collaborating institutions

- University of Ilorin, Nigeria
- Center for Drylands Agriculture, Bayero University, Nigeria
- International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Nigeria
- Université Abdou Moumouni de Niamey, Niger

Project Overview

This project will examine how mobile-phone technology can bridge the barriers between farmers, wholesalers and retailers in the legume value chains. The goal is to improve the functioning of existing markets, and to promote market integration between the major producing areas and markets in West Africa.

The mobile-phone based service will allow producers and traders to communicate and agree on the quantities they wish to sell, and the prices they will accept. It also allows users to rate the quality of services and products received, using multiple local and foreign language options.

The project promises research opportunities in understanding the adoption of mobile-phone-based technology in value chains, the drivers of effective communication between farmers and sellers, as well as the effects of communications improvements on market outcomes.

The project works in Nigeria and Niger.