

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.

FEED THE FUTURE INNOVATION LAB FOR LEGUME SYSTEMS RESEARCH

PROJECT OVERVIEW:

Transforming Seed Systems to Respond to Bean Variety Demand Through Multistakeholder Platforms in Malawi



Principal investigator/Lead institution
Dr. Jean Claude Rubyogo, Alliance of Bioversity International
and CIAT

Collaborating institutions

- LUANAR, Malawi
- DARS-Chitedze, Malawi
- PABRA-SABRN, Malawi
- Virginia Tech, U.S.

Project Overview

One of the key challenges to bean seed production and supply systems in Malawi is lack of value chain coordination starting from the market demand for grain that influence demand for certified, basic and breeder seed, and ultimately feeding into the breeding pipeline. The lack of structured planning and interactions among value chain actors, results in uninformed seed players on the value of the varieties and the inability to anticipate and plan for production and marketing activities. Subsequently, farmers do not have access to quality seed of their preferred varieties through the formal sector. More often farmers use part of their saved grain as seed, resulting in lower yields. As result of demand led breeding, bean is increasingly becoming a commercialized crop, with grain offtakers interested in specific varieties. However, the offtakers often are not connected to certified seed suppliers and breeding pipeline, and as a result, they source low quality grain from farmers at low prices, which discourage farmers to invest in the use of certified seed.

To address these challenges, this project uses an approach where the market pull incentivizes farmers to use improved consumer preferred varieties and this drives up the demand for certified seed, which will attract seed entrepreneurs to invest in seed supply chain. This can be achieved if the offtakers grain demand is deliberately synchronized/coordinated with seed production & supply to respond to farmers' seed demand (varieties and quantity). This requires a coordination through a private sector led multi stakeholder platform (MSP) bringing together all participating value chain actors and by integrating the seed system in the MSP. The study aims to test how a market pull for demanded varieties through the MSP or without MSP context can stimulate farmers' interest and purchase of certified bean seed. Private producers of certified seed will then respond to seed demand from farmers, by investing to increase quantities and quality of seed supplied, the number of farmers accessing seed, and ultimately increase bean productivity and production.

This project works in Malawi.