

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:

Cowpea Atlas Phase I: Mapping Cowpea Data Sources and Gaps in West Africa



Principal investigator/Lead institution
[Dr. Ousmane Coulibaly](#), CERAAS/ISRA

Collaborating institutions

- GBioS, University of Abomey-Calavi, Benin
- Ahmadu Bello University, Nigeria
- ISRA, Senegal
- INRAN, Niger

Project Overview

Cowpea is a strategic crop for income generation and food security in West Africa and exclusively grown by smallholder farmers. Cowpea production is characterized by low yield. The crop has important potentials for value addition through diversification of derived products and utilization, which is still unexploited in the sub-region.

Social, cultural, and economic factors hindering or promoting cowpea production and marketing systems are poorly documented. This lack of information and unavailability of reliable data on each segment of the cowpea value chain hamper the design of interventions to develop competitive value chains with higher incomes and products for food and nutritional security. As a result, stakeholders along the cowpea value chains mainly farmers, women and youth are unable to take advantage of existing national and export markets.

In addition, there have been a number of projects and initiatives at national and regional levels, which were barely integrated and sustainable. This results in inefficient resource allocation and low investment in cowpea value chains. To tackle these challenges, this project is designed to ensure an inclusive and sustainable agricultural-led economic growth through the identification of sociocultural and/or economic motivators or barriers to cowpea utilization at various stages and scales within production and market systems in Benin, Nigeria, Niger, and Senegal.

The project aims to identify cowpea data sources and gaps along the cowpea value chains in target countries. It is expected that all stakeholders in cowpea value chains in targeted countries and West Africa would benefit from the outputs and outcomes of this project.