

## INNOVATION LAB FOR SUSTAINABLE INTENSIFICATION

Feed the Future Innovation Labs draw on the expertise of top U.S. colleges and universities in collaboration with developing country research and educational institutions to tackle some of the world's greatest challenges in agriculture, food security, and nutrition. Led by U.S. universities, the Feed the Future Innovation Labs are on the cutting edge of efforts to research, develop, and take to scale safe and effective technologies that address current and future challenges posed by a changing climate and the need to feed a growing global population.

### What is Sustainable Intensification?

Any efforts to feed the growing global population must account for ongoing pressures on current agricultural production, including climate uncertainty, degraded arable land, access to clean water, and labor resources in developing countries. Approaching these challenges requires consideration of how best to increase crop production while limiting environmental & societal impacts.

The Feed the Future Innovation Lab for Collaborative Research on Sustainable Intensification (SIIL), headquartered at Kansas State University, supports the Feed the Future goals of reducing global hunger, poverty and undernutrition. The SIIL focuses on integrated farming systems research and technologies to sustainably increase agricultural productivity and income that provide food security and nutrition to smallholder farmers.

### Focus Activities:

- Sustainably increase the production of nutritious food and encourage dietary diversity of smallholder and women farmers
- Increase the involvement and empowerment of women in agricultural production and processing
- Maximize food production through improved crop-production technologies while minimizing environmental impact
- Preventing food loss and waste and improving food safety

### Geospatial & Farming Systems Research Consortium (GFSRC):

Managed by UC Davis, the Geospatial & Farming Systems Research Consortium (GFSRC) supports the SIIL by providing spatially-explicit data and analysis to undertake the following:

- Identify current patterns of agricultural intensification
- Analyze determinants and opportunities for sustainable intensification
- Develop strategies for increasing adoption and diffusion of technologies
- Develop case studies on technology targeting and scaling
- Organize all geospatial and farming systems data collected by GFSRC into an interoperable, online data management platform
- Synthesize materials and lessons into an interdisciplinary university-level course



### Sustainable Intensification Innovation Lab (SIIL)

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**Focus countries:** Bangladesh, Burkina Faso, Ethiopia, Ghana, Senegal, and Tanzania

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