

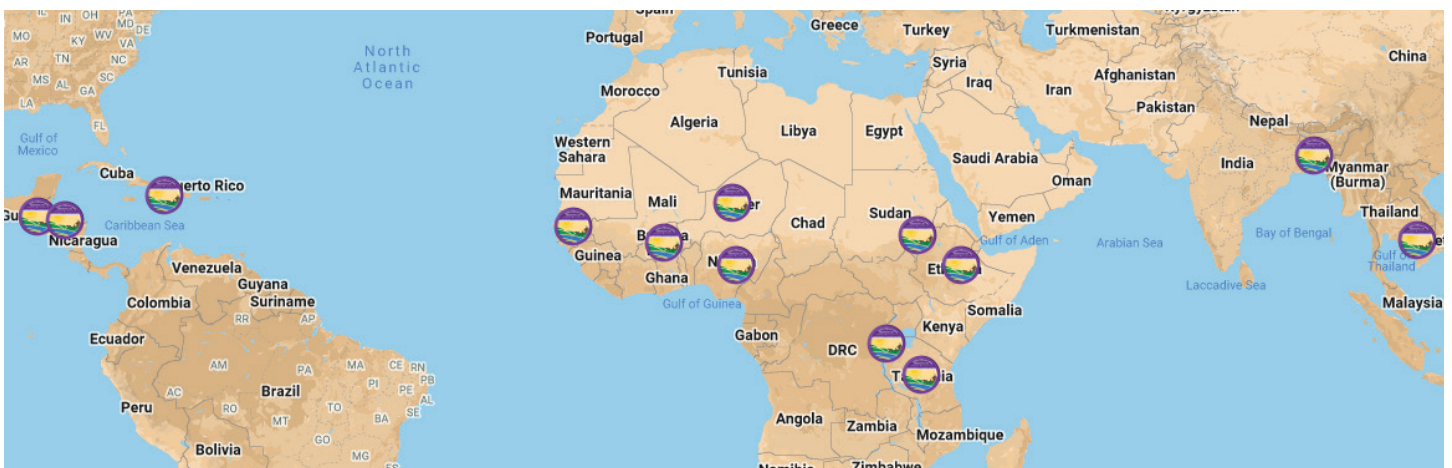
## Transforming Farming Systems for Smallholders



## Feed the Future Innovation Lab for Sustainable Intensification

### Vision

The Feed the Future Innovation Lab for Collaborative Research on Sustainable Intensification (SIIL) aims to become the global leader in transdisciplinary research, knowledge sharing, and capacity building, using sustainable intensification to improve resilience, and food and nutritional security to smallholder farmers around the world. The SIIL will forge a path that utilizes cutting-edge research while integrating socio-economic and biophysical innovations to augment its sustainable intensification farming systems approach.



### Four Core Areas

- Sustainably increase the production of nutritious food and encourage dietary diversity.
- Increase the involvement and empowerment of women in agricultural production and processing.
- Increase food production through improved crop, soil, nutrient, and water management technologies.
- Efficiently use resources while minimizing the environmental impact using a systems approach.

# Research Portfolio Highlights

## Appropriate Scale Mechanization Consortium (ASMC)

Lead: University of Illinois at Urbana-Champaign

The ASMC empowers smallholders through mechanization solutions to sustainably intensify agricultural systems.

Principal Investigator: Prasanta Kalita, pkalita@illinois.edu

Website: [www.asmc.illinois.edu](http://www.asmc.illinois.edu)

## Digital and Geospatial Farming Systems Tools Consortium (DGFSC - Phase II)

Lead: Kansas State University

The DGFSC develops digital and geospatial tools to guide producers and decision-makers to enhance resilience of farming systems.

Principal Investigator: Ignacio Ciampitti, ciampitti@ksu.edu

Website: [www.digitalconsortium.wixsite.com/dgfs](http://www.digitalconsortium.wixsite.com/dgfs)

## Policy Research Consortium (PRC)

Lead: Rutgers University

The PRC aims to develop and utilize specific indicators to quantify the impact and progress toward food and nutritional security.

Principal Investigator: Carl Pray, cpray@sebs.rutgers.edu

Website: [www.ru-ftf.rutgers.edu](http://www.ru-ftf.rutgers.edu)

## Sustainable Opportunities for Increasing Livelihoods with Soils (SOILS)

Lead: International Fertilizer Development Center; Kansas State University

The vision of SOILS is to improve the health and fertility of soils as the foundation for nutritious food production, and resilient and sustainable livelihoods.

Website: [www.ifdc.org](http://www.ifdc.org)

## Sustainable Intensification (SI) Assessment Framework

Lead: Kansas State University

This interactive framework is organized into five domains: productivity, economic, environmental, human and social conditions to assess SI research and best practices.

Website: [www.sitoolkit.com](http://www.sitoolkit.com)

## Center of Excellence on Sustainable Agricultural Intensification and Nutrition (CE SAIN) in Cambodia

Lead: Royal University of Agriculture

The CE SAIN improves food and nutritional security by supporting agricultural research, education, extension and fostering private sector engagement.

Director: Lyda Hok, hoklyda@rua.edu.kh

Website: [www.cesain.org](http://www.cesain.org)

## Haiti Agricultural University Partnership: Center of Excellence on Mitigation, Adaptation, and Resilience to Climate-Change in Haiti (CEMARCH)

Lead: Kansas State University

The CEMARCH strengthens partner capacity, fosters agricultural education, training, research, and extension, and links farmers with the private sector to address food and nutritional security in Haiti.

Program Director: Beth Guertal, guertea@ksu.edu

## i(Innovation) Research, Extension and Advisory

## Coordination Hub (iREACH)

Lead: West and Central African Council for Agricultural Research and Development (CORAF)

iREACH's vision is to strengthen coordination, alignment, and integration of research, extension, and advisory activities with partners throughout the CORAF regions.

Program Manager: Niéyidouba Lamien, n.lamien@coraf.org

## Economic Impact of Improved Bean Varieties in Central America and USA

Lead: Michigan State University; International Center for Tropical Agriculture

This study estimates the economic impact of investments made by multiple donors on bean breeding in Guatemala, Haiti, Honduras, Nicaragua, and USA.

Principal Investigators: Mywish Maredia, maredia@msu.edu;

Byron Reyes, b.reyes@cgiar.org

# Focus Country Subawards



Bangladesh

## Pathways of Scaling Agricultural Innovations for Sustainable Intensification in the Polders of Coastal Bangladesh (2020-2023)

Lead: International Rice Research Institute (IRRI) and Kansas State University (KSU)

Principal Investigators: Krishna Jagadish, kjagadish@ksu.edu; Sudhir Yadav, s.yadav@irri.org



Cambodia

## S3-Cambodia: Scaling Suitable Sustainable Technologies (2020-2023)

Lead: University of Tennessee Institute of Agriculture

Principal Investigator: David Ader, dader@utk.edu



Senegal

## Improving Food and Nutrition Security of Smallholder Agro-pastoral Farming Systems by Integrating Crop-Livestock-Human Nutrition in Senegal and Niger (2020-2023)

Lead: KSU and Senegalese Institute for Agricultural Research

Principal Investigators: Doohong Min, dmin@ksu.edu; Aliou Faye, aliouselbel1@yahoo.fr

