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Achieving synergies among USAID investments in grain legume research

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May 14, 2014

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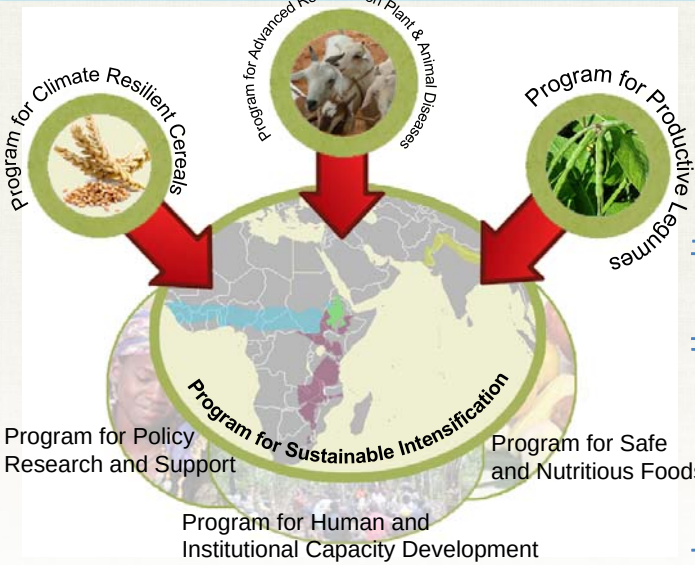
Food Security Innovation Center



3 Major Research Programs – "Big Ideas"

Program anchoring research in key farming systems

Integrated Cross-Cutting Programs

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Program for Research on Legume Productivity

- Innovation Labs:
  - Grain Legumes
  - Climate Resilient Beans
  - Climate Resilient Cowpea
  - Climate Resilient Chickpea
  - Peanut Productivity and Mycotoxin Control
  - Soybean Value Chain Research
- Bt Cowpea
- Grain Legumes CRP3.5
- Norman Borlaug Commemorative Research Initiative (NBCRI)
  - Pulse Productivity Project *(USDA-NIFA/ARS)*
- Mixed maize/legume systems *(Sustainable Intensification)*

http://www.feedthefuture.gov/resource/feed-future-food-security-innovation-center-research-legume-productivity

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Achieving Synergies

- Minimize redundancy across the portfolio
- Foster interdisciplinary linkages, leverage scientific advances across broad range of projects
  - SO1.A3: participatory evaluation of fast-cooking, nutritious varieties identified by NBCRI/ARS project
  - SO1.A5: background selection for Bt cowpea

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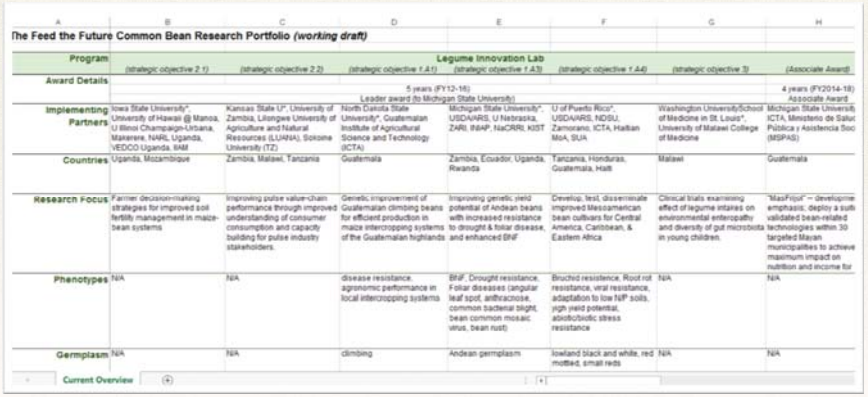
Common Bean Research under Feed the Future



The Feed the Future Common Bean Research Portfolio *(working draft)*

Program	Legume Innovation Lab						
	(strategic objective 2.1)	*(strategic objective 2.2)*	*(strategic objective 1.4.1)*	*(strategic objective 1.4.3)*	*(strategic objective 1.4.4)*	*(strategic objective 3)*	*(Associate Award)*
Award Details	5 years (FY12-16) Leader award (to Michigan State University)						4 years (FY2014-18) Associate Award
Implementing Partners	Iowa State University*, University of Hawaii @ Manoa, U Illinois Champaign-Urbana, Makerere, NARL Uganda, VEDCO Uganda, IMM	Kansas State U*, University of Zambia, Lilongwe University of Agriculture and Natural Resources (LUANA), Sokoine University (TZ)	North Dakota State University*, Guatemalan Institute of Agricultural Science and Technology (ICTA)	Michigan State University*, USDA/ARS, U Nebraska, ZARI, RAP, NaCRRI, KIST	U of Puerto Rico*, USDA/ARS, NDSU, Zamorano, ICTA, Haitian MoA, SUA	Washington University/School of Medicine in St. Louis*, University of Malawi College of Medicine	Michigan State University, ICTA, Ministerio de Salud Pública y Asistencia Social (MSPAS)
Countries	Uganda, Mozambique	Zambia, Malawi, Tanzania	Guatemala	Zambia, Ecuador, Uganda, Rwanda	Tanzania, Honduras, Guatemala, Haiti	Malawi	Guatemala
Research Focus	Farmer decision-making strategies for improved soil fertility management in maize-bean systems	Improving pulse value-chain performance through improved understanding of consumer consumption and capacity building for pulse industry stakeholders.	Genetic improvement of Guatemalan climbing beans for efficient production in maize intercropping systems of the Guatemalan highlands	Improving genetic yield potential of Andean beans with increased resistance to drought & foliar disease, and enhanced BNF	Develop, test, disseminate improved Mesoamerican bean cultivars for Central America, Caribbean, & Eastern Africa	Clinical trials examining effect of legume intakes on environmental enteropathy and diversity of gut microbiota in young children.	"MasFrijol" – developme emphasis, deploy a suit validated bean-related technologies within 30 targeted Mayan municipalities to achieve maximum impact on nutrition and income for
Phenotypes	N/A	N/A	disease resistance, agronomic performance in local intercropping systems	BNF, Drought resistance, Foliar diseases (angular leaf spot, anthracnose, common bacterial blight, bean common mosaic virus, bean rust)	Bruchid resistence, Root rot resistance, viral resistance, adaptation to low NP soils, high yield potential, abiotic/biotic stress resistance	N/A	N/A
Germplasm	N/A	N/A	climbing	Andean germplasm	lowland black and white, red mottled, small reds	N/A	N/A

Current Overview

The portfolio at a glance…

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Common Bean Research under Feed the Future

- Broad portfolio of complementary research investments
- Aim to enhance food security, nutrition, and environmental sustainability for poor farmers by increasing the productivity and availability of common bean.
- Strategic coverage of diverse geographies, germplasm resources, target phenotypes, academic disciplines, research methodologies, partners

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Facilitate Scaling

- Streamline engagement between research & development partners across thematically related programs
- Broker linkages along impact pathways
  - Sustainable Intensification program area
  - Mission programming (through Assoc. Award, or informally)
  - Scaling Seeds & Technologies Partnership (SSTP)
  - Identify, promote, and exploit enabling policies (*i.e.* seed harmonization)

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Practical Synergies

- Leverage funding across programs to achieve mutual technical objectives
  - Coordinated global network of bean field trials
  - Equipment
  - Cross-training for students
  - Market studies across crops (*e.g.* soy, bean)
- Management & operational efficiencies achieved by coordinating across programs
  - Environmental compliance
- Knowledge management: Better access/utilization of field trial, genomic, market, other data?

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How can USAID maximize synergy?

- Community self-organization vs. active management?
- What's working? What opportunities are we missing?
- What kind of tools would facilitate coordination? What information do you need?
- How best to support host-country partners on an institutional level?
- Any enabling policy priorities bubbling up across projects?
- Other comments?

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Please See our Feed the Future Website

Thank You!

www.feedthefuture.gov