

## TECHNICAL VISION DRY GRAIN PULSES CRSP 2013-2017



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### “Vision of Pulse CRSP”

1. CRSP Mission and Approach
2. FTF Research Strategy
3. Lessons learned by MO
4. External input
5. Proposed research themes
6. Proposed geographical foci
7. Institutional capacity building
8. Process going forward



### CRSP Mission

- To support long-term collaborative research that leads to the development of tangible outputs and contributes to clearly defined outcomes and development impacts in USAID priority countries
- To empower and enhance the capacity of host country institutions to address recognized needs and constraints through collaborative creation of new technologies and knowledge and the development of human resource capacity, leading to institutional self-reliance and sustainability

### CRSP Approach

- Mobilize research capacities of U.S. universities
- Address priority agriculture development challenges
- Invest in long-term research objectives
- Focus efforts on outputs with high impact potential
- Collaborate with appropriate international partners to achieve research objectives
- Empower and build capacity of national agriculture research institutions (NARs, universities, etc.)

## Feed the Future Global Food Security Research Strategy ([www.feedthefuture.gov/](http://www.feedthefuture.gov/))



- Establishes research objectives for pulses
- Advances cross-cutting themes
- Identifies geographical foci
- Promotes strategic partnerships
- Defines roles for CRSP's in development



## Research Objectives for Pulses re FTF

1. Sustainably improve the productivity of smallholder farming systems
2. Transform pulse value-chains to facilitate increased participation by small-scale stakeholders.
3. Enhance nutritional quality of diets and the nutritional status of women and young children



## FTF Cross-Cutting Themes

- Improve welfare of women and young children
- Mitigate effects of climate change and reduce vulnerability
- Intensify and enhance the sustainability of production systems
- Strengthen capacity of national agricultural research institutions



## FTF Focus Countries and Regions

- West Africa- Ghana\*, Mali, Liberia, Senegal
- East Africa- Ethiopia\*, Kenya, Rwanda, Tanzania\*, Uganda
- Southern Africa- Mozambique, Malawi, Zambia
- Central America/Caribbean- Guatemala, Honduras, Nicaragua, Haiti
- Other- Bangladesh, Cambodia, Nepal, Tajikistan



## FTF Countries where Bean Value Chains are a priority

- Ethiopia
- Rwanda
- Uganda
- Malawi
- Mozambique
- Zambia
- Nepal
- Nicaragua



## FTF Priority “Cropping Systems”



- Sudano-Sahelian cropping systems of West Africa
- Eastern and Southern Africa maize-mixed cropping systems
- Ethiopia highland cropping systems
- Indo-Gangetic Plain cropping systems of India and Nepal

## Characteristics of Productive and Successful Research Projects

- A team of committed collaborating scientists
- Clear research objectives with outputs that will contribute to significant development outcomes
- Adequate time to achieve the research objectives
- Sufficient funding to complete research activities
- Multi- and interdisciplinary approaches to address complex problems and challenges
- Appropriate partners with needed expertise and capacities



## The CRSP MUST be Greater than the Sum of the Individual Project

- Community of learners
- Serve common stakeholders
- Operate in systems
- A livelihoods approach demands inter-relationships be considered



## External Input into Technical Program

- Consultations
- TMAC
- External Evaluation Committee
- US bean industry



## Workshops/Consultations

*“Enhancing pulse productivity on problem soils by smallholder farmers” (PSU, August 2011).*

*“Enhancing the nutritional status of the poor through pulses” (MSU, Dec. 2011)*



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## TMAC Evaluations and Recommendations:

- **Performance-** Success in achieving technical objectives as established in project Technical Applications and annual Workplans during the 2007-12 funding period.
- **Potential-** Potential that continued research investments (2013-17) in projects will result in major new advances and technological outputs that will have high potential to achieve major impacts on pulse-based cropping systems and value chains.
- **Relevance-** Alignment of the outputs and outcomes of the proposed research foci/areas with strategic research objectives and development priorities of both the Bureau of Food Security and USAID Country and Regional Missions for pulses (grain legumes) under Feed the Future.

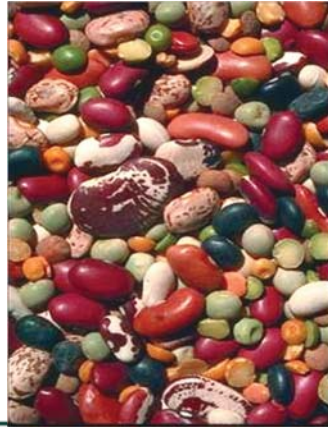
## Factors to be Considered for Priority Setting

- Potential for **major gains** through research
- Potential for outputs to contribute to **impact** (as related to FTF indicators)
- Potential for **scalability** to multiple countries and regions
- Opportunities to use **new research tools** to address persistent constraints
- Opportunities to **network** and coordinate efforts
- Opportunities to **leverage resources**



## Research Issues and Challenges

- Availability of funds
- Short term vs long term objectives
- Thematic vs commodity or regional focused priorities
- Scope and complexity of projects



## Proposed Thematic Research Goals

**Goal 1:** To sustainably and substantively increase pulse productivity while limiting vulnerability to climate change for smallholder farmers, especially women.

**Goal 2:** To transform pulse systems to improve livelihoods for the benefit of stakeholders of pulse value chains extending from smallholder farmers to consumers.

**Priority 3:** To improve the nutritional quality of diets and to enhance the nutritional and health status of the poor, especially women and children.

## Goal 1. Research Approaches to Increase Pulse Productivity

- Genetic improvement of pulse crops to achieve high pulse yield with a focus on enhancing nutrient and water acquisition and use efficiency in strategic agro-ecologies
- Development of appropriate IPM strategies to sustainably and economically manage pests in pulse-based farming systems

## Goal 2. Research Approaches to Sustainably Transform Pulse Systems for Improved Livelihoods

- Improve the multi-functionality of smallholder pulse-based farming systems (productivity, sustainability, household nutrition), giving special attention to the integration of livestock.
- Development of effective and sustainable mechanisms/ approaches for seed, technology, and knowledge dissemination for the benefit of stakeholders of pulse value chains especially women.
- Enhance smallholder pulse farmer (especially women) access and participation in expanded markets.

### Goal 3: Research Approaches to Enhance Nutrition Especially of Women and Children

- Increase knowledge of the nutritional and health contributions of pulse consumption particularly of women and infants during the first 1000 days, so as to reduce child stunting, and to improve pregnancy outcomes.
- Understand dietary decision making by resource-poor women as related to nutritional quality of diets

### Regional Geographical Foci by the Dry Grain Pulses CRSP (2013 – 2017)

- West Africa Sahel Region (Senegal, Mali, Burkina Faso, Niger, Benin and Ghana)
- East Africa (Rwanda, Tanzania, Uganda, Kenya, Zambia, Mozambique and possibly Malawi)
- Central America (Honduras, Nicaragua and Guatemala) and the Caribbean (Haiti)

### Strategic Partnerships

- CRP3.5 Grain Legumes (CIAT, IITA, ICRISAT)
- Networks (PABRA, CA, etc.)
- USAID Regional and Country Missions
- Other Legume R&D programs (N2Africa, McKnight Foundation)



### Institutional Capacity Building

- Build capacity in strategic and new research areas
- Respond to specific institutional needs and personnel development priorities
- Address capacity gaps resulting from retirements
- Provide supplemental funds to support Host Country research capacity and project implementation.

## Process going forward:

1. TMAC makes recommendations to MO
2. USAID reviews Pulse CRSP
3. Tentative decisions made on future research and institutional capacity building foci
4. CRSP MO informs Project Teams regarding future status (June 2012)
5. MO prepares and submits Technical Application to USAID (July 2012)
6. USAID extends contract to MSU for Pulse CRSP (prior to September 30, 2012)



## Pulse CRSP Future Project Options

- Extension with funding (Technical Application + Budget)
- No-cost extension
- No extension or project
- Opportunity to compete for new project awards (RFP)



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