



Sustainable Legume Intensification in CCRP

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COLLABORATIVE CROP RESEARCH PROGRAM

This presentation

- CCRP overview
- Framework for grant making
- Legume priorities for 2014-18
- Legume Lab
 complementarity







Plant Biology Program

• 1983-1993: \$1.7 M / yr

Collaborative Crop Research Program

- CCRP-I, 1993 2000: ~\$2 M/yr
- CCRP-II-a & b, 2001 2008: ~\$4 M/yr
- CCRP-III, 2009 2013: ~\$10 M/yr, cofunding from BMGF
- CCRP-IV, 2014-2018: ~\$11M/yr, cofunding from BMGF - SLII

2013 - 120 grantee organizations 70 collaborative research projects 12 countries in 4 communities of practice (CoPs)



CCRP Communities of Practice (CoP)





Agroecological Intensification (AEI)

Improving the performance of farming systems through the integration of ecological principles in farm and system management

- Supporting...
 - Productivity under resource limitations
 - Sustainability, resilience v. shocks, adaptive capacity
- By facilitating...
 - Diversification
 - · Flexible options for diverse contexts
 - · Social innovation for local adaptation and adoption



Legume levers		Productivity	Nutrition	Livelihoods	Sustainability
Diversify cereal-based systems with legume integration – diversify diets		Х	Х	Х	Х
Breeding for best fit to socio-ecological niches		Х		x	
Pest management to reduce losses e.g botanicals					
Incorporate residues for soil fertility 22 of CCRP's					
Gender issues related to child feeding	52 projects				
Small machinery for shelling and processing	are now on legumes				
Reduced aflatoxin contamination; increased awareness					
Complementary foods for children			Х		
Facilitating market access			2	Х	



Impact through seed systems

• Farmer-driven Seed Distribution

In Malawi with NASFAM

6.5 tons of new disease resistant-groundnut (peanut) seed \rightarrow 566 farmers with 80 seed banks \rightarrow produced 52 tons of seed

16 tons returned to seed bank \rightarrow farmers sold remainder to seed companies and other farmers





Addressing the AEI agenda – legume integration examples:

Project	System components – AEI levers & agenda
Best Bet Legumes (LUANR, Malawi &MSU)	Legume performance in maize-based systems, across environments, evidence for fertiliser/ISFM policy, diversified diets, linked to nutrition education includes recipe days, local seed systems – "pass-on" organised by NGOs
Bambara groundnut (LUANR, Naliendeli, IIAM)	Crop diversity, variety adaptation, crop management, local seed systems, diet diversity, developing markets



Program priorities -- 2014-18

- Agroecological intensification;
 - Legume diversification
 - Components and systems
- Strengthening capacity
 - Multi-environment trials initiatives (METI)
 - Farmer Research Networks beyond farmer groups, M&B, democratization of research, powerful tool?
 - Next-gen support: Leadership development; post-grad training; AEIx
- Scaling
 - Within, between/amongst CoPs; with other initiatives
 - Policy influence; data/insight to contribute to discussion



Legumes as components of diversified systems for improved sustainability, nutrition & incomes



Grantmaking aims for 2014-2018 --Sustainable Legume Intensification Initiative

- Mali, Burkina Faso, Uganda, Ethiopia, and Tanzania
- Primary focus on common bean, cowpea, groundnut, chickpea, with secondary focus on other legumes
- Increase legume grantmaking to 50% of overall portfolio
- 60 post-graduate training opportunities (50% related to legumes) with at least half of all funded projects including either a MSc or PhD student. At minimum 1/3 of trainees will be women.
- Functioning FRNs in each region
- Gender-informed grant-making

McKnight: 55% Gates : 45%

Increasing research quality and potential for impact

Understanding scale and context: spatial literacy a challenge – in future plan for spatial analysis (agro-ecology & socio-economic) more explicitly; grantees and/or mentors with skills







Increasing research quality and potential for impact

- Scale for recommendations: What are implications for contextualised scaling – national v local? Need robust evidence to inform policy e.g. seed release are we still breeding for stability......
- Opportunities for research at scale: alignment of research with dissemination programs promoting legumes – make use of FRNs



Increased grant-making on pest management

What are the opportunities for ecological pest management ? Existing work on botanicals in SAf – e.g. *Tephrosia* Make common-cause with partners – meeting Arusha, May 2014





Complementarity: Countries





Complementarity: Crops



Complementarity: Foci

