



Grain Legumes: From Productivity to Nutrition

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**Feed the Future Innovation Lab for
Collaborative Research on Grain
Legumes**

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Five aspects

Improved
varieties



Seed systems



Soils/management



Markets/trad



Nutritio



*Capacity Building
underlying all collaborative
research*



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Productivity: Varieties and Seed Systems (MSU)



- Varietal work:
 - Heat/drought tolerance
 - Pest/disease resistance
 - Higher yields in stressful environments
 - Varietal Releases
- Training a new generation of breeders

Zambia and Uganda



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Soils and Farmer Decision-making (ISU)



Mozambican researchers working with farmer to take soil samples and discuss native soil classifications

Farmers and scientists:
Soil analysis, needs,
solutions

- ▶ Simple tools can enhance farmer diagnosis of soil health and structure to increase fertility
- ▶ Gender Differences



Mozambique and Uganda
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Consumer Demand (KSU)



Determining consumer demand attributes to guide breeders and private sector



► Knowledge of demand leading to coordination btw. producers and markets

Zambia, Malawi, Tanzania



Nutrition (WU-SL)



Hypothesis that more legumes means healthier guts in infants

► Weaning foods with beans/cowpeas in Malawi

Study evaluates if legumes can help address issues of Environmental Enteric Dysfunction (environmental enteropathy)



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MasFrijol Guatemala

Bringing Agriculture & Nutrition together

Increasing Bean Productivity

- Promote locally adapted and preferred varieties
- Establish community seed banks (“Almacenes”)
- Access to PICS sacks for household storage

Improving Nutrition through Increased Bean Consumption

- Increase appreciation of beans as an “ancestral” staple crop and food
- Nutrition education focused on women’s groups
- Recipe competition, videos, mobile education units

Collaboration and Coordination between Min Agric and Min Health



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Other programs

- Legume Scholars Program with CGIAR and Peanut and Mycotoxin Innovation Lab
- International Year of Pulses www.IYOP.net
- Pan African Grain Legumes Conference
 - Early March 2016 Livingstone Zambia
legumelab.msu.edu
- Integrated Pest Management and SAWBO Scientific Animations without Borders



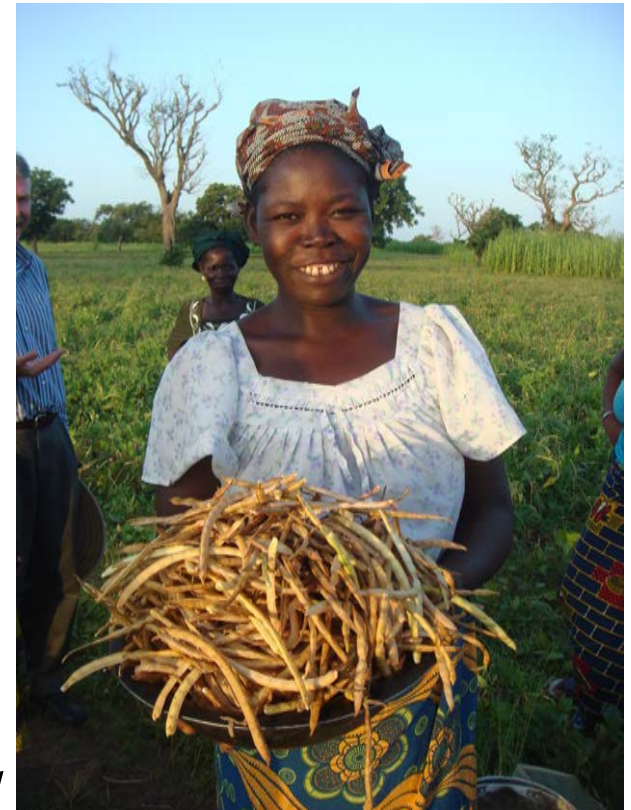


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