

Sustainable Seed Systems

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**Bean/Cowpea Collaborative Support Program
(CRSP)
US Agency for International Development (AID)**





Project Goals

❖ **Develop cost-effective and sustainable seed multiplication and dissemination systems for improved cultivars that meet the needs of limited-resource farmers.**

- multiplication and dissemination

❖ **Develop methodologies and approaches to evaluate new varieties and breeding lines in target on-farm environments to promote their adoption**

- on-farm research



Sustainable Seed Systems

❖ **Limited production and consumption of new improved varieties in Malawi**

- **No formal seed multiplication systems**
- **No formal seed dissemination systems**
- **Lack of infrastructure to promote new varieties**



Seed Multiplication System - US

- **Public breeders with state, federal, non-profit and private support**
- **University and State infrastructure support for multiplication**
- **Extension service that conducts on-farm trials and promotes new varieties**



Seed Multiplication System - Malawi

- **Few public breeders, most with no on-going support**
- **No University and State infrastructure support for seed multiplication**
- **No Extension service that conducts on-farm trials and promotes new varieties**
- **Majority of people earn a few dollars a day
– no purchasing power**



Production Environment - Malawi

- **Tropical country – high pest pressure in the field and in storage**
- **No reliable source of electricity**
- **Limited access to goods and supplies, very expensive (import duties, shipping, etc.)**



Seed Multiplication

Breeder seed



Foundation seed



Certified seed



**Quality declared
seed**



Strategies for Seed System

1. Seed multiplication programs

- Collaborate with on-going NGO programs:
**Actionaid, World Vision, Concern Universal,
Total Landcare**
- Evaluate breeding lines and new variety plots
with participating farmers
- NGO programs distribute seed to new farmers





Strategies for Seed System

2. Agricultural College Program

- Establish seed producing farmer groups around College and provide training and field monitoring
- Market seed through College or enable farmers to make direct linkages to purchasers























