

BEAN BREEDING IN AFRICA: Market- Led Approach



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PABRA



Development Partners

CIDA, SDC, BMGF, McKnight, ASARECA,
National Governments, AGRA, Kirkhouse Trust



Member Countries

- Burundi
- East and West
DRC
- Ethiopia
- Kenya
- Madagascar
- Rwanda
- Sudan
- South Sudan
- Northern Tanzania
- Uganda

Member Countries

- Cameroon
- Rep of Congo
- Central African Rep
- Togo
- Ghana
- Mali
- Guinea Conakry
- Burkina Faso
- Sierra Leone
- Senegal



Member Countries

1. Angola
2. South DRC
3. Lesotho
4. Malawi
5. Mauritius
6. Mozambique
7. South Africa
8. Swaziland
9. Tanzania
10. Zambia
11. Zimbabwe

PABRA Strategic Framework 2014-2019

Focus Outcome (Access; Utilization; Impact)

Immediate

outcomes

Increased access to improved management technologies and dry bean varieties for market and household consumption

Increased access to bean based products for animal feed

Increased access to industrial bean-based products and trade in national, regional and international markets in a gender equitable manner

Increased access to market demanded snap bean products in a gender equitable manner

Increased access of micronutrient rich bean products among the vulnerable groups in a gender equitable manner

Immediate outcomes

Improved trade of marketable bean products in a gender equitable manner

Increased utilization of improved bean based products in a gender equitable and sustainable manner for food and nutrition security

Ultimate

outcome

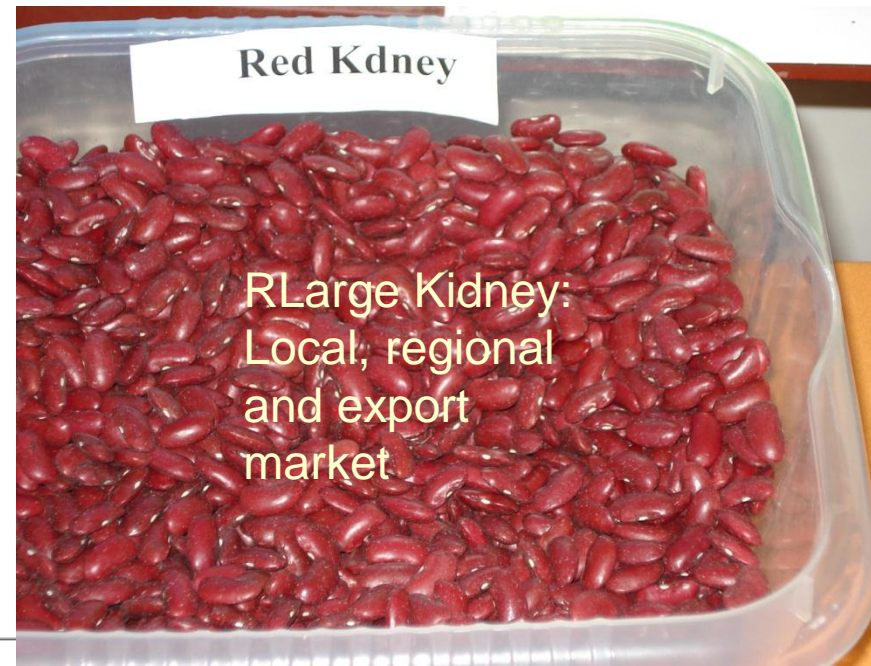
Improved economic growth, food security, nutrition status and natural resource base in a gender equitable manner for sustainable livelihoods of people in Eastern, Central, Southern, and Western Africa

Aim and outputs PABRA'S Breeding Program

PABRA aims to develop marketable resilient and nutritious bean germplasm:

- ⊙ **Marketable high yielding multiple stress resistant bean varieties**
 - ⊙ **Pest and disease resistant**
 - ⊙ **Acidic, low fertility soils and efficient nutrient use**
 - ⊙ **Drought and heat tolerant varieties**
- ⊙ **Marketable, high yielding , multiple stress resistant, high Fe & Zn varieties**
- ⊙ **Varieties for the niche market**
 - ⊙ **Adapted high yielding varieties for canning industry**
 - ⊙ **Multiple stress resistant snap bean varieties**

Some marketable bean types



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wider

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BREEDING ACTIVITIES IN PABRA

- **Pathogen characterization**
- **Identification of new disease resistance sources**
- **Disease resistance improvement: Markers assisted selection**
- **High Fe and Zn content (Hp+)**
- **Drought Tolerance**
- **Culinary quality**

COMMON DISEASES



Angular Leaf Spot



BCMV



Pythium Root rot



Common bacterial blight



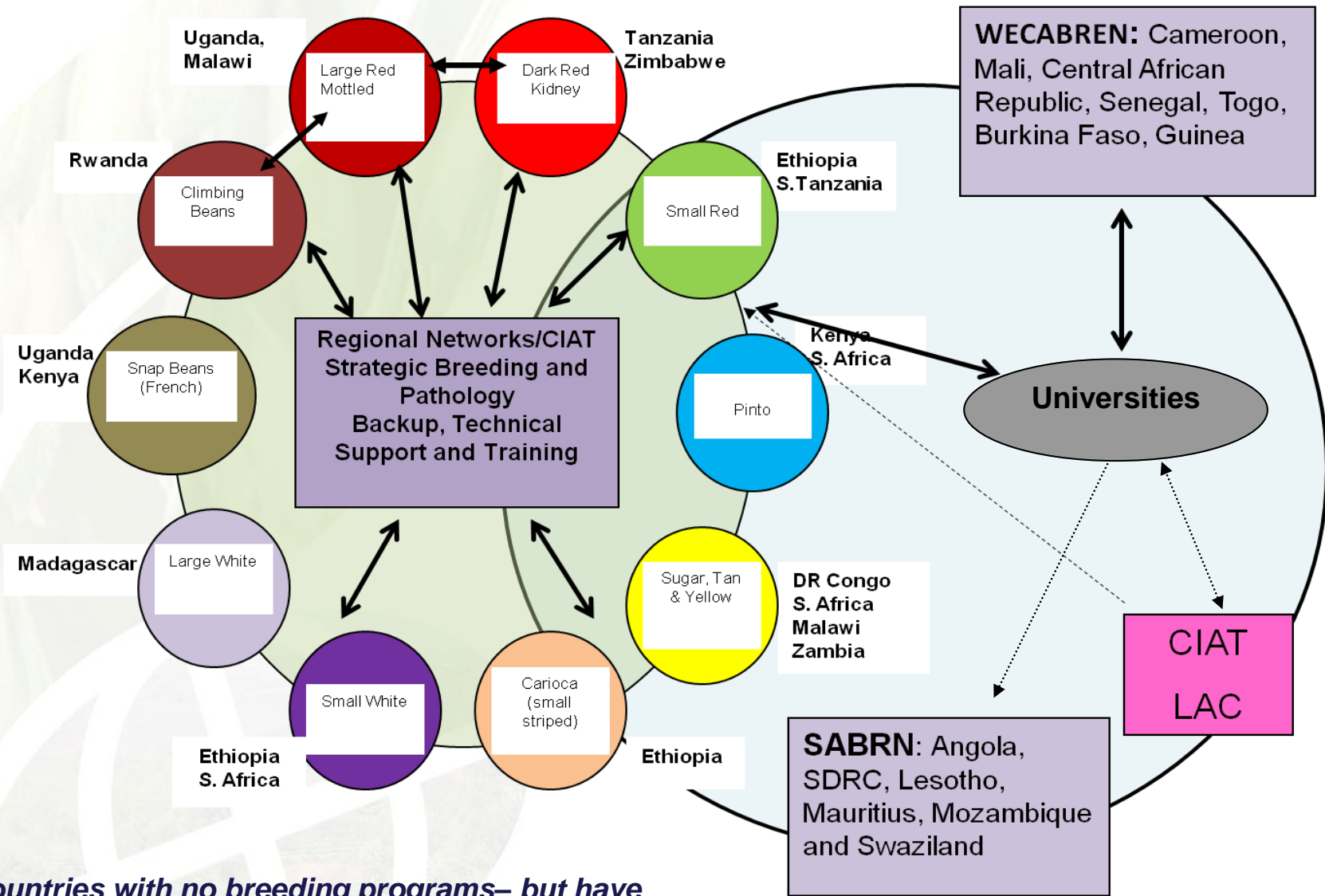
BCMNV



Anthracnose

Eco-Efficient Agriculture for the Poor

MARKET-LED BREEDING: SHARED RESPONSIBILITIES



Countries with no breeding programs– but have released bean varieties. Some varieties are released in more than one country- “Nets that work for all”



Potential for release of varieties across countries – through networking

Variety	Countries
CAL 143	Malawi, Zambia, Mozambique, Swaziland Angola
A197	Malawi, Zambia, Angola, Tanzania,
A286	Malawi, South Africa., Angola, Lesotho, Mozambique, Zimbabwe, Swaziland
A344	Malawi, SA, Angola
Sugar 131	Malawi & Mozambique (registered in Zimbabwe, Zambia)
UBR 92 (25)	Malawi, (reg.Zimbabwe and Zambia)

Diversified seed systems (production, supply & info flow)

Decentralized seed production



Seed supply through local agro-dealers shop



Opening opportunity for commercial companies



NGO supported seed systems: seed fairs



Some of the PABRA Beans traded on the Ethiopian Commodity Exchange

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English



ETHIOPIA COMMODITY EXCHANGE
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MA1 270 : 0 | WMA2 265 : 0 | 2UFRAUGJ 740 : 5 | 2UFRB7 840 : 0 | 2UFRB9 790 : 0 | 2UFRBUG 735 : 0 | 2UHRA4 857 : 8 | 2UHRA5 840 : 10 | 2UHRB4 850 :

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250,000 tons of sesame and navy beans will be traded on the exchange floor in 2011.

Bean types/grades

	Open	Close	High	Low	Change	Vol_Ton
RWPA5	695	695	695	695	0	20.00
RWPA4	725	725	725	717	0	100.00
RWPA4	707	707	707	707	0	100.00
RWPA3	720	735	740	715	15	240.00
FWPA3	702	702	702	700	0	360.00

ECX White Pea (Navy) Beans Contract

1. Contract Classification and Grades
2. Grading Parameters
3. Standard Trading Terms
4. Standard Settlement Terms
5. Standard Delivery terms

Continuous training and exposures

- PPB/PVS /industry linkages
- Continuing education (mainly NARS breeders through various projects (TLI/TLII), PABRA core support,
- Attachment of students from Universities
- Special education projects –Gvt of Uganda/ADB just signed with CIAT to train 15 graduates in various areas of agriculture
- Various/continuous exposure to plant sciences and essential non- plant sciences components (value chain concepts, project management, seed systems, impact orientation, partnership, communication/leadership etc.



Thank you