

The AGRA Approach to Seed Value Chain Development in Africa

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Alliance for a Green Revolution in Africa (AGRA)

AGRA's Vision

“A food secure and prosperous Africa through rapid smallholder agricultural growth and transformation”

AGRA's Mission

“To trigger a uniquely African green revolution that will transform African agriculture into a highly productive, efficient, competitive and sustainable system that assures food security and lifts millions out of poverty”

AGRA's Goal

- Reduce food insecurity by 50% in at least 20 countries by 2020.**
- Double incomes of 20 million smallholder families by 2020.**
- At least 15 countries put on pathway for attaining and sustaining a green revolution**

AGRA has programs across the agricultural value chain



AGRA Programs are in 16 countries

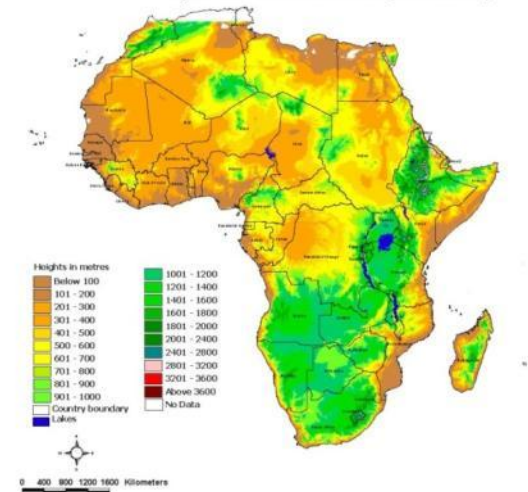
- 13 initial countries
- + 3 New countries (PASS only)
 - Liberia
 - Sierra Leone
 - South Sudan



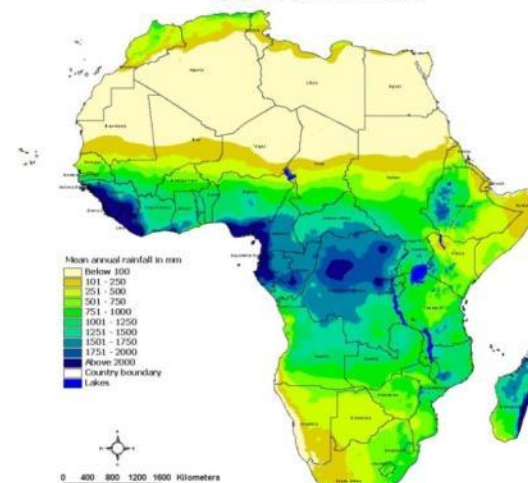
The Program for Africa's Seed Systems (PASS): seed value chains

- **Country/agroecology-based: diversity of crops, soils, rainfall, altitudes, diseases and pests**
- **Farmer-focused**
- **Support public and private organizations**
- **Linkages**
- **Mentoring**
- **Monitoring&Evaluation**
- **Lesson learning**

Digital Elevation Model of Africa (90 m interval)



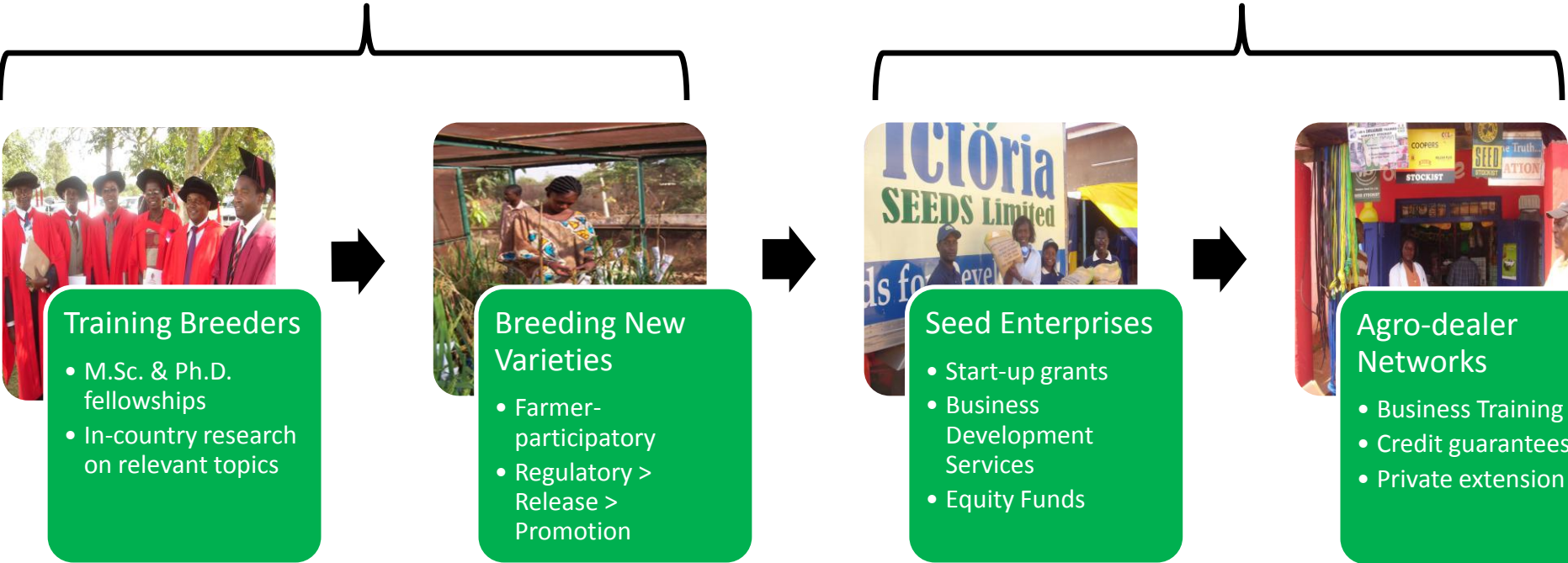
FAO Soil Classes of Africa 2000



PASS SEED VALUE CHAIN

R & D

Delivery



Promoting the development of a seed system that delivers high quality of seed of more productive food crop varieties to smallholder farmers in an efficient, equitable and sustainable manner

PASS functional components (sub programs)

EDUCATION (EACI)

- Training a new generation of plant breeders and seed technologists on priority African food crops
- Short term training courses (Seed Enterprise Management Institute-SEMI)

BREEDING (FIAAC)

- Targeted support to breeders to develop, release, promote new crop varieties
- Link breeders to each other and to seed producers, seed companies
- Promote new varieties through large-scale demonstrations, field days, etc

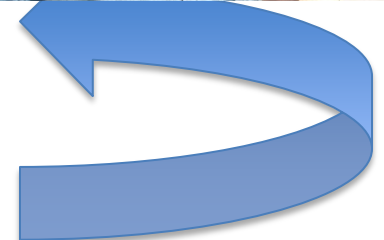
SEED PRODUCTION&DISSEMINATION (SEPA)

- Learning new skills to produce high quality seeds, raising farmer awareness to create demand, and making the seeds accessible to poor farmers
- Preparing business plans for loan/equity investments
- On site business development services offered by experts of the private seed sector
- Participation in SEMI courses on seed production and processing, seed business management, seed marketing, quality assurance
- Linkages with other seed cos., with scientists, seed dealers, other AGRA programs and partners

AGRODEALER DEVELOPMENT (ADP)

- Improving functional capacities of input retailers for better service delivery to smallholder farmers, awareness and demand creation, increased financial leveraging

PASS Integrated Seed Value Chain



PASS Cumulative Outputs 2007 –2013

PUBLIC SECTOR SUPPORT-ACADEMIC TRAINING AND PLANT BREEDING

MSc&PhD Students enrolled	355 (138 PhD)
MSc&PhD Students graduated	175 (56 PhD)
Varieties released	432 (19% by PASS graduates)
Varieties commercialized	263 (23% by PASS graduates)
Qty breeder seed (MT)	1,088
Qty foundation seed by breeders except for cassava (MT)	1,339
Qty foundation by breeders-cassava cuttings	1,495,535

PASS Cumulative Outputs 2007 –2013

PRIVATE SECTOR SUPPORT-SEED ENTERPRISES AND VILLAGE INPUT RETAILERS (AGRO-DEALERS)	
Seed enterprises supported	110 (81 SMEs)
# Companies with loan (Amt)	16 (\$12.3 million)
Foundation seed (except for cassava) by private seed enterprises(MT)	3953
Certified Seeds produced (MT)	119,240 (57,992 in 2012)
Agro-dealers trained/certified	14,098
Agro-dealer seed sales (MT)	376,315
Agro-dealer fertilizer sales (MT)	931,418
# Agro-dealers with loan (Amt)	5,773 (\$50.2 million)

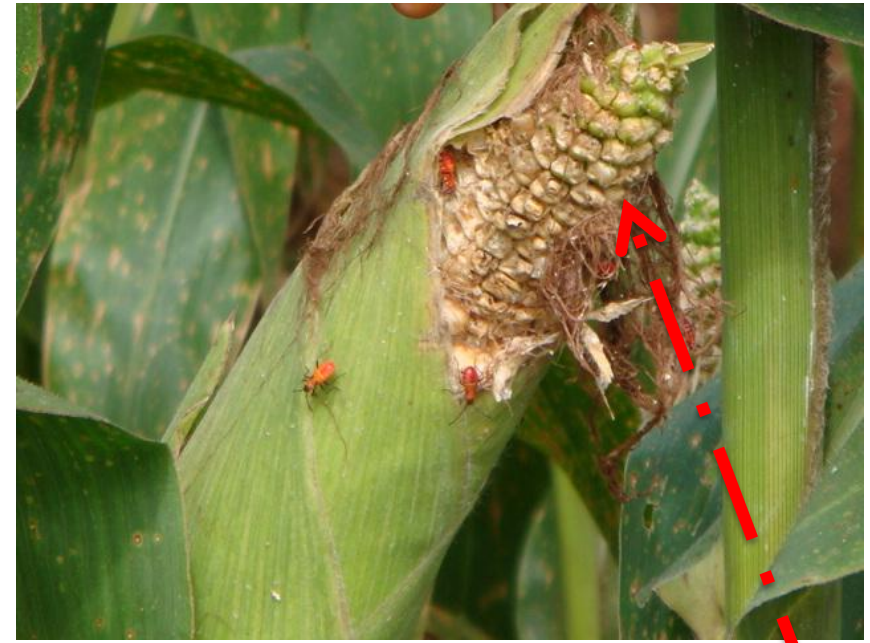
PASS WA Seed Partnerships

- NARI [Burkina-INERA, Ghana (CSIR-CRI, SARI), Mali-IER, Niger-INRAN, Nigeria (NRCRI, IAR/T, IAR, LCRI), Liberia (CARI), Sierra Leone (SLARI)]
- CG: IITA
- Seed companies (incl. affiliates): Burkina-6, Ghana-11, Mali-6, Niger-6, Nigeria-13
- Agro-dealer support projects: 1 per country (Burkina Faso, Mali, Ghana, Nigeria); 1 upcoming (Niger); Liberia/Sierra Leone, none



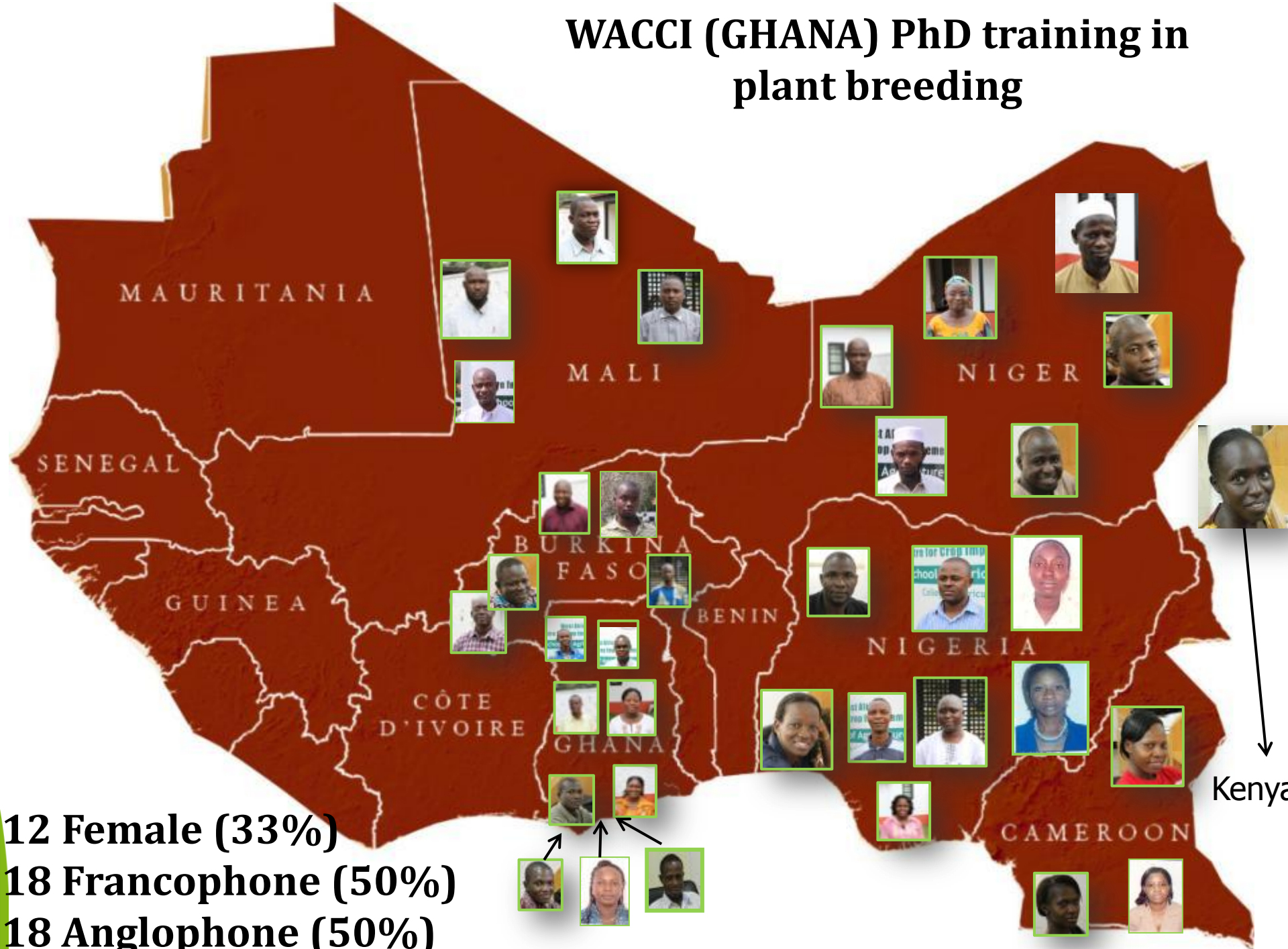
Importance of local development and/or testing of new varieties before release

Introduced rice, susceptible to blast and to iron toxicity



Introduced maize showing open tip=entry for insects/diseases

WACCI (GHANA) PhD training in plant breeding



12 Female (33%)

18 Francophone (50%)

18 Anglophone (50%)

PASS/UGH LEGON WACCI PhD in Plant breeding



2007-the first cohort is enrolled



2013-the first cohort defend their theses

MSc training:

1. Universite de Ouagadougou (Burkina Faso)
2. Kwame Nkrumah University of Science and Technology (Ghana)
3. Ahmadu Bello University (Nigeria)
4. University of Ibadan (Nigeria)

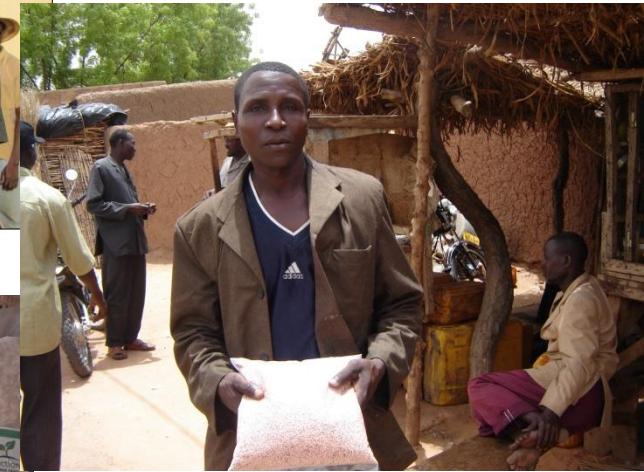
Examples of successful breeding in West Africa



West African seed companies producing, processing, packaging and selling certified seeds of rice, maize and sorghum hybrids




NAFASO 2012: 2500 MT



A few lessons going forward

It is all about linking dots...

- Weakest link: seed enterprises
 - Cross-cutting: access to foundation seeds
 - Improve collaboration between NARS and private seed companies. They have a long history of operating separately.
 - Need increased access to both local and international breeding materials
 - Greater financial support for national agricultural research institutes will be required (infrastructures)
 - Private sector capacity development is essential in private business and technical operations terms
 - Need for updated, streamlined seed policies
 - Improved regulatory systems
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PARTNERSHIPS

- AGRA is catalyst for African GR
- PASS projections of 250,000 MT of high quality seeds by 2015 will require collaboration on the ground (technical, financial, policy)
- USAID initiatives: SSTP, WASP, ATT



Thank you for the opportunity

