Introduction to the SPHI, SASHA and the SSP-WA

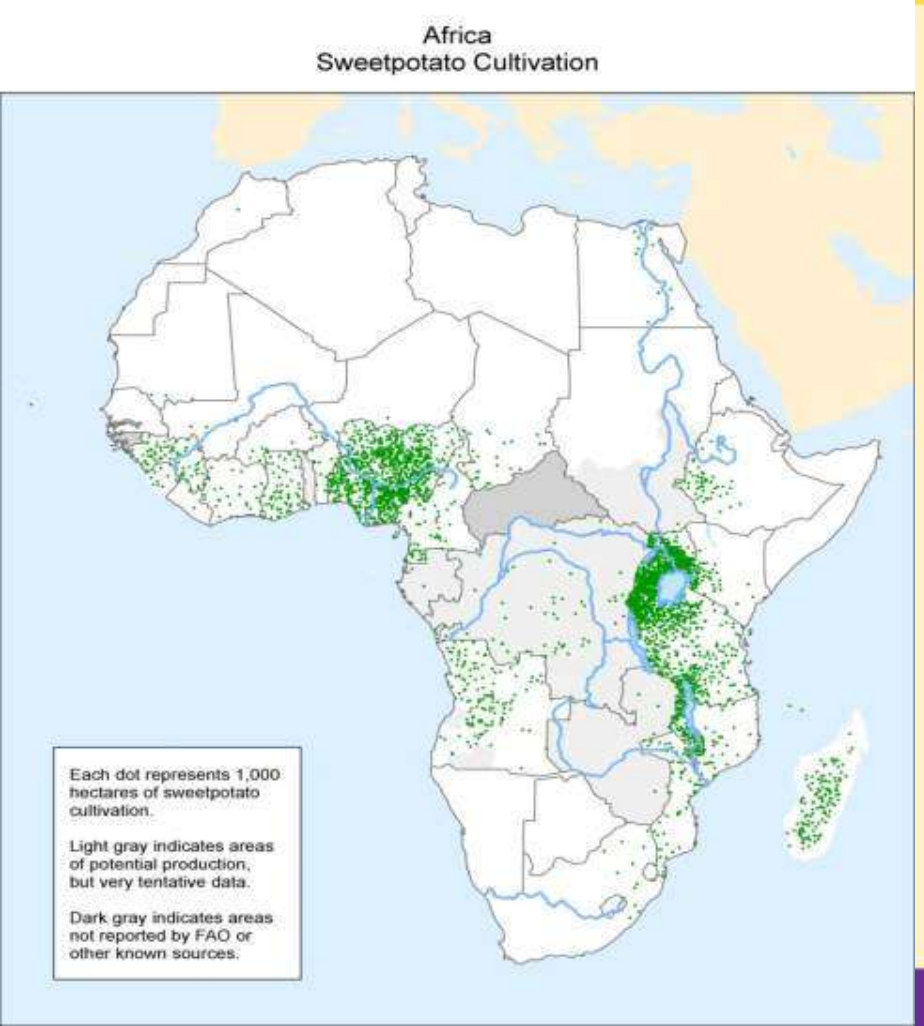
Ted Carey

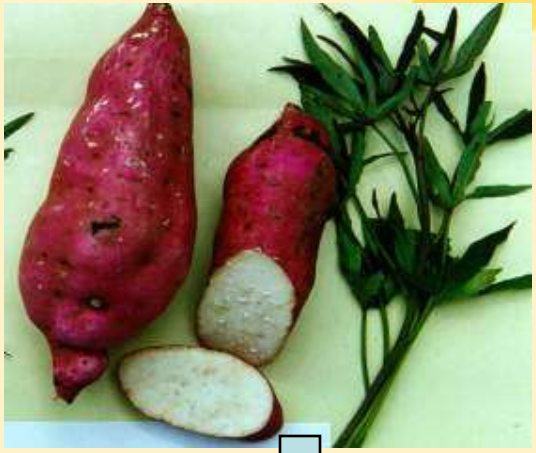
SSP-WA Meeting
24 January 2012

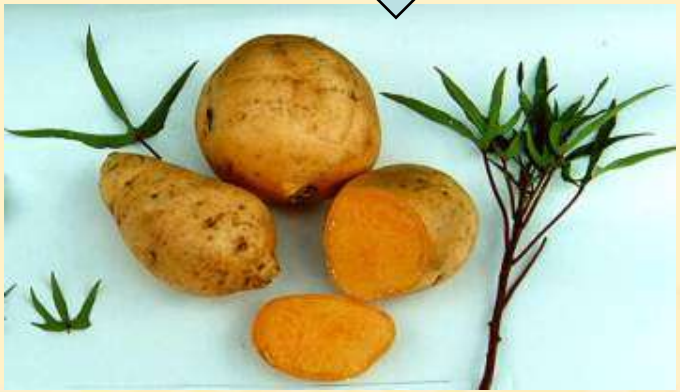
SWEETPOTATO ACTION FOR SECURITY AND HEALTH IN AFRICA

- SPHI - Sweetpotato for Profit and Health Initiative
- SASHA - Sweetpotato Action for Security and Health in Africa
- SSP-WA - Sweetpotato Support Platform for West Africa

The Potential Contribution of Orange-fleshed Sweetpotato







1. Marginal change ... VAD
2. Increased area, yields, marketing ... Food security

Development of the Sweetpotato for Profit & Health Initiative + SASHA

SASHA
Sweetpotato Action for Security and Health in Africa

Features

- 10 months (2008/2009) process seeking input from stakeholders through field visits, multi-disciplinary theme papers, internet survey, and a series of five workshops
- Working paper published on 6 major themes
  - -- Breeding
  - -- Seed systems
  - -- Crop Management
  - -- Nutrition
  - -- Value Chains
  - -- Partnerships
- Writing of the SASHA proposal to support 1st five years

7 Major Constraints Identified and Prioritized

- Lack of timely availability of adequate quantities of disease-free planting material
- Varieties with limited yield potential in specific agro-ecologies & quality characteristics that do not meet demands of specific target groups
- Damage due to the sweetpotato weevils in drier zones
- Limited demand and inadequate markets
- Poor agronomic practices
- Limited awareness of decision makers about potential contribution of the crop to poverty and malnutrition reduction due to an inadequate evidence base
- Need for a critical mass of informed stakeholders with good information exchange to maximize investment return

Participants at the Challenge Workshop Reached Consensus on the Following Vision

SASHA
Sweetpotato Action for Security and Health in Africa

Repositioning sweetpotatoes in African food economies, particularly in expanding urban markets, to reduce child malnutrition and improve smallholder incomes

SPHI is a multi-partner, multi-donor initiative that seeks to reduce child undernutrition and improve smallholder incomes in 10 million African families by 2020 through the effective production and expanded use of sweetpotato.

The Sweetpotato Action for Security and Health in Africa (SASHA) Project is a 5 year project led by the International Potato Center that will develop the essential capacities, products and methods to reposition sweetpotato in the food economies of Sub-Saharan Africa. It serves as the foundation for the broader Initative.

Minimum Goals to be Achieved by 2020

Country	(a) % Existing Area under Improved Sweetpotato Materials	(b) Area under Improved Materials (ha)	(c) Number of Direct Beneficiaries in 10 years	(d) Additional Production from Improved Technologies ('000 tons) from Existing Areas	(e) Annual Value of Additional Production by 10 Years ('000 USD) from Existing Areas	(f) Total Production from Improved Technologies in 2020 ('000 tons) from Existing Areas	(g) Amount ('000 tons) Needed in 2020 to Maintain 2003 per Capita Consumption Levels
Uganda	50	289,000	1,926,667	648	71,253	3,239	3,927
Nigeria	20	92,800	618,667	158	17,358	1,735	2,703
Malawi	50	79,614	1,592,270	287	31,527	1,433	1,655
Tanzania	30	151,500	1,515,000	144	15,840	1,104	1,307
Madagascar	30	37,186	371,856	131	14,421	1,005	1,432
Rwanda	50	74,498	1,241,633	218	23,980	1,090	1,332
Burundi	30	37,500	625,000	126	13,827	964	1,515
Kenya	40	28,000	350,000	154	16,918	923	879
Angola	20	28,694	409,909	69	7,579	758	677
Ethiopia	35	17,380	347,592	72	7,873	481	564
Mozambique	50	48,500	970,000	97	10,670	485	80
DR Congo	20	9,130	182,596	23	2,508	251	280
Zambia	30	11,848	236,958	21	2,277	159	61
Ghana	35	22,838	456,750	16	1,752	107	117
Burkina Faso	30	2,565	51,300	11	1,188	83	42
Benin	30	3,388	67,758	8	924	64	115
South Africa	50	7,719	15,438	12	1,265	57	51

New SPHI Associated Programs

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Sweetpotato Action for Security and Health in Africa

Integrating ***Orange*** in Zambia: OFSP promotion & crop management research (USAID)

New SPHI Associated Programs

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Mitigating Disaster with Drought Tolerant OFSP in Mozambique (USAID)

Visit of the US Deputy-Secretary of State, Mr. Thomas R. Nides

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Prime Minister of Moz visiting CIP, Governor of Maputo City speaking to the participants during the field tour

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Participants dressed in gleaming orange

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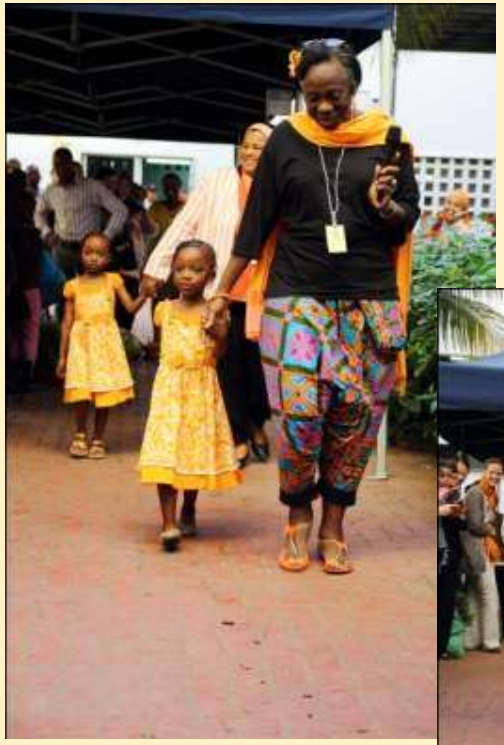
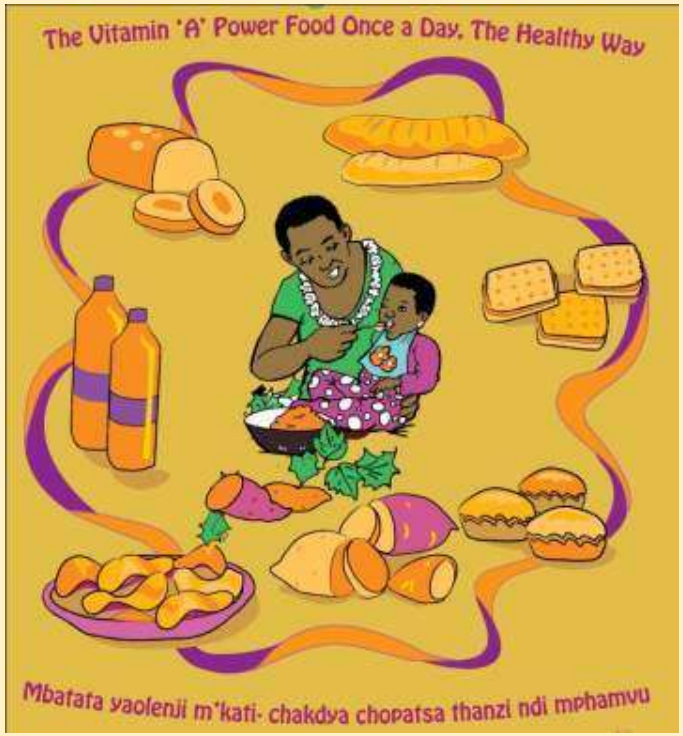


Roots of the new release varieties sold at Pick N pay

Existing Associated Programs



Rooting Out Hunger in Malawi (Irish Aid)

OFSP in Angola (Chevron)

OFSP in Ethiopia (USAID & ASARECA)

Existing Associated Programs - DONATA

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Sweetpotato Action for Security and Health in Africa

Enhanced uptake and adoption of orange-fleshed sweetpotato (OFSP) technologies in Ethiopia, Kenya, Rwanda, Tanzania and Uganda (July 2008-December 2012)

Support from the Association for Strengthening Agricultural Research in East and Central Africa (ASARECA), the Forum for Agricultural Research in Africa (FARA) and the African Development Bank

Two Phases: Greater Emphasis in the first 5 years on R&D as the Foundation

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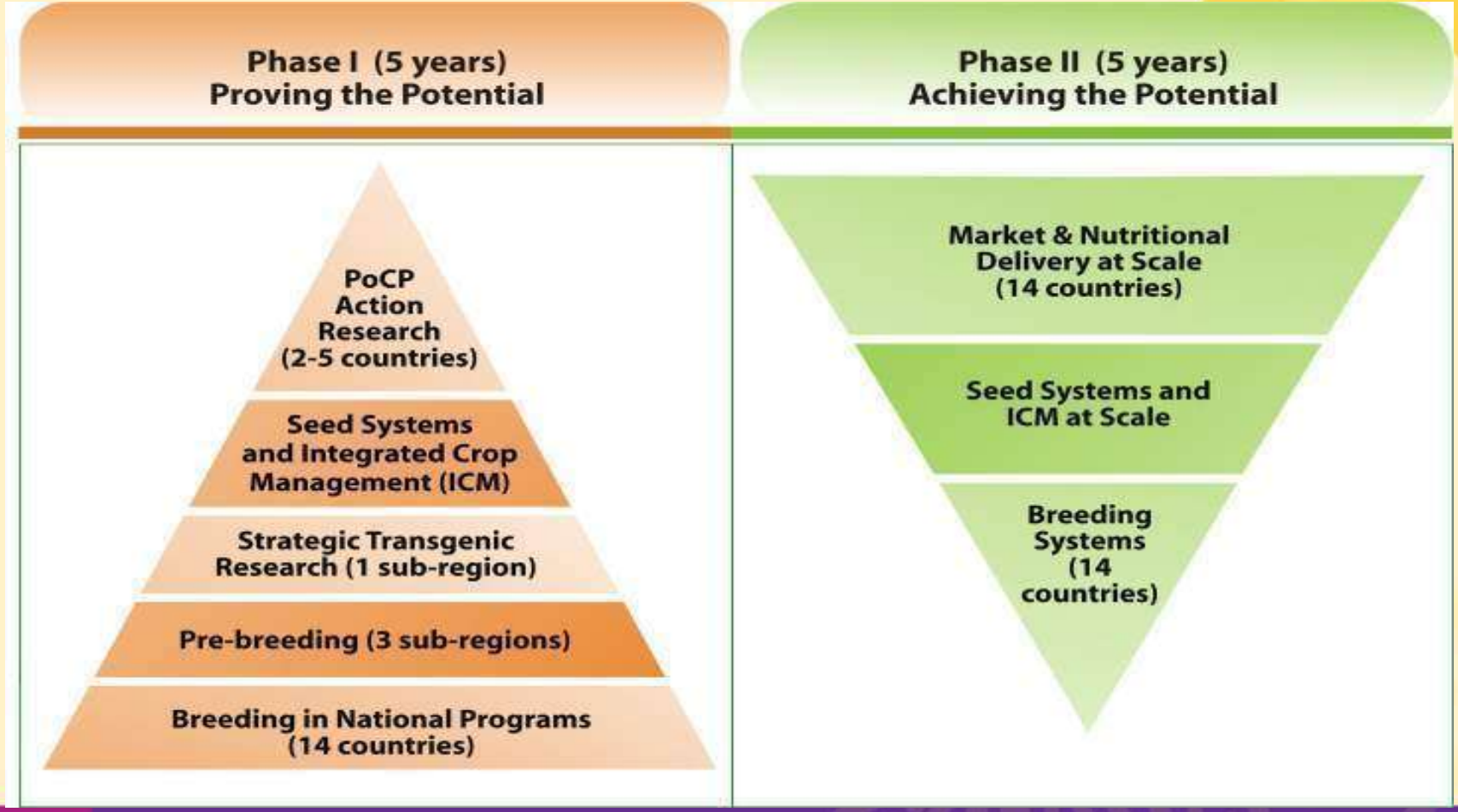

Four major technical components of SASHA

1. **Population Development & Varietal Selection**
   - a. East & Central Africa: Robert Mwanga
   - b. Southern Africa: Maria Andrade
   - c. West Africa: Ted Carey
   - d. CIP-HQ (Lima, Peru): Wolfgang Grüneberg

2. **Weevil Resistant Sweetpotato using Transgenics**
   Marc Ghislain

3. **Seed Systems**
   - a. Seed Systems Research: Jan Kreuze
   - b. Tanzania going-to-scale with vines (Marando Bora)

Four major technical components of SASHA

4. Effective Delivery Systems

Proof-of-Concept Projects (must have a control group)

A. Kenya Agriculture-Health PoCP
   Frederick Grant

B. Rwanda Value Chain Project
   Kirimi Sindi & Jean Ndirigue

Feasibility Studies

A. Sweetpotato as an Animal Feed
   Sammy Agili

B. Potential for Sweetpotato Processed Products in Nigeria
   Natural Resources Institute/UNAAB

Research Program 5: Management & Sweetpotato Support Platforms

to organize the work around research for development platforms that integrate and support the work of institutional partners in each sub-region

- **Provide technical backstopping**
  - Special emphasis on Alliance for a Green Revolution (AGRA) supported national breeding programs and PhD training programs (ACCI & WACCI)
- **Assure clean germplasm exchange**
- **Assure gender-sensitive design and implementation**
- **Assure comparable data collection** between countries engaged in the breeding and germplasm exchange
- **Facilitate information exchange**
- **Support advocacy work for promoting Vitamin A Sweetpotato**

SPHI Sweetpotato for Profit and Health Initiative

17 priority countries, 3 sub-regions

Under SASHA, activities in 8 countries

Main Objective: Breed new populations with new methods and varietal development

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- Generate a radically expanded range of sweetpotato varieties that combine different quality traits with significant improvements in yielding ability
- Generate by population improvement new populations for major needs of users
  - SPVD resistance (East Africa)
  - Low sweetness (West Africa)
  - Drought tolerance (Southern Africa)
  - Incorporate important traits e.g.
    high beta-carotene content
    dual purpose for animal feed

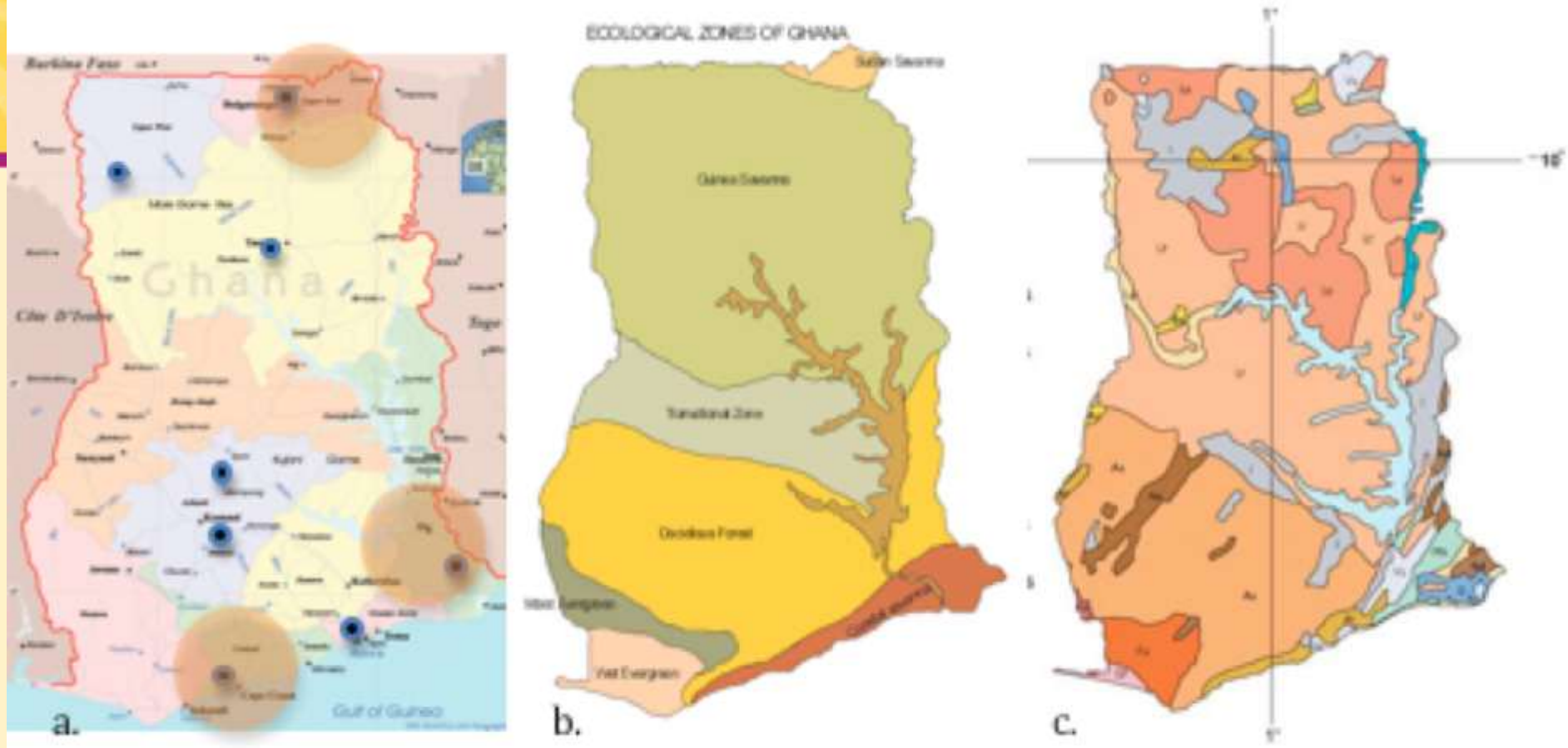

Figure 1. Map of Ghana showing a) sweetpotato production zones (large, light brown circles) and selection sites used by the breeding program (black dots), b) agroecological zones, and c) edaphic zones.

Progress: CloneSelector

- Easy-to-use
- Excel-based program
- Developed for routine breeding tasks e.g. planting trials, and analyzing data
- These tools will greatly increase the power and efficiency of sweetpotato breeders in Africa

Major Progress to Date

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Accelerated breeding in Mozambique with release of 15 varieties after 4 years

Sweetpotato Support Platform Meetings

- SSP-EA, SSP-SA, SSP-WA
- SSP-WA
  - July 2010, Kumasi, Ghana
  - November 2010, Cape Coast, Ghana
  - July 2011, Kumasi, Ghana
  - January 2012, Abuja, Nigeria
  - May 2012, Kumasi, Ghana
  - September 2012, Abeokuta?

SSP-WA #3

Kumasi, Ghana, July 2011

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