



A dynamic partnership

***working across Africa to help millions
of small-scale farming families lift
themselves out of poverty and hunger.***



Major challenges to African agriculture

Infrastructure

Africa has a very poor infrastructure base

- **Roads: DRC 59 km/million**

Tanzania 114km/million

Nigeria 230km/million inhab

- **Irrigation: 5-7 per cent of arable land**
- **Markets**
- **Energy**



Major challenges to African agriculture

Education

- **Weak Agricultural base: Except for few countries, limited capacity for graduate training.**
- **Very low ratios of women agricultural scientists**
- **Need for “land grant” college system**
- **Need for measures to retain trained agricultural staff**



Major challenges to African agriculture

Finance

- **Paucity of financial institutions in rural areas**
- **Low level of loans to agriculture (2 per cent in Tanzania)**
- **High risks due to drought, poor technologies, markets collapse, climate change**
- **Need for risk mitigation: weather index insurance and credit guarantee schemes**
- **Targeted subsidies**



Major challenges to African agriculture

Climate change

- **Africa contributes the least to carbon emission but will be the most impacted by climate change**
- **African agricultural productivity is projected to experience a drop of approximately 20 per cent by 2050**
- **Climate change adaptation and mitigation measures have to be accorded priority: e.g. genetic enhancement, changes in crops, water management systems**

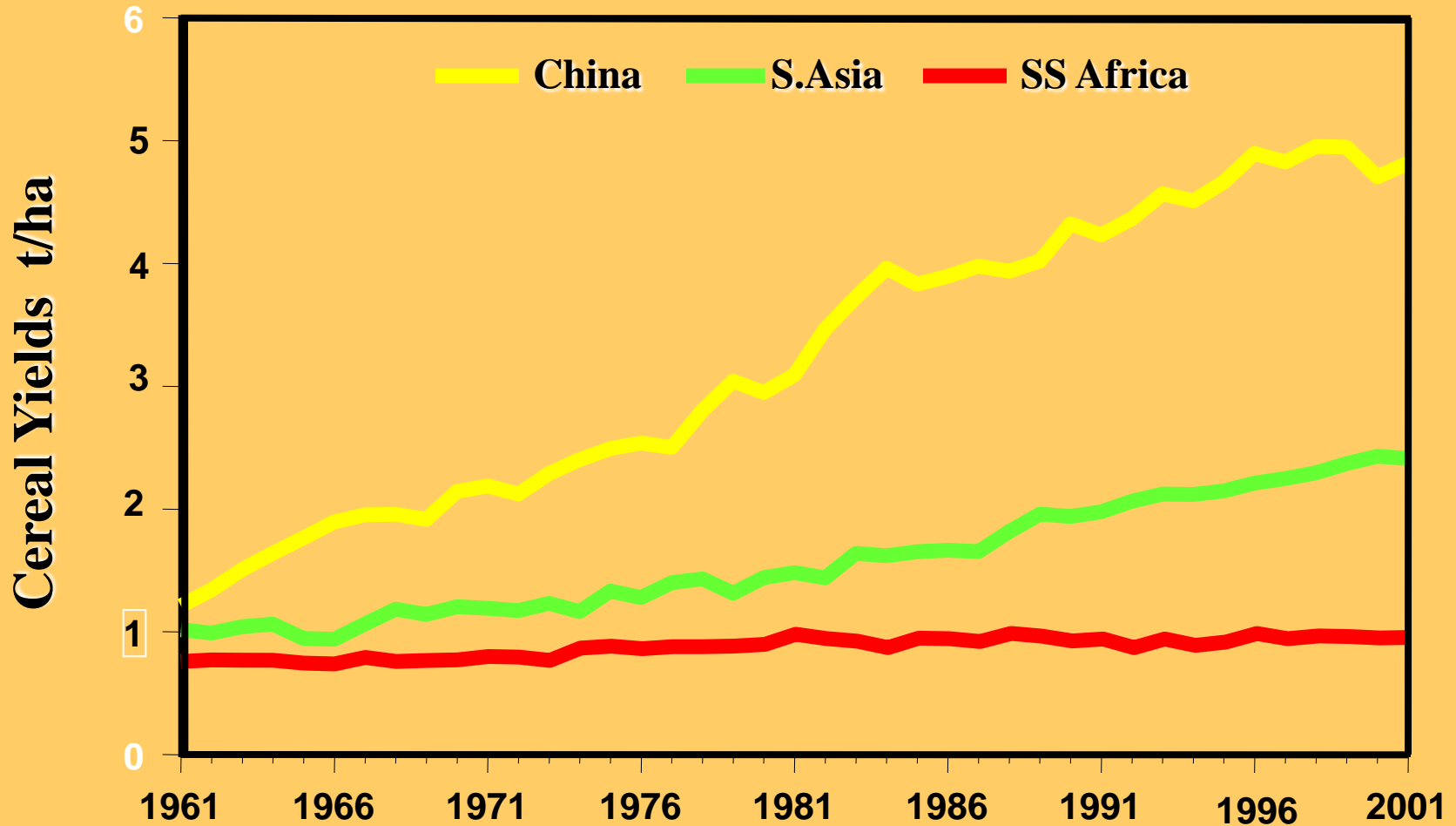


Major challenges to African agriculture

Land Issues

- Land holdings mostly in small units (less than 2 ha)
- Largely communally owned, thus low financial value in Africa
- Cultural value mostly biased against female ownership of land although women are the major food producers
- Need for urgent action to address land tenure issues

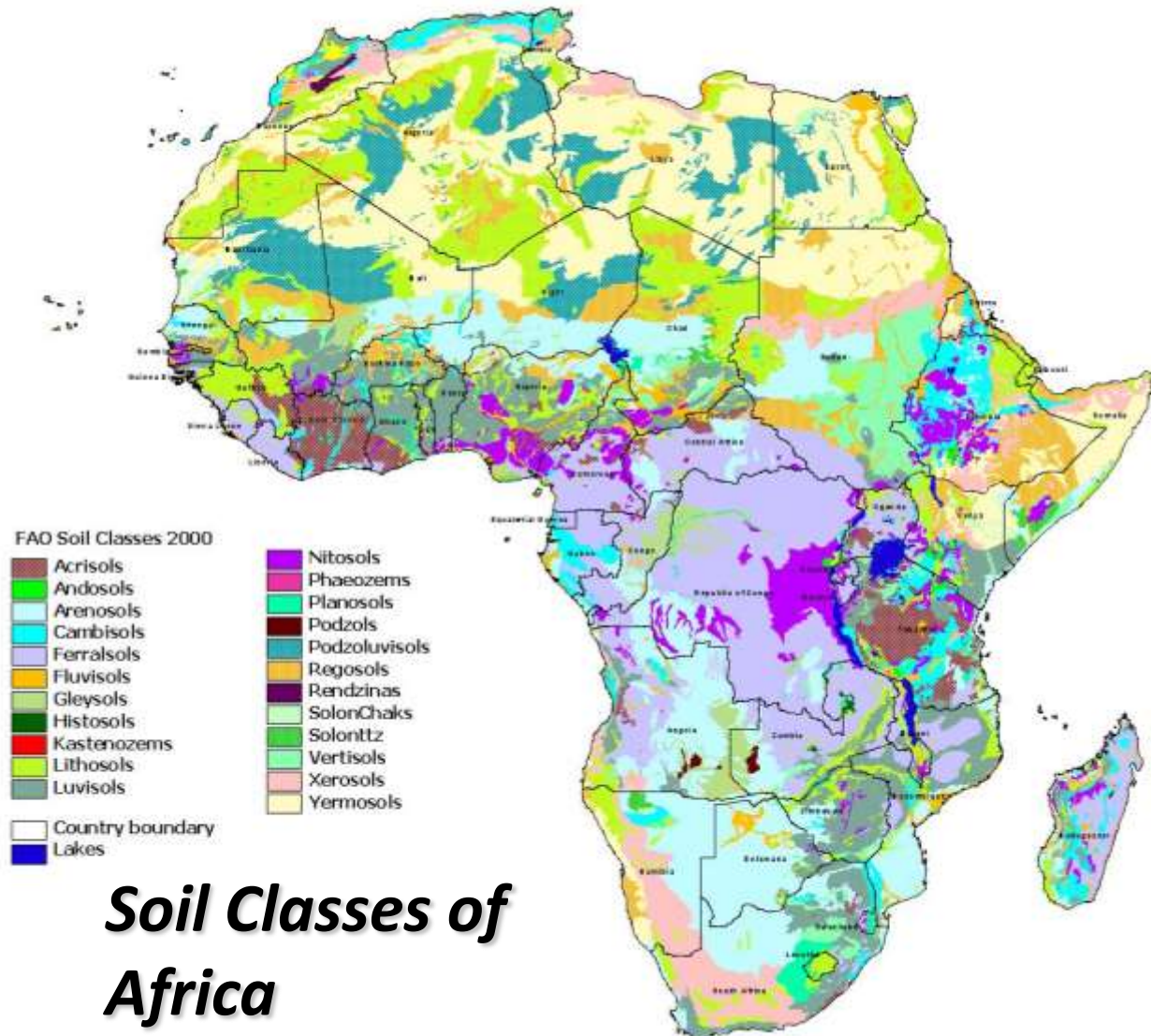
Low productivity of African Agriculture



Source: FAOSTAT (2001)

Other challenges need to be addressed in the short and medium term

- Ecological diversity
- Diverse soils
- Many crop species
- Segmented political landscape
- Erratic rainfall
- Low adoption of improved crop varieties



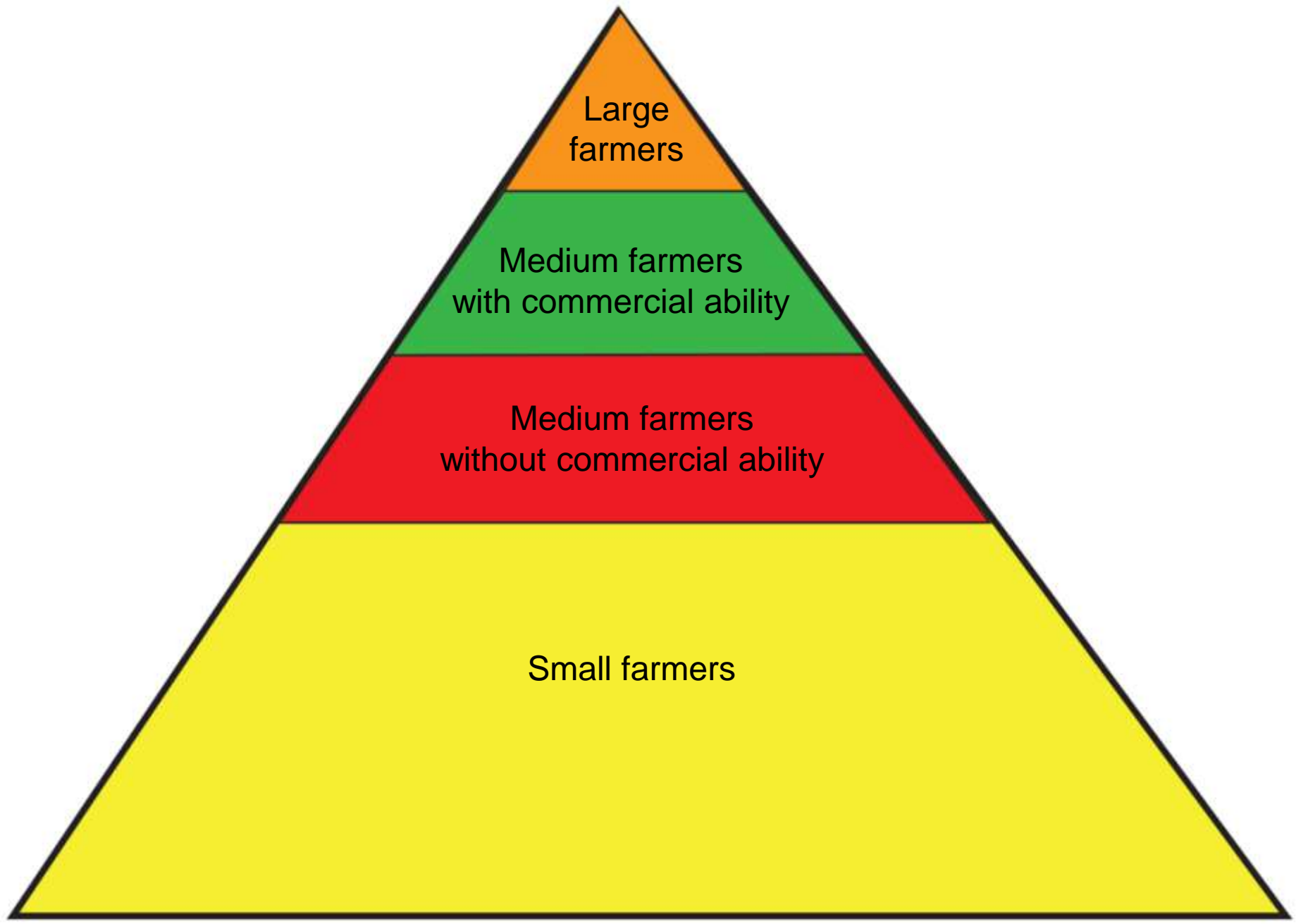
Africa must act *now* to end perennial food crisis

- **Silent rural hunger in Africa for past 30 years**
- **Global attention high now because of urban food riots**
- **Food crisis poses economic, social and political challenges**
- **Low-income food deficit countries are most affected**

Food imports: \$88 billion in 2006, \$119 billion in 2007

- **Africa is a net-food importing region**

Cereal imports increased by \$2.7 billion between 2006 and 2007

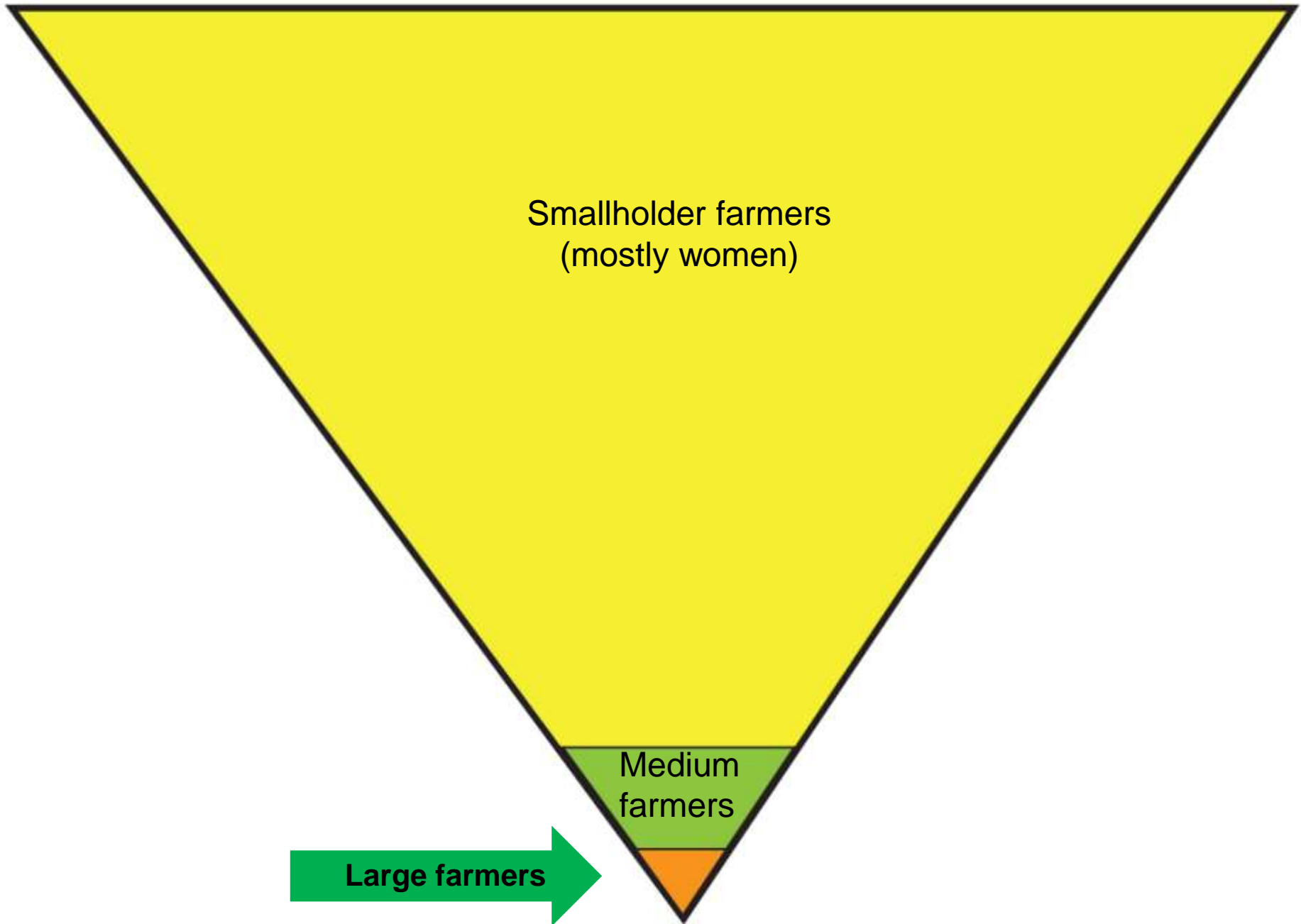


Large
farmers

Medium farmers
with commercial ability

Medium farmers
without commercial ability

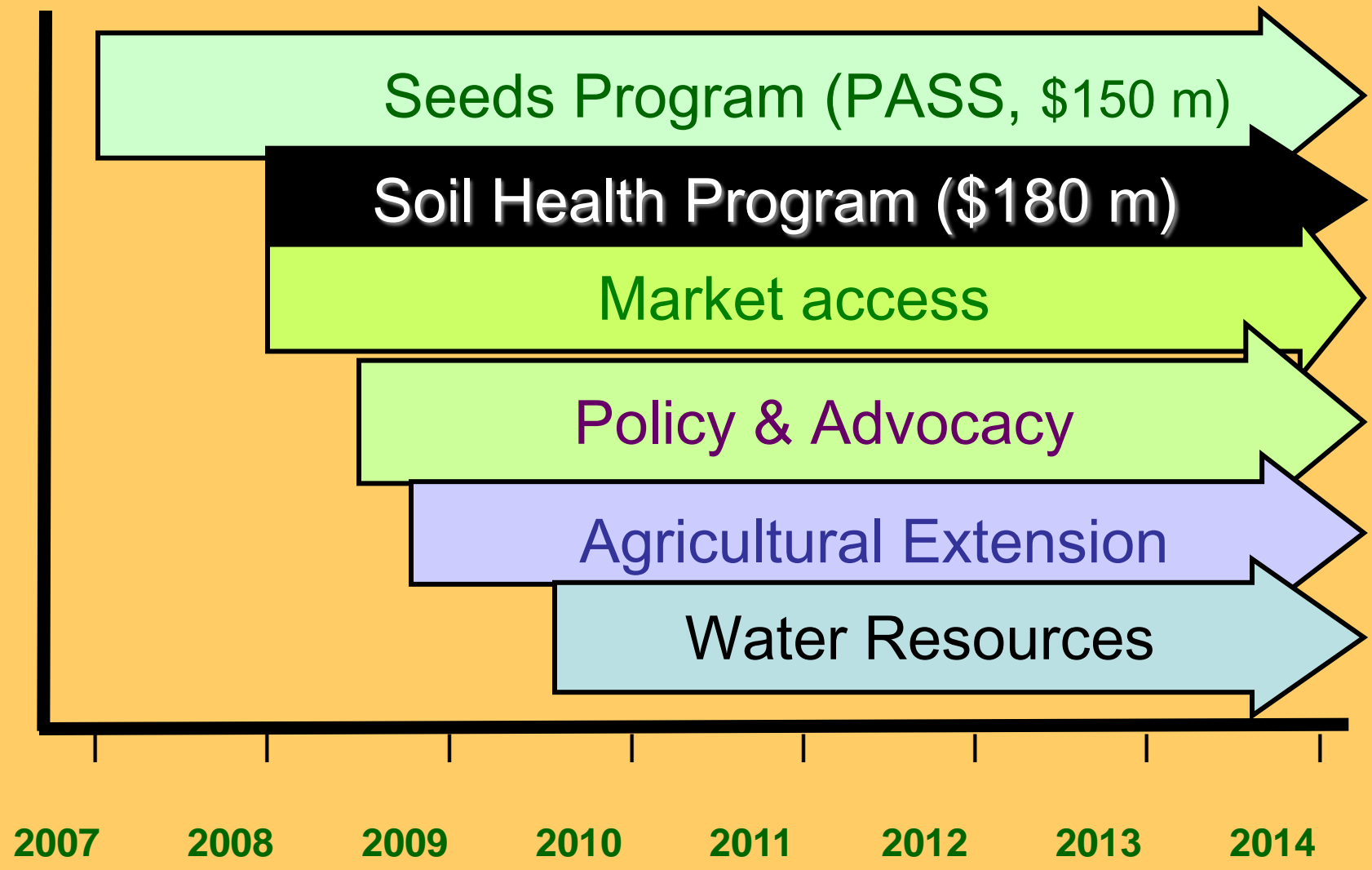
Small farmers





AGRA interventions can solve problems along the value chain

Investments for the Green Revolution



The first and catalytic initiative of AGRA, PASS consists of 4 sub-programs:

- 1. Education for African Crop Improvement**
- 2. Improvement and Adoption of African Crops**
- 3. Seed Production for Africa**
- 4. Agro-Dealer Development Program**

1. Education for Crop Improvement

- MSc, PhD fellowships at selected African universities (ACCI, WACCI)
- Technician training
- Thesis research in student's home country on relevant crop constraints
- Train students on use of MM, link them to screening facilities

*University of Kwa-Natal,
African Centre for Crop
Improvement*



2. Improvement and Adoption of African Crops

- 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.



3. Seed Production for Africa

- Link public breeding to seed production and distribution
- Support and strengthen community-based seed enterprises for non-commercial crops
- Offer seed companies business and technical training
- Build a vibrant, competitive seed sector



4. Agro-dealer Development

- Training in business management
- Training in available technologies
- Access to loans for growth
- Demonstration plots



PASS 10-year expectations

Outputs

- 80 PhD crop breeders
- 170 MSc crop breeders
- 1,250 new varieties in production
- 40 seed companies assisted
- 9,000 well-functioning agro-dealers

Outcomes

- Stronger and more productive national crop improvement programs
- Effective farmer access to new seeds and other inputs
- Higher yields and more productive farms

Soil Health Program

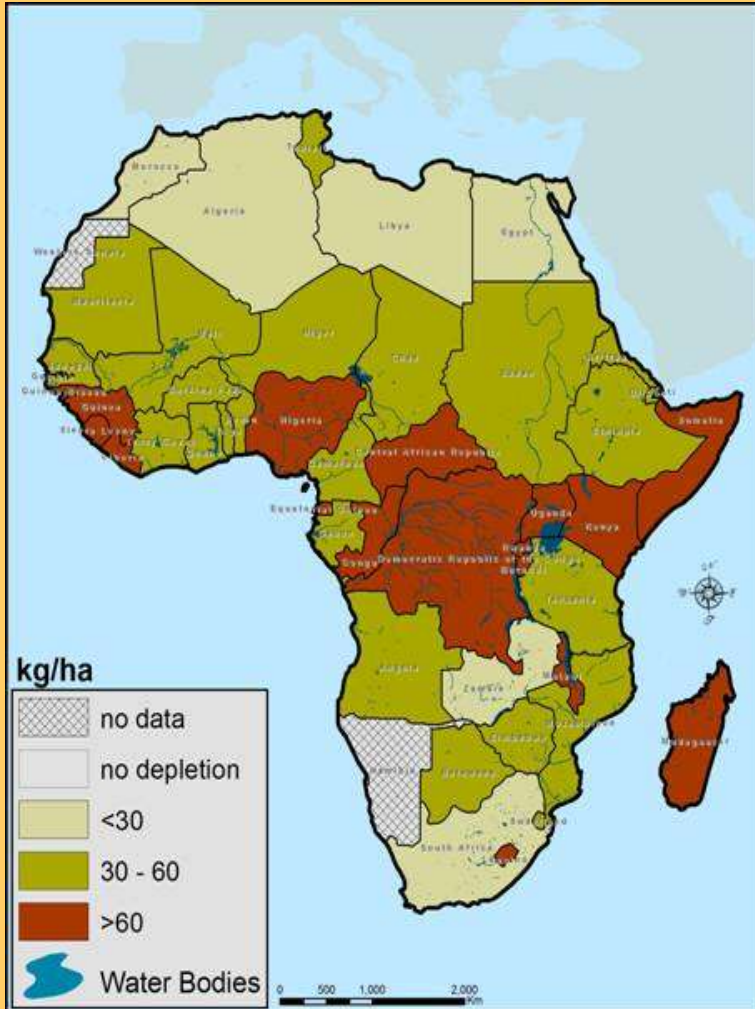


Advances in crop improvement could trigger the Africa Green Revolution...BUT

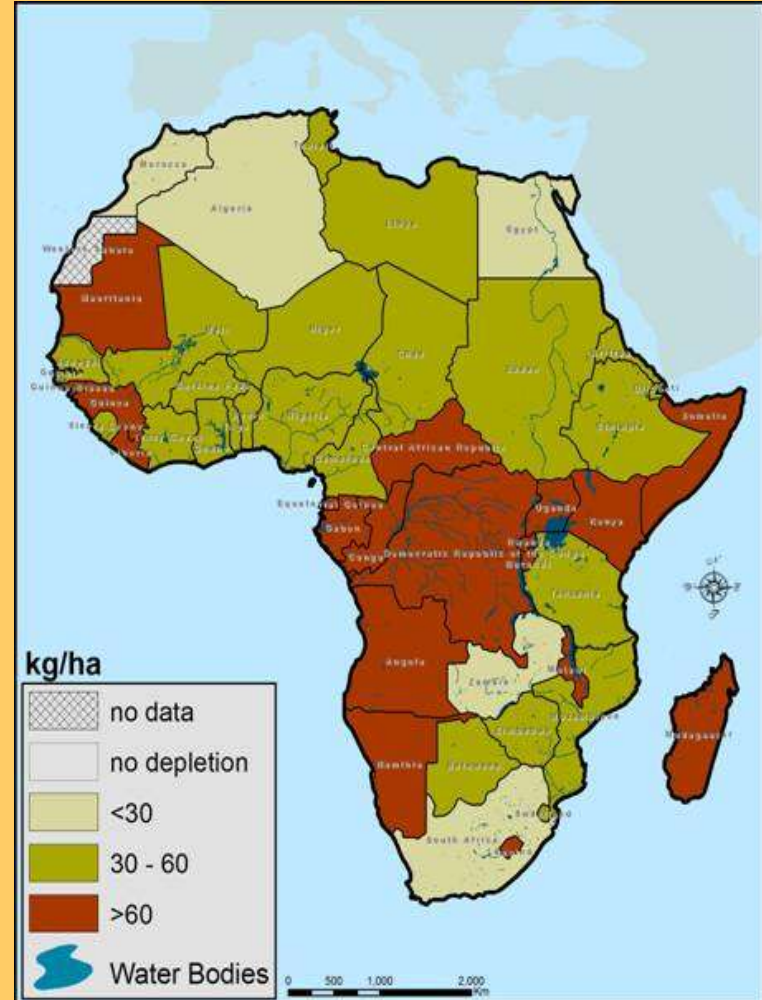


Soil nutrient mining is killing Africa!

1995-97



2002-04



Opportunities and leverage points for increasing soil health

- 1. Support the fertilizer distribution channel**
- 2. Promote fertilizer use and improved soil management at large scale**
- 3. Advocate and provide knowledge and technical support for policy change that improves fertilizer procurement**
- 4. Transfer knowledge to farmers**
- 5. Improve technologies and data resources for soil health management and train and network the next generation of soil scientists**

Market Access

Objective :

Build efficient and well integrated
Inputs /outputs markets

Market access for farmers

**Adequate storage
to reduces
postharvest losses**

**Accurate
market information**

**Awareness of
grades
and standards**

**Value addition
and promotion of
non-food usage**



Sitting on blocked capital: *Poorly developed markets limit income growth from commercialization of technical changes in agriculture*

Markets: cross-border trade

- *Unstructured, but very important*
- *Volume flowing across the border can determine government actions*



Policies for rapid transformation of Africa's agriculture

- Accelerate investment in research and rural infrastructure
- Smart subsidies for farm inputs ('growth enhancement credits')



- Develop networks of agrodealers across rural areas
- Secure national food supplies



Tilt the policy development agenda in favor of Africa

- Shift policy development from structural adjustment to pro-farmer supports
- Promote home-grown, evidence-based policies
- Mobilize strong political commitments for change

His Excellency Dr Bingu wa Mutharika, President of Malawi, explaining his country's farmer support programs at an international forum in Oslo





Turning point on hunger in Africa: Malawi feeds a hungry nation

- 2005/06: \$50m subsidy distributed by the government
- 2006/07: \$60m “smart subsidies” allotted to farmers
- 2006/07: Private sector distributed inputs for the first time

Private sector sold \$25m of seeds and fertilizers

A Malawian Green Revolution

400,000 MT surplus in 2005/06

900,000 MT surplus in 2007

Exports \$ 160 million of maize

Donates 10,000 MT of maize to Lesotho and Swaziland!

A better and more secure future

***An efficient, dynamic and competitive smallholder
agricultural sector will lift millions of Africans from poverty
and hunger!***

