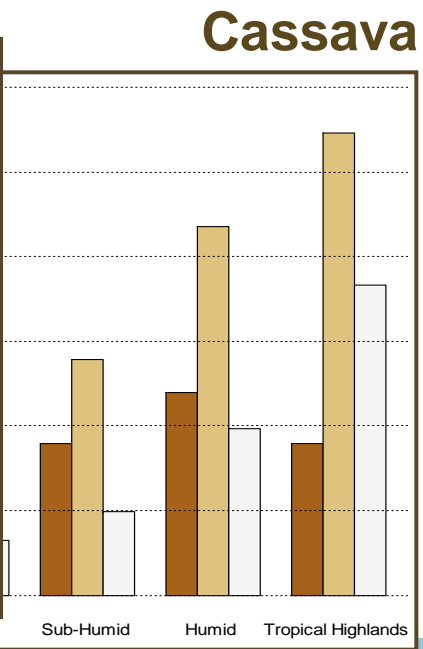
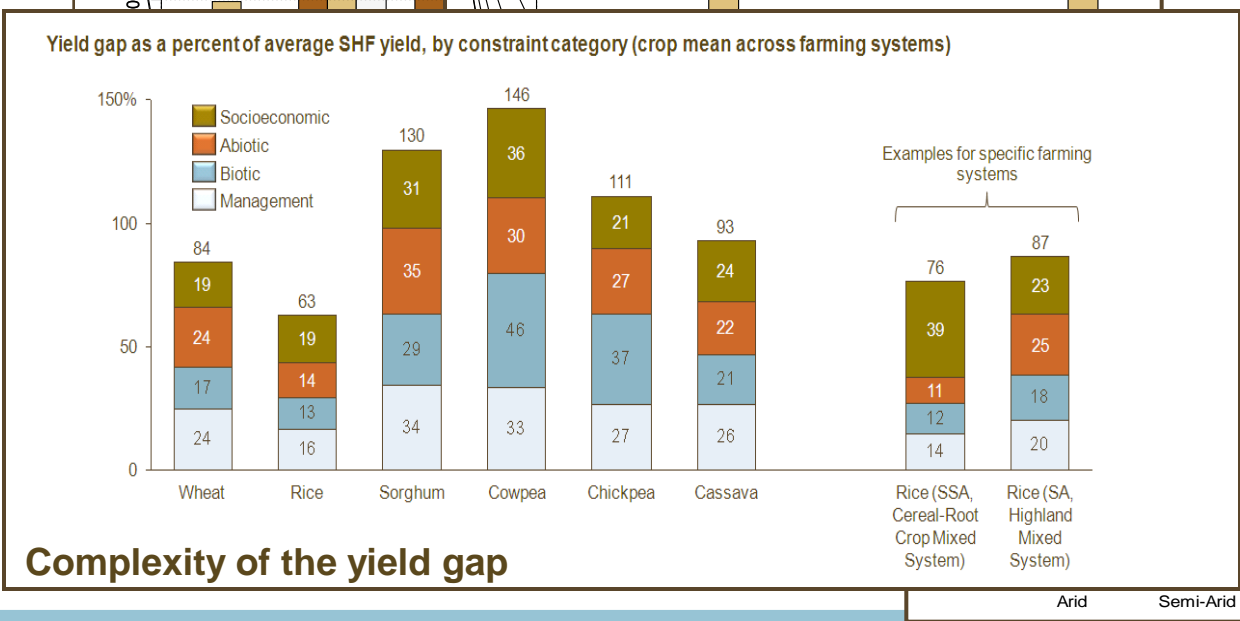
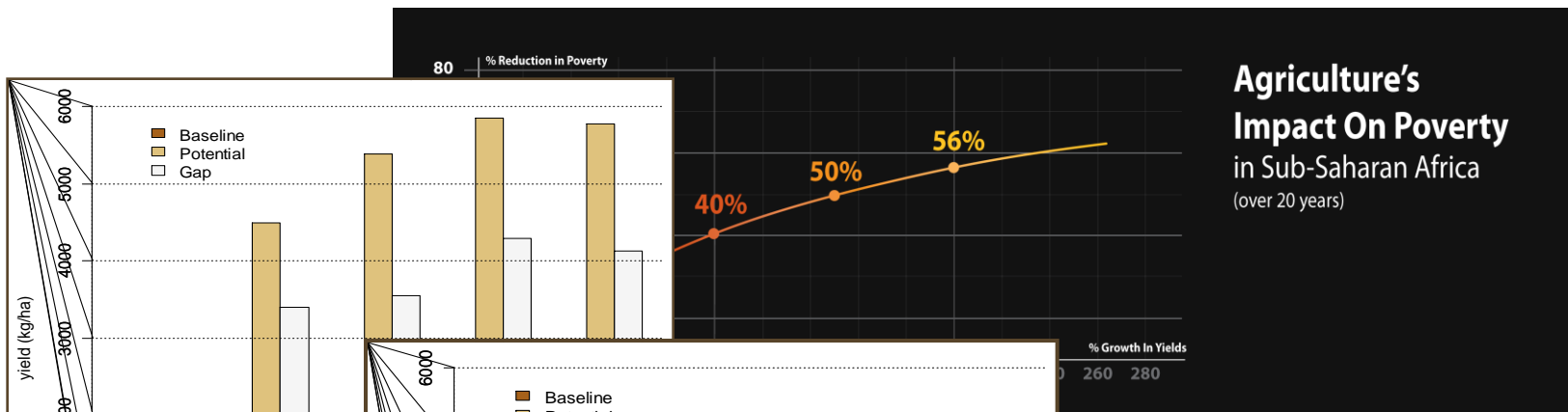


International Partnerships for sustainable intensification

Prabhu Pingali
Deputy Director,
Agricultural Development

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GATES *foundation*

Analysis of productivity gap reveals need for complex solutions

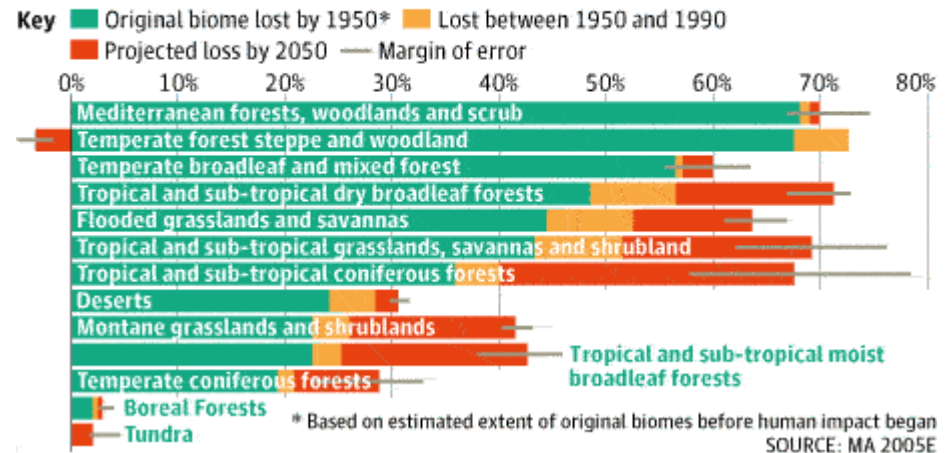


Intensification, **reconsidered**

- **Global and local challenges:**
 - Growing population and food demand
 - Land pressures and environmental degradation
 - Consumption trends and food prices

Loss of natural habitats

Conversion of major terrestrial biomes for human use



The challenge for us now is **how to intensify** – releasing marginal lands to non-production - while minimizing environmental and social externalities and costs. **Sustainably.**

Investments in sustainable intensification underpin the outcomes of sustainable productivity growth.

- **Yield increases**
- Efficient use of scarce resources and inputs
- Maintained and enhanced natural resource base – both for agriculture and the surrounding ecosystems
- Empowered and resilient farm families
- Stable yields and crop resilience

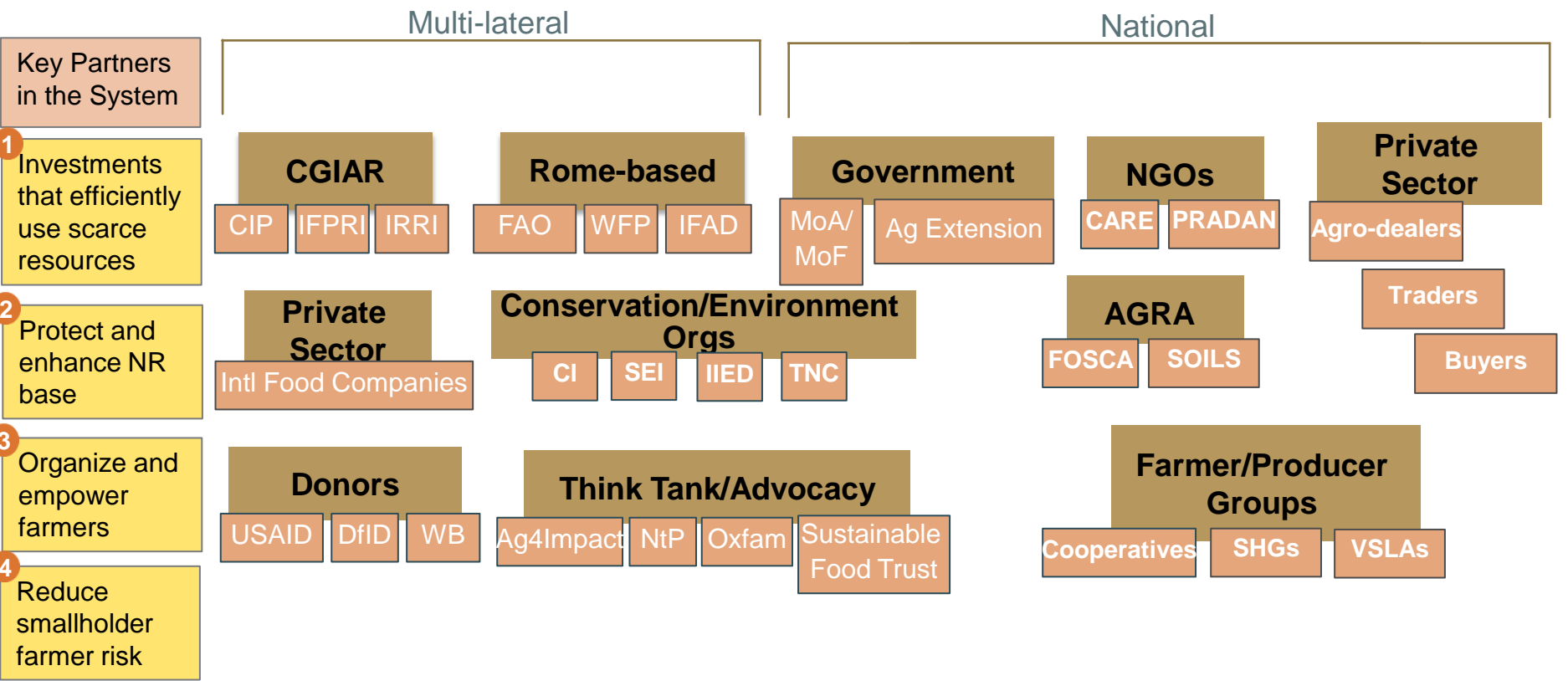
Our investments along the value chain are working to:

1. Enable more efficient use of scarce resources and inputs;
2. Protect and enhance the natural resource base;
3. Ensure that poor farmers are organized, empowered, and knowledgeable; and
4. Provide solutions that reduce long-term risks to livelihoods.

Investments in sustainable intensification require collaboration and knowledge-sharing along the value chain

Increasing Sustainable Productivity →

Poverty Reduction Goal



1. Enable more efficient use of scarce resources and inputs



- 23 of 103 grants
- 25% of investment dollars
- \$244m out of total \$1.14b

Of the total agriculture portfolio, it comprises 15% of all investment dollars

Key grants:

- N2 Africa: Putting Nitrogen Fixation to work for Smallholder Farmers in Africa
 - 5 yrs, \$19m
 - Wageningen University

This project aims to increase legume productivity, nutrition and soil health for small farmers in sub-Saharan by expanding the use of selected legumes with proven impact on biological nitrogen fixation.

- Soil Health Program
 - 6 yrs, \$165m
 - AGRA

This program will build a sustainable foundation for agricultural growth by restoring African soil nutrients through the use of improved soil fertility management practices, training and fertilizer.

2. Protect and enhance the natural resource base



- 15 of 103 grants
- 10% of investment dollars
- \$103m out of total \$1.14b

Of the total agriculture portfolio, it comprises 5% of all investment dollars

Key grants:

- Africa Monitoring System
 - 3 yrs, \$10m
 - Conservation International

This project develops a tracking and diagnostic system for decision-makers that will help monitor agricultural productivity, ecosystem health, and human well-being measures in African landscapes with real-time data, and understand the opportunities and trade-offs of increased agricultural production.

- Global Crop Diversity Trust
 - 7 yrs, \$30m
 - United Nations Foundation

This project works to secure the genetic diversity of crops important to farmers in developing countries by ensuring samples at seed banks are viable, upgrading national gene bank storage facilities and sharing information about genetic diversity so breeders have access to important traits.

3. Ensure that farmers are organized, empowered, and knowledgeable



- 25 of 103 grants
- 20% of investment dollars
- \$203m out of total \$1.14b

Of the total agriculture portfolio, it comprises 10% of all investment dollars

Key grants:

- Pathways: Empowering Women in Agriculture
 - 5 yrs, \$15m
 - CARE

This project support a model that uses women's Village Savings and Loans' groups as a means to increase women farmers' productivity and empowerment in more equitable agriculture systems in sub-Saharan Africa and South Asia.

- Participatory Video for Agricultural Extension
 - 4 yrs, \$2.8m
 - Digital Green Foundation

This grant tests an agricultural extension method involving the production of videos featuring local farmers and their innovative agricultural practices.

4. Provide solutions to long-term risks to smallholder livelihoods



- 40 of 103 grants
- 45% of investment dollars
- \$447.5m out of total \$1.14b

Of the total agriculture portfolio, it comprises 22% of all investment dollars

Key grants:

- Cassava Brown Streak Disease Resistance
 - International Institute of Tropical Agriculture
 - 4 yrs, \$3m

This grant supports national research institutions in Tanzania and Uganda to develop new varieties of cassava that are resistant to Brown Streak Disease.

- Protecting Livestock, Saving Human Life
 - GALVMed
 - 5 yrs, \$22m

This project seeks to reduce risk and improve the incomes and nutrition of poor livestock keeps by developing vaccines that address major livestock diseases.

The quality of grant making is as important as the outcomes we solve for

Risk Assessment Matrix Tool

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Grant Title:

Grantee:

A	B	
Category of Environmental Sustainability	Primary Environmental Variables	Grant Tech Activities
Water	Surface water -- availability	
	Surface water -- quality	
	Groundwater -- availability	
	Groundwater -- quality	
Soils	Organic matter	
	Nutrient cycling	
	Erosion	
	Salinity control	
Biodiversity	Agricultural species diversity -- plants	
	Agricultural species diversity -- animals	
	Wild species diversity -- plants	
	Wild species diversity -- animals	
	Ecosystem fragmentation	
	Resilience to climate change	
Air and Climate	Greenhouse gas emissions	
	Air quality	



An Orientation Document
February 2012

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Partnerships

**We won't succeed on our own.
We rely on partners to carry out the work.**

- From developed and developing worlds
- From public, private and nonprofit sectors



Thank You

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