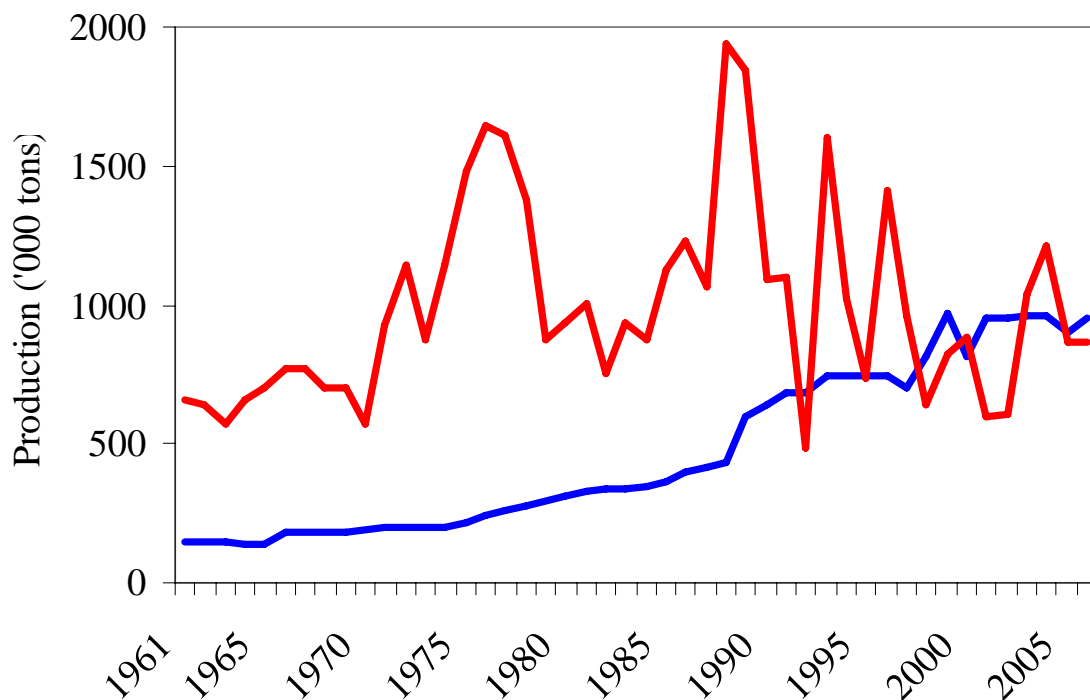


From Roller Coasters to Rocket Ships: Lessons from Past Successes in African Agriculture

Steven Haggblade
Michigan State University
AGRA Policy Planning Workshop
Nairobi June 23-24, 2008

Roller Coasters or Rocket Ships?



IFPRI Review of Successes in African Agriculture

1. Methods

2. Lessons

a. What has to happen?

b. How?

1. Methods

- Inventory “successes”: expert survey
- Select informative cases: advisory panel
- Comparative case studies: case study teams
- Generalize: analytical teams plus stakeholder workshops

Case Studies Reviewed

- Maize: Kenya, Malawi, Zambia, Zimbabwe
- Cotton: Mali
- Cassava: Nigeria, Ghana, Malawi, Zambia
- Horticultural exports: Kenya, Ivory Coast
- Dairy: Kenya, Ethiopia, Uganda
- Conservation farming: Burkina, Zambia
- Improved fallows: Kenya, Zambia

Categorizing the Case Studies

Motors of change	Case studies
Comprehensive public research, input and marketing package	Maize Cotton Dairy
Public R&D	Cassava
Private-led marketing	Export horticulture
Research and extension: private and public	Conservation farming Improved fallows

Plan of Attack

1. Methods

2. Lessons

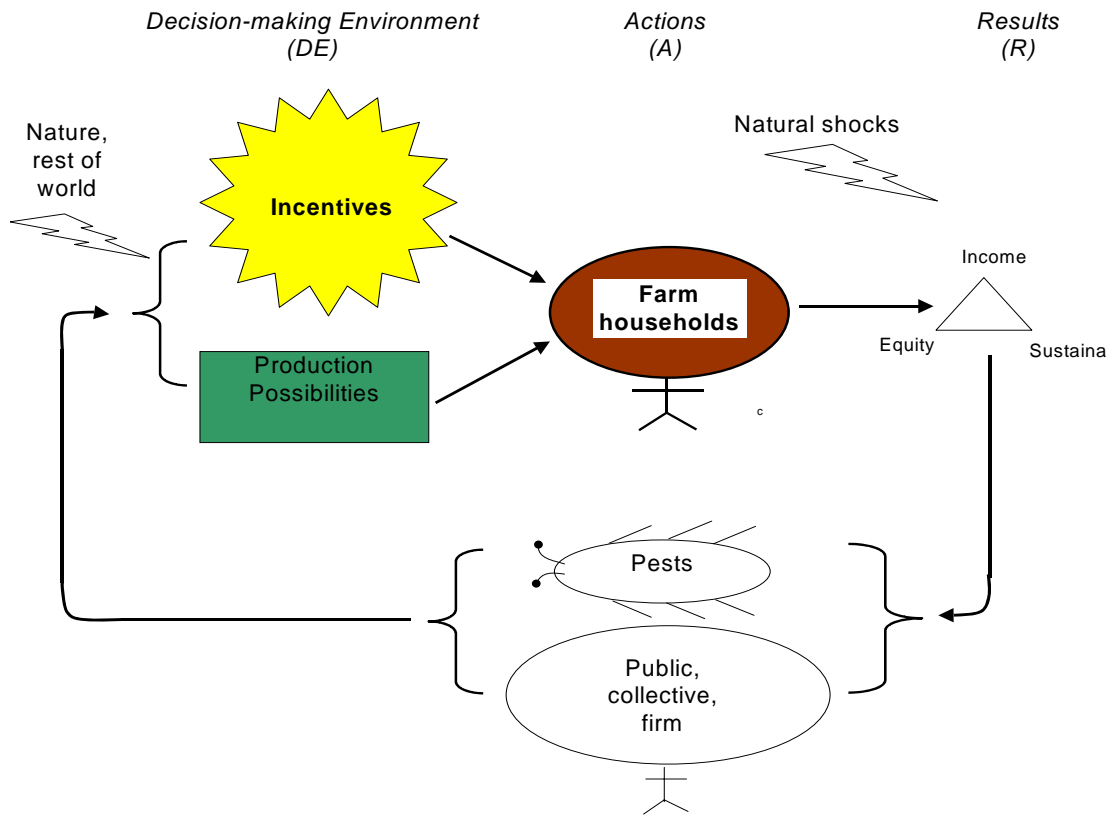
a. What has to happen?

b. How?

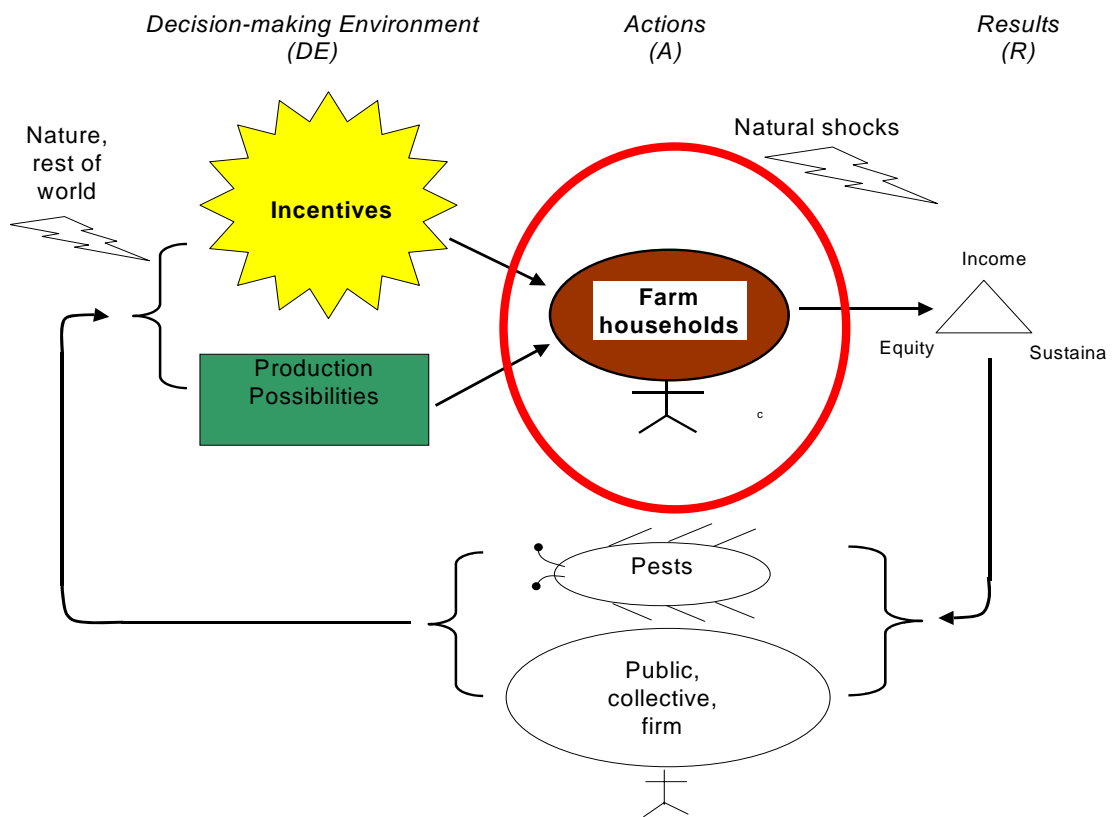
2a. What has to happen?

- Improved productivity
- Adequate incentives

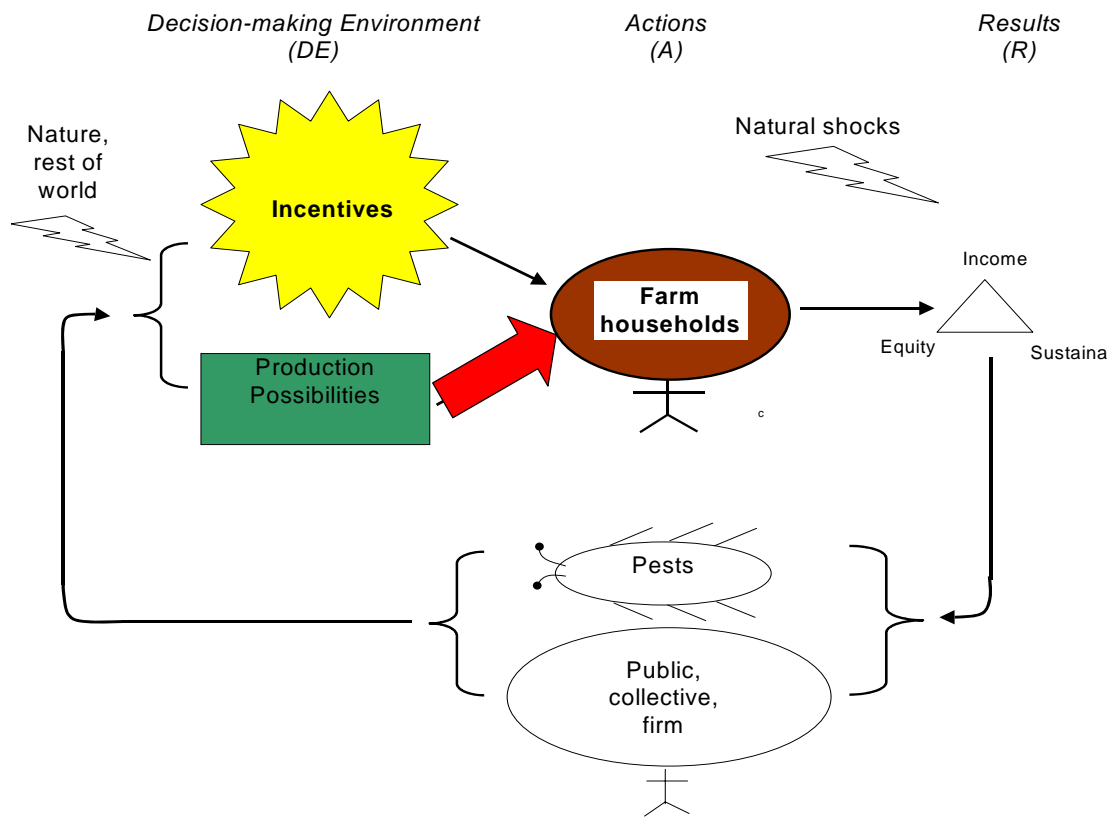
The Dynamics of Agricultural Change



The Dynamics of Agricultural Change



The Dynamics of Agricultural Change



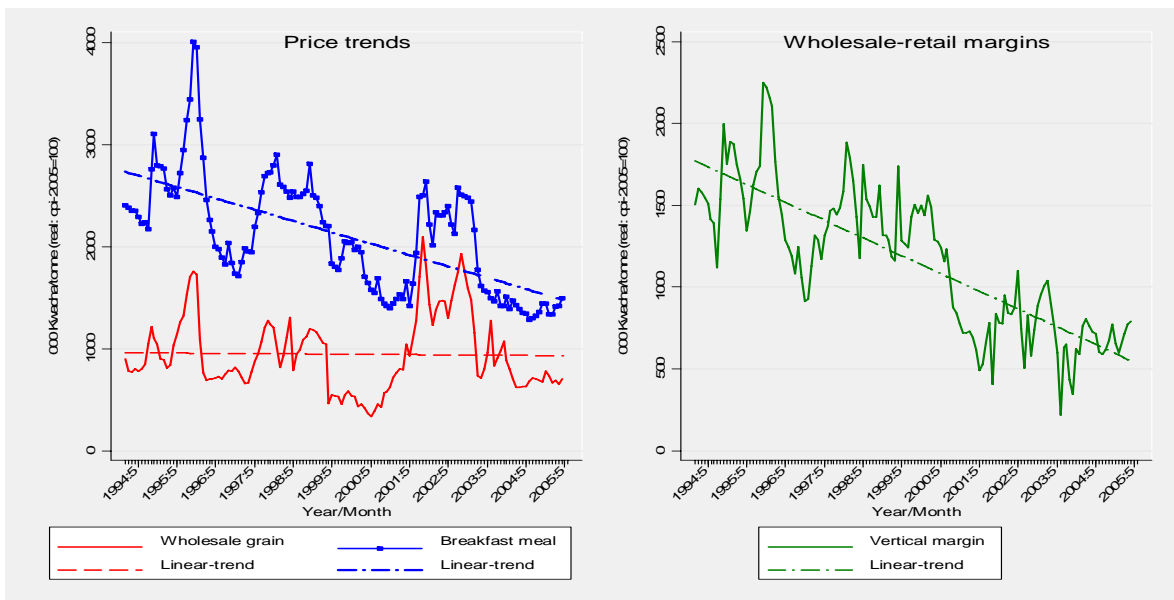
Improved productivity: technology



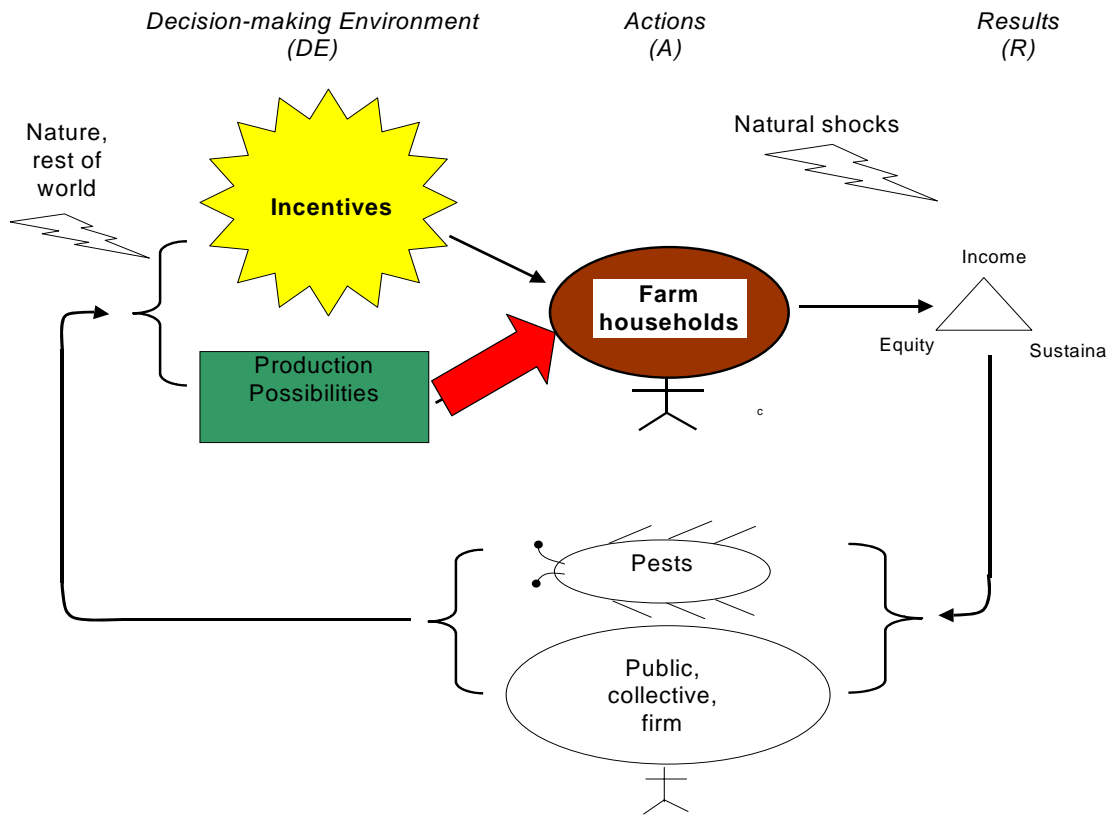
Improved productivity: management

	Yield (kg/ha)	
	Cotton	Maize
Conventional plowing	820	1,350
Conservation farming basins	1,280	3,000
Sources of difference		
higher input use	90	500
early planting*	40	400
water harvesting in basins*	330	750
total difference	460	1,650

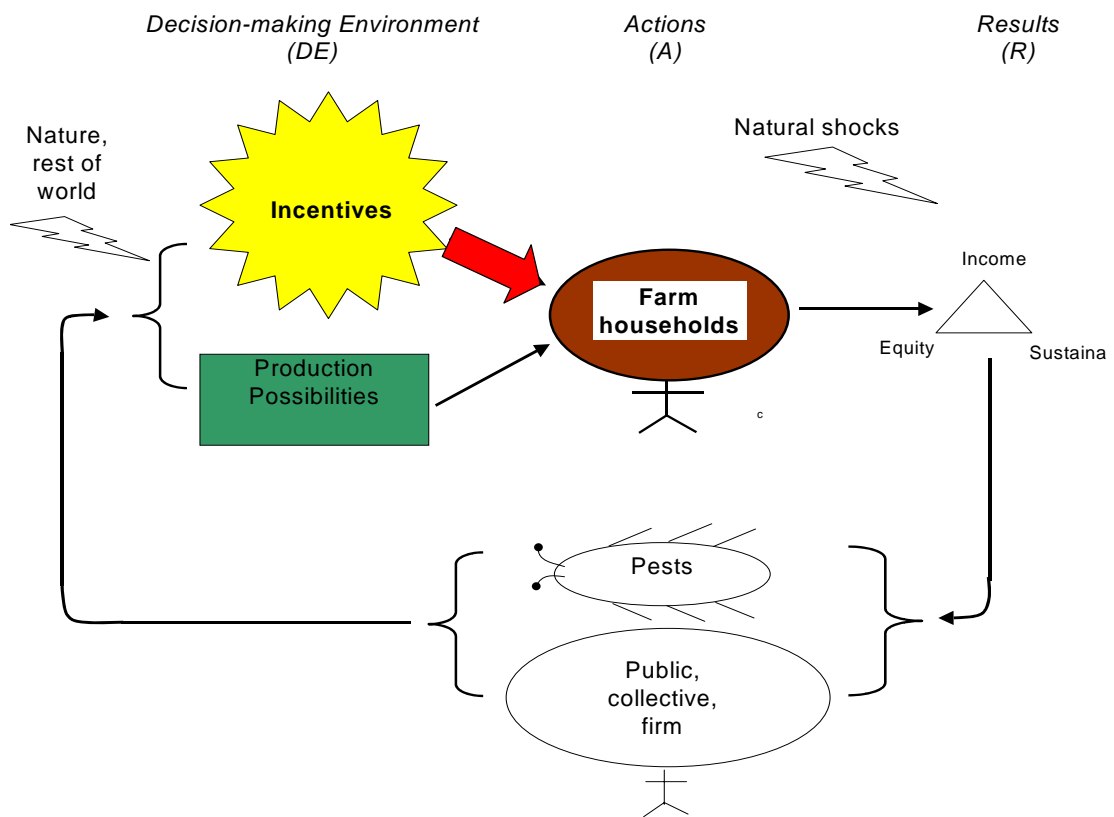
Improved productivity: marketing



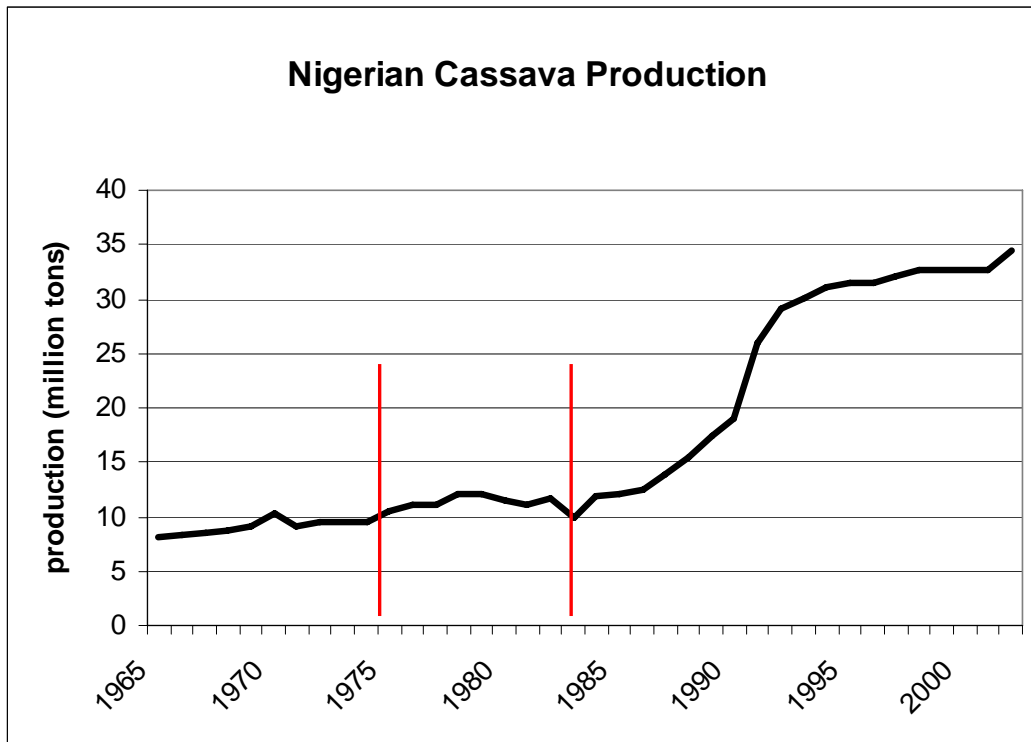
The Dynamics of Agricultural Change



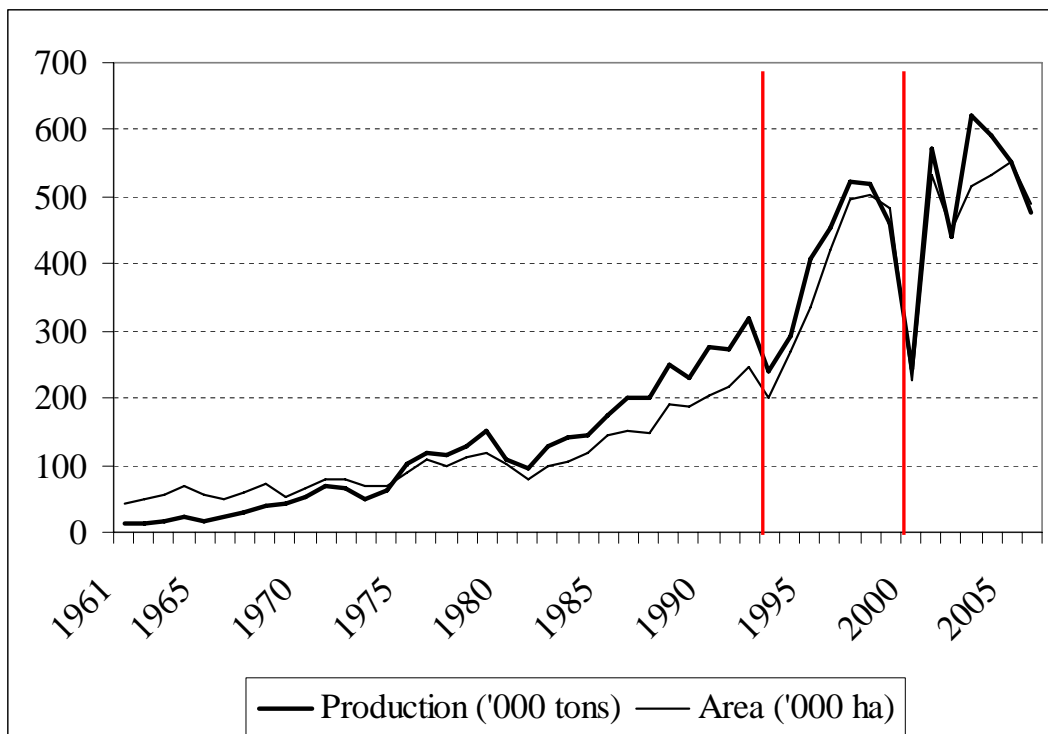
The Dynamics of Agricultural Change



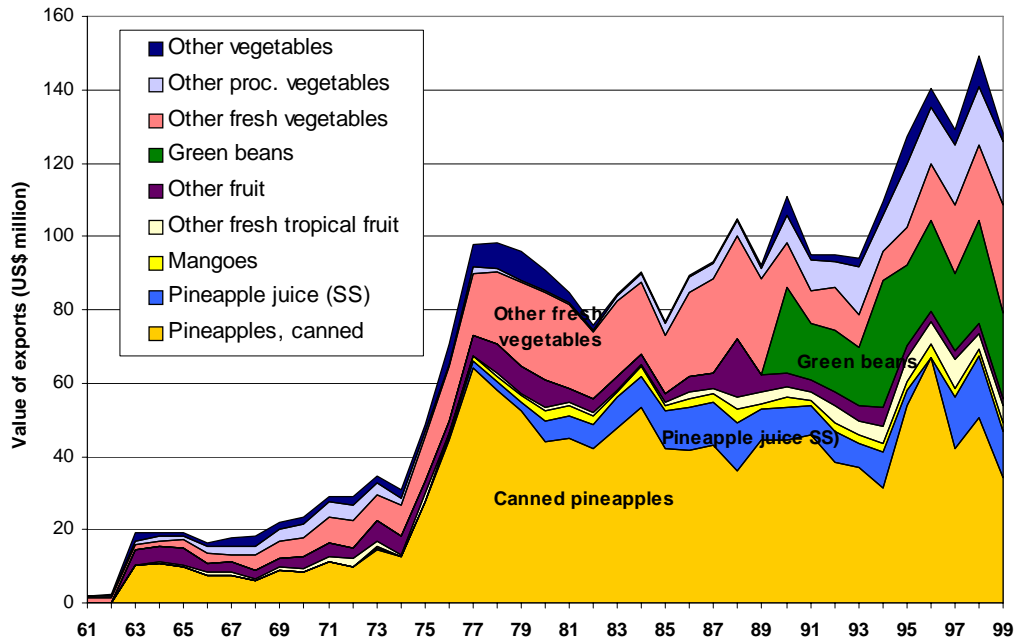
Adequate incentives: Cassava Nigeria



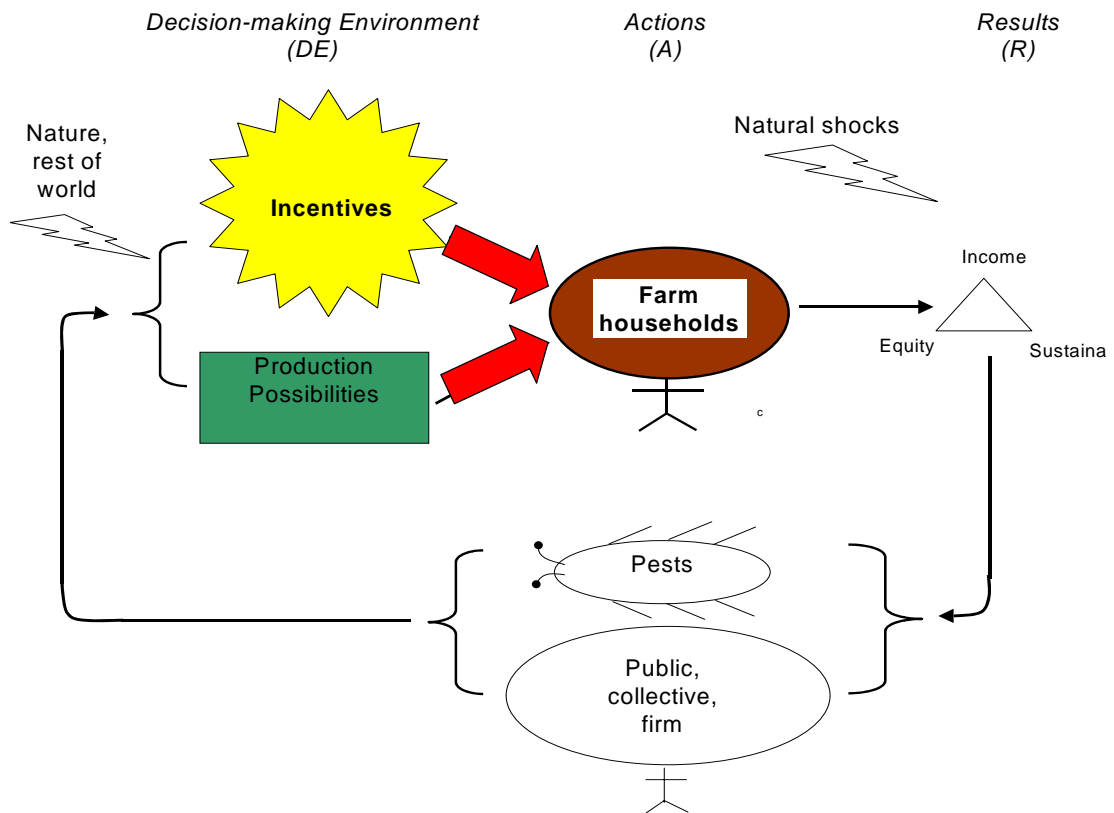
Adequate incentives: Malian cotton



Adequate incentives: growing markets



The Dynamics of Agricultural Change



Plan of Attack

1. Methods

2. Lessons

a. What has to happen?

b. How?

2b. How?

- Public goods plus private incentives
- Patience and perseverance
- Think regionally

Public vs private: many options are possible

	Public	Private	Public and private	Public → private
Technology	<ul style="list-style-type: none">• Cassava• Maize• Cotton	<ul style="list-style-type: none">• Conserv. farming	<ul style="list-style-type: none">• Improved fallows• Dairy	
Marketing		<ul style="list-style-type: none">• Horticulture• Cassava	<ul style="list-style-type: none">• Dairy	<ul style="list-style-type: none">• Maize• Cotton

Key public goods

- Research
 - Open pollinating varieties
 - Vegetatively propagated crops
 - Orphan crops
- Disease control
- Infrastructure
- Policies

2b. How?

- **Public goods plus private incentives**
- Patience and perseverance
- Think regionally

2b. How?

- Public goods plus private incentives
- **Patience and perseverance**
- Think regionally

Patience and perseverance

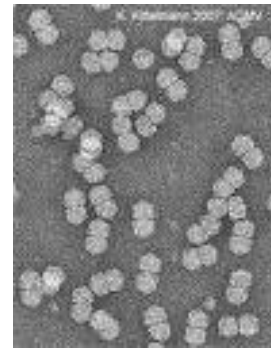
- Dairy: 80 years
- SR52: 28 years
- TMS cassava: 18 years + 7 years

Patience and perseverance

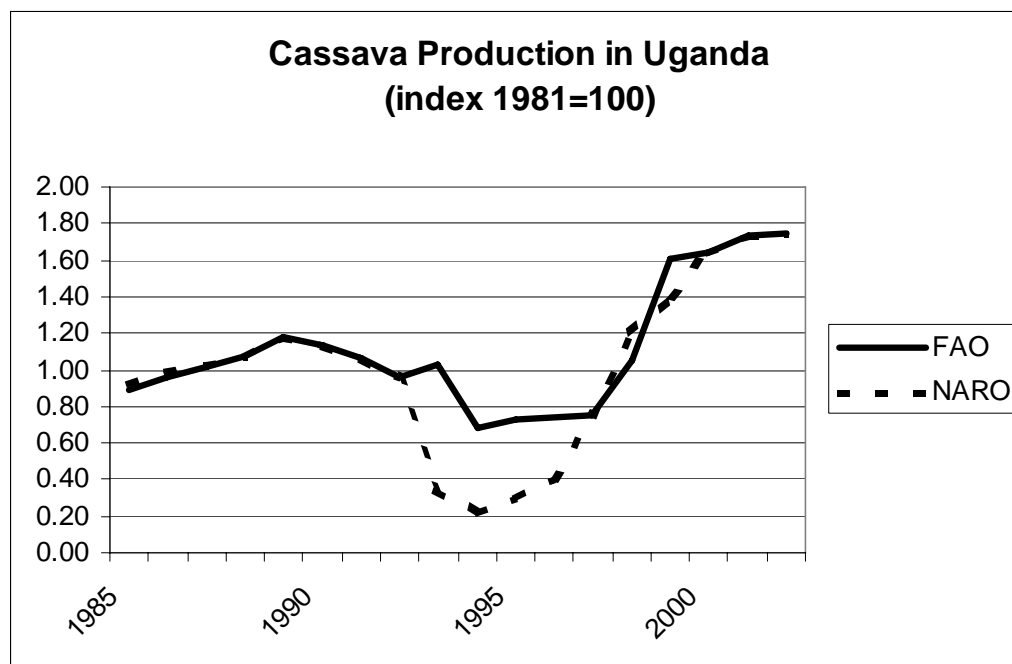
- Dairy: 80 years
- SR52: 28 years
- TMS cassava: 18 years + 7 years

→ SLOW MAGIC

Pests and diseases constantly mutate



Mutating pests and disease require sustained research



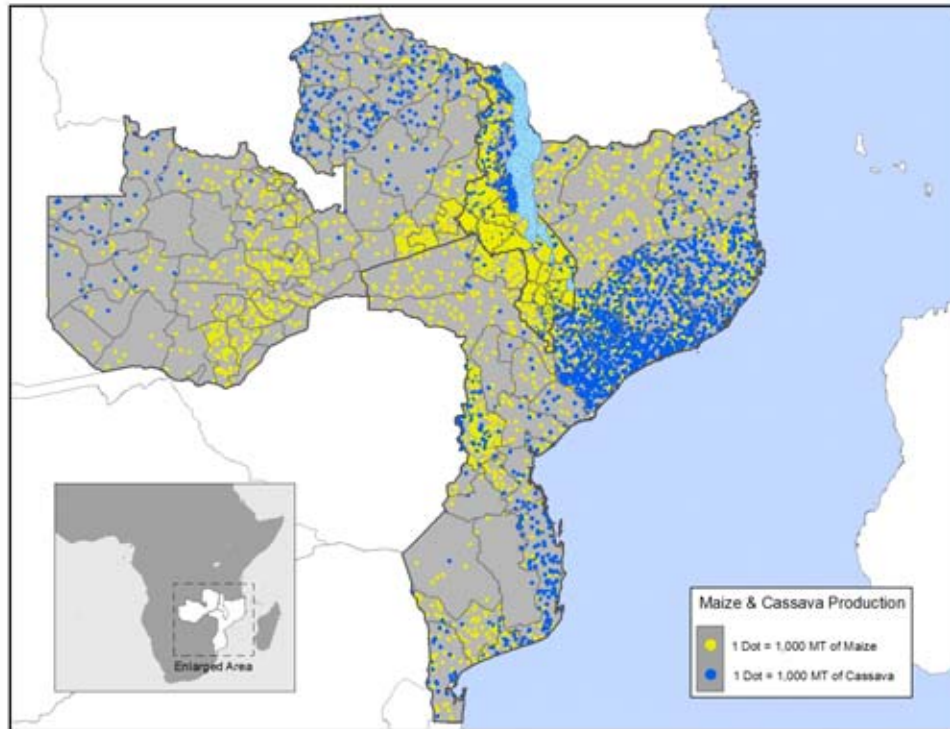
2b. How?

- Public goods plus private incentives
- Patience and perseverance
- **Think regionally**

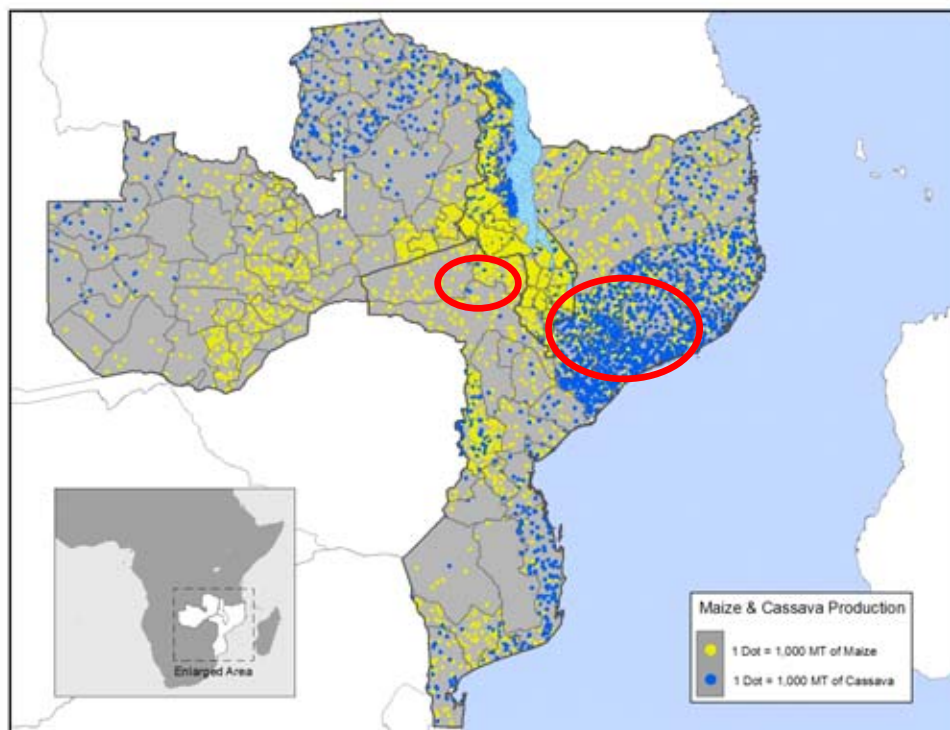
Think regionally: technology

- Cotton
- Maize
- Cassava
- Dairy
- Improved fallows
- Conservation farming

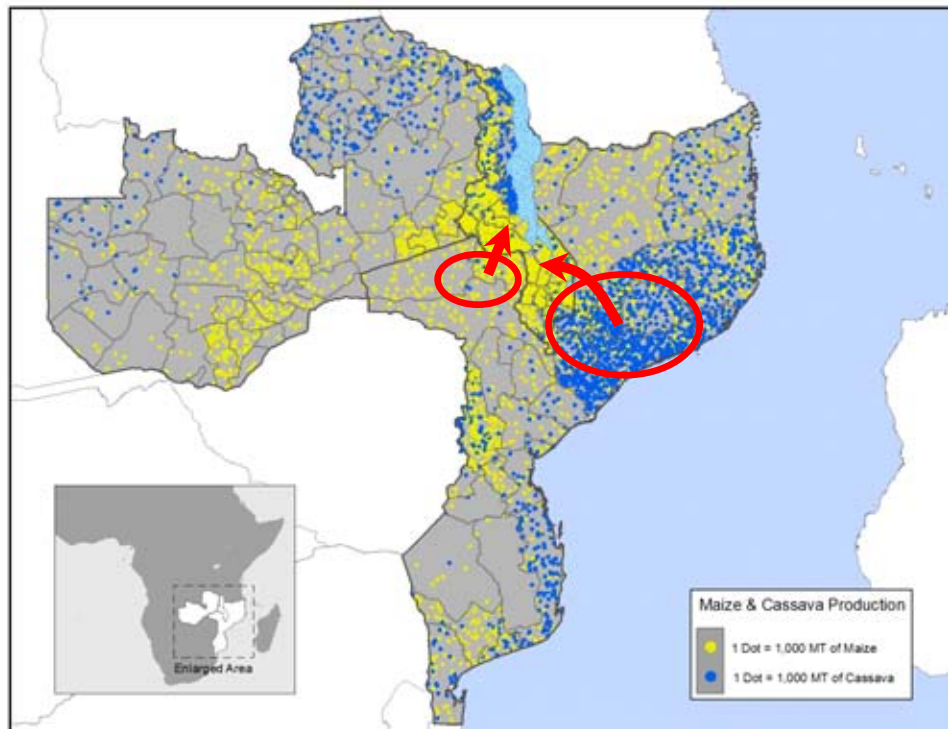
Think regionally: trade



Think regionally: trade



Think regionally: trade



Conclusions

- Success is possible
- What has to happen?
 - Improved productivity
 - Adequate incentives
- How
 - Public goods plus private incentives
 - Patience and perseverance
 - Think regionally