Smallholder Productivity Growth and Market Access: Recent Findings and Implications for GHFSI Implementation

T.S. Jayne
Michigan State University

USAID EGAT/AG and AFR/SD Briefing on Insights for the Implementation of the GHFSI

USAID, Ronald Reagan Building, Washington, DC.
February 19, 2010

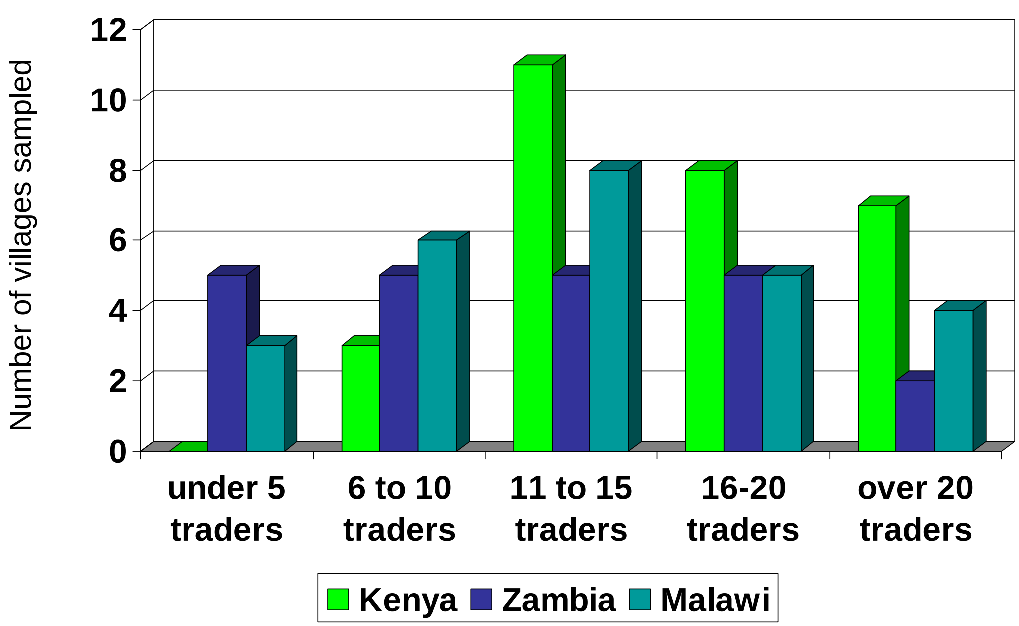
Main conclusions

1. Market reform effects after 20 years: There is now tangible evidence of improvements in smallholders' access to markets for both inputs and food
   - this should raise the returns to future public investments to ag
2. However, there are major limitations for market development programs to transform many smallholder farmers into staple food sellers (implications for CAADP Pillar II / ACTESA)
3. Effectively reaching the poorest of the poor will require CAADP investments aimed to improve access to land (while structural transformation kicks in over time)
4. No real alternative to a smallholder-led strategy in most of SSA. Major progress in cutting poverty rates will not be made without broad-based inclusive agricultural growth
5. Public investments with the greatest returns to ag growth and poverty reduction are: infrastructural investment, R&D, conducive policies – implications for REC's role in CAADP

Message 1.
Market reform effects after 20 years:

There is now tangible evidence of improvements in smallholders' access to markets for both inputs and food

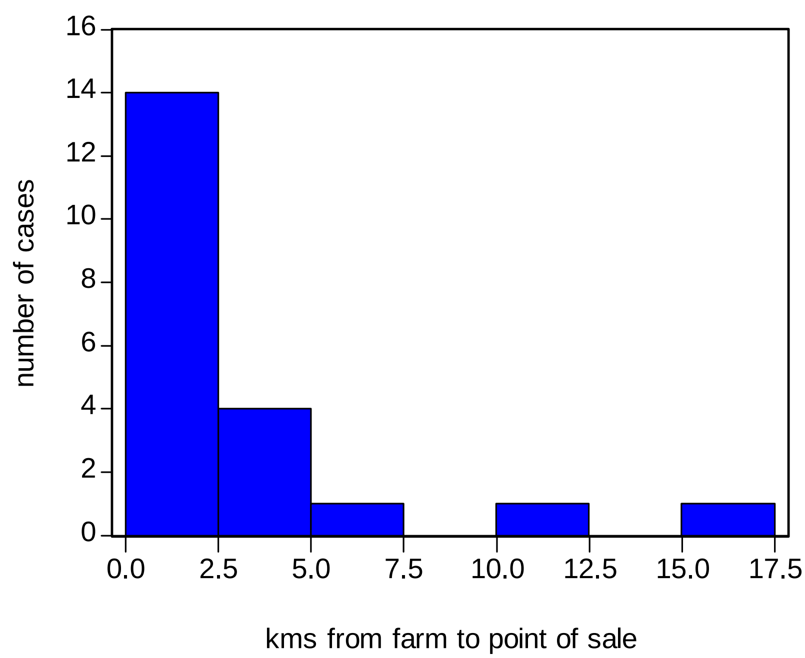
Number of traders buying maize from farmers in village – 2009 Maize Value Chain Study



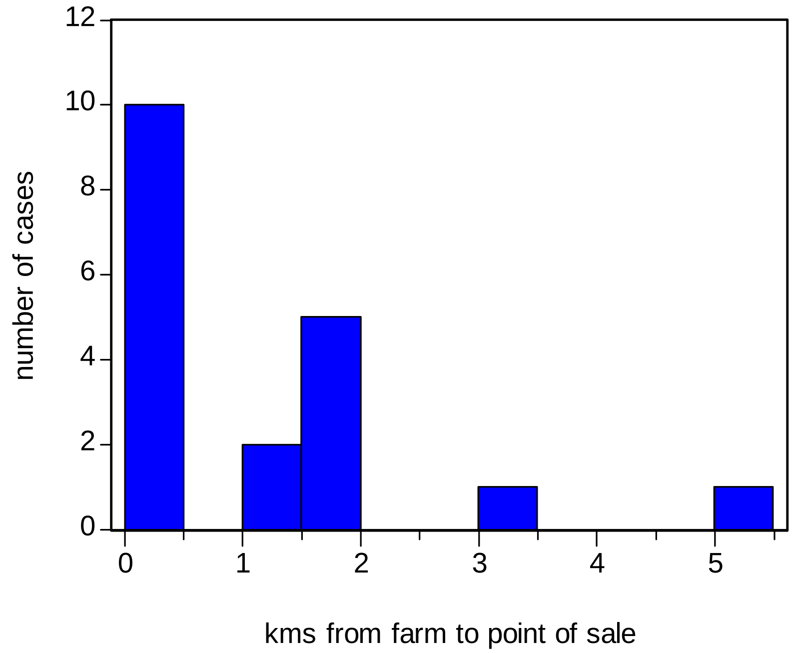
Farmers' access to markets

- Median distance travelled by farmers to point of maize sale in:
  - Kenya = 0 km
  - Malawi = 1 km
  - Zambia = 4 km
- Importance of cell phone ownership on ability to find buyers – over 65% of rural households in Kenya own cell phone and use it to locate buyers

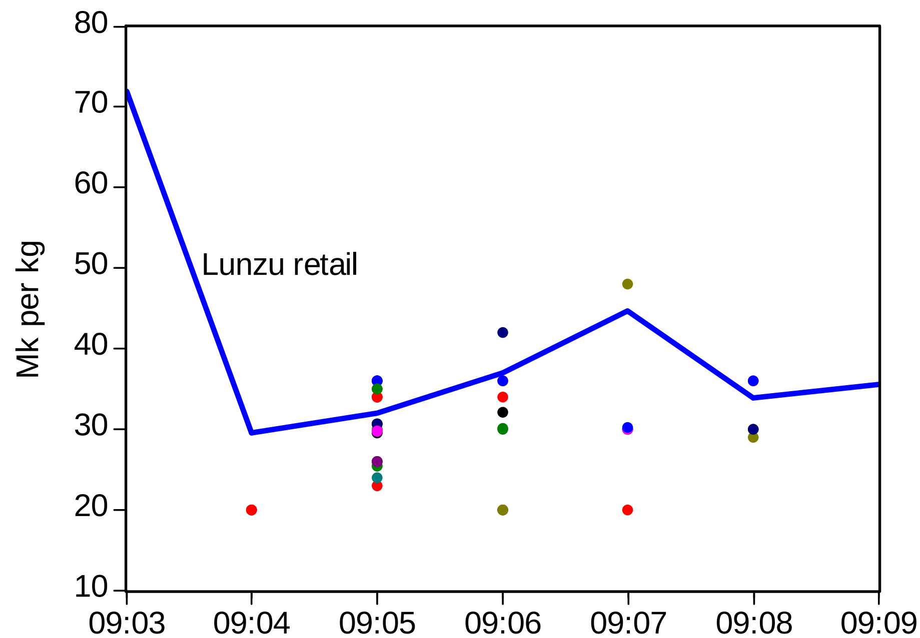
Household-reported distance: farm to point of maize sale, 2008/09 mkting season, accessible villages, Mulanje District



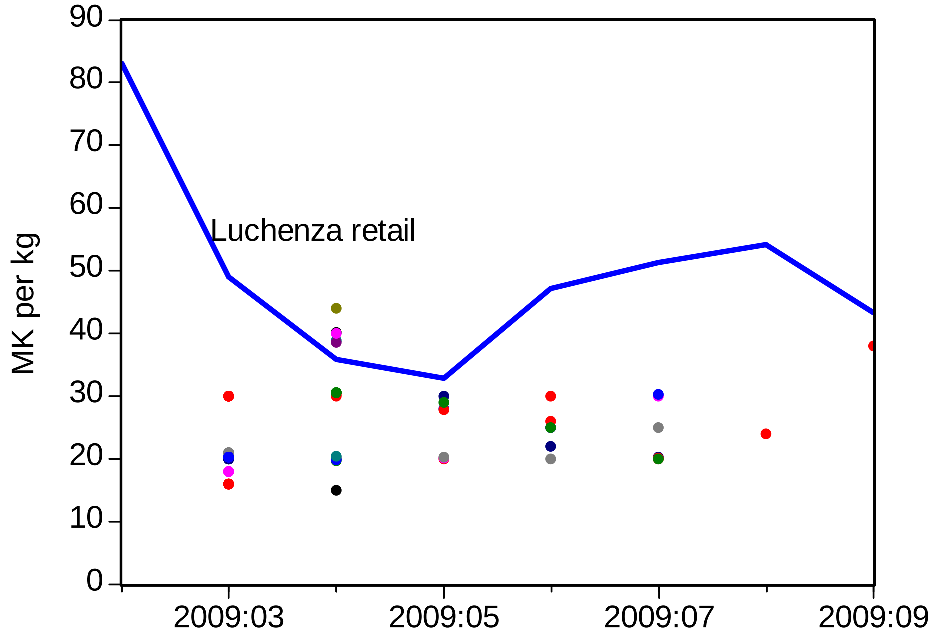
Household reported distance: farm to point of maize sale, 2008/09 mkting season, accessible villages, Mzimba District



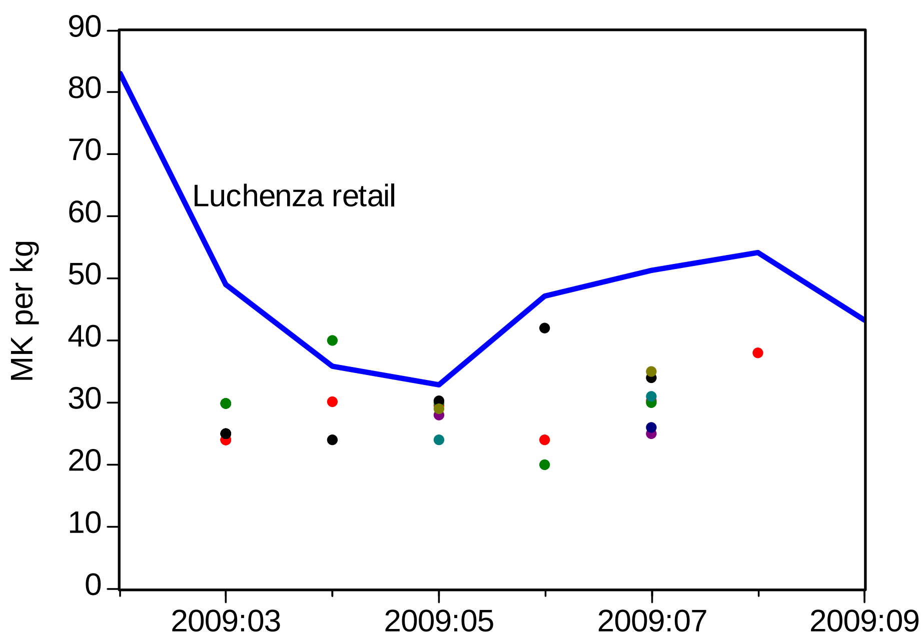
Lunzu retail price and farmer-reported prices received in remote villages in Blantyre District, 2009



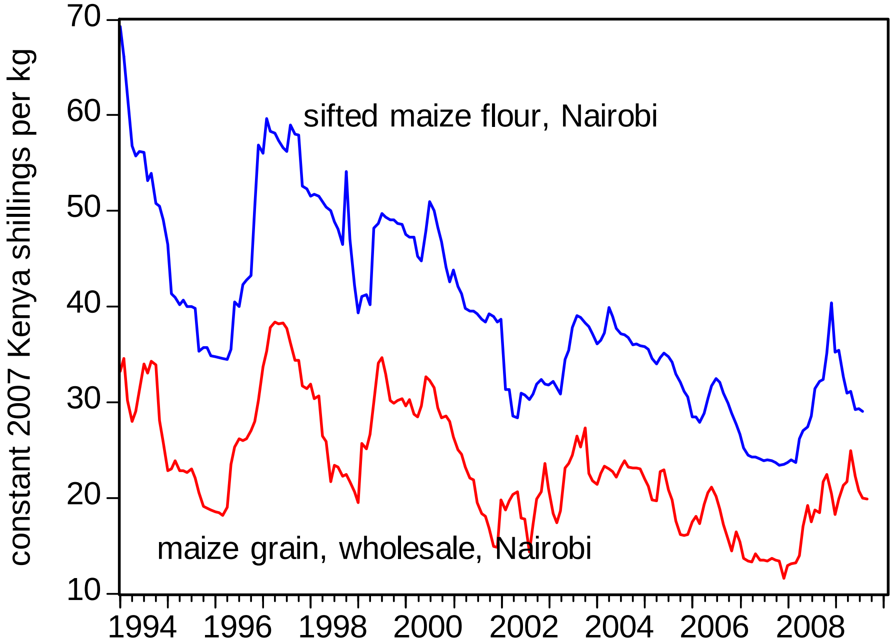
Luchenza retail price and farmer-reported prices received in remote villages in Mulanje District, 2009



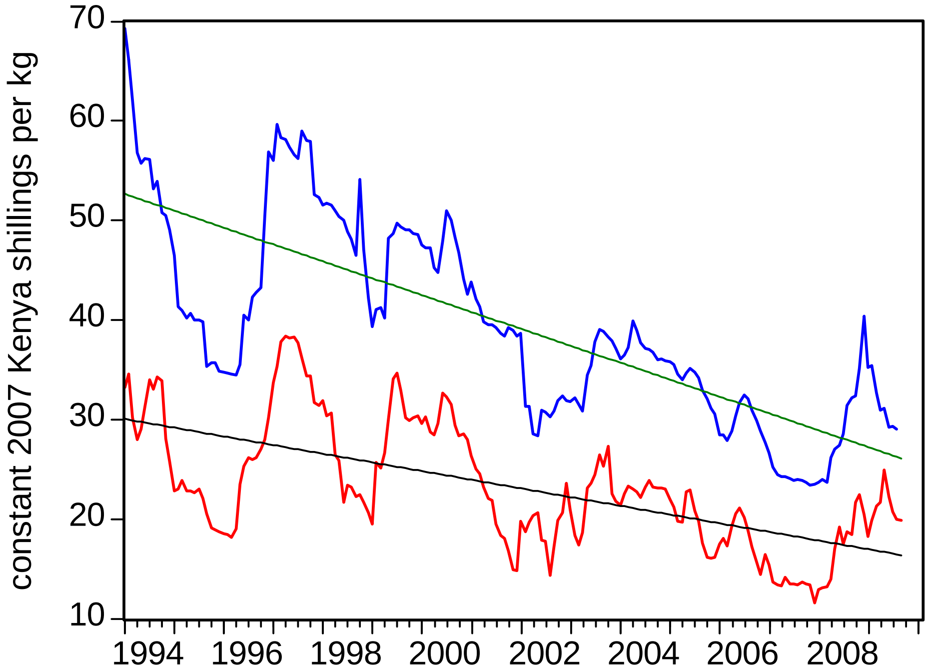
Luchenza retail price and farmer-reported prices received in accessible villages in Mulanje District, 2009



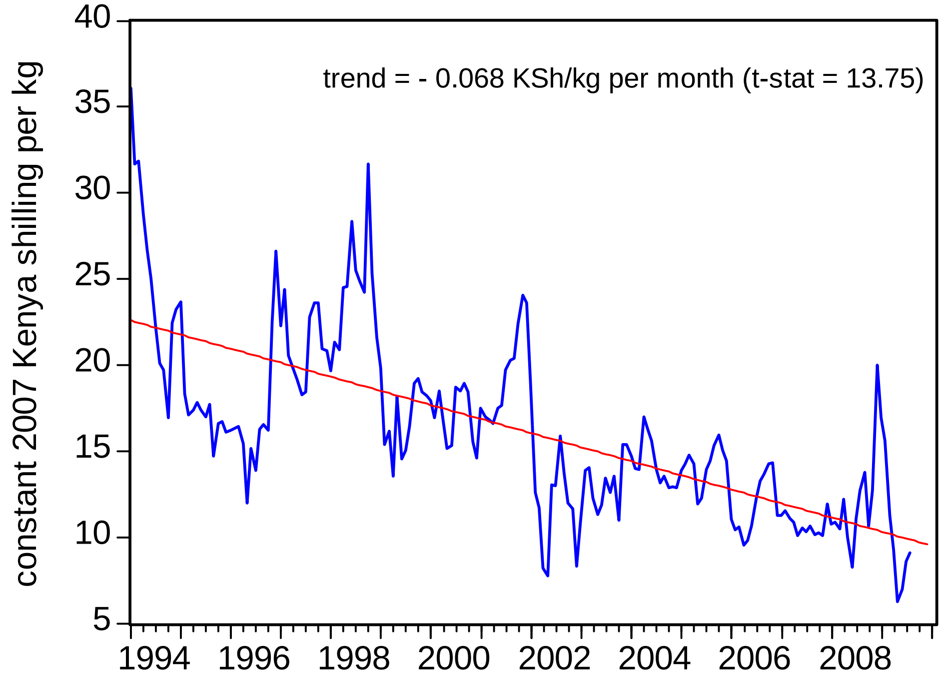
Maize milling/retail margins, Kenya



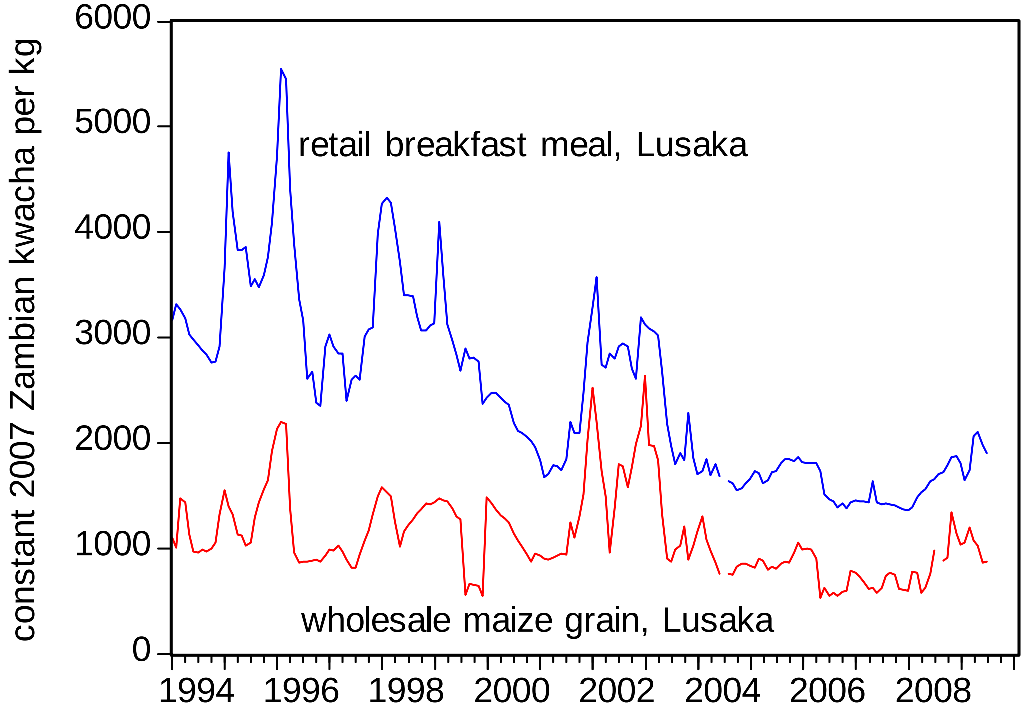
Maize milling/retail margins, Kenya



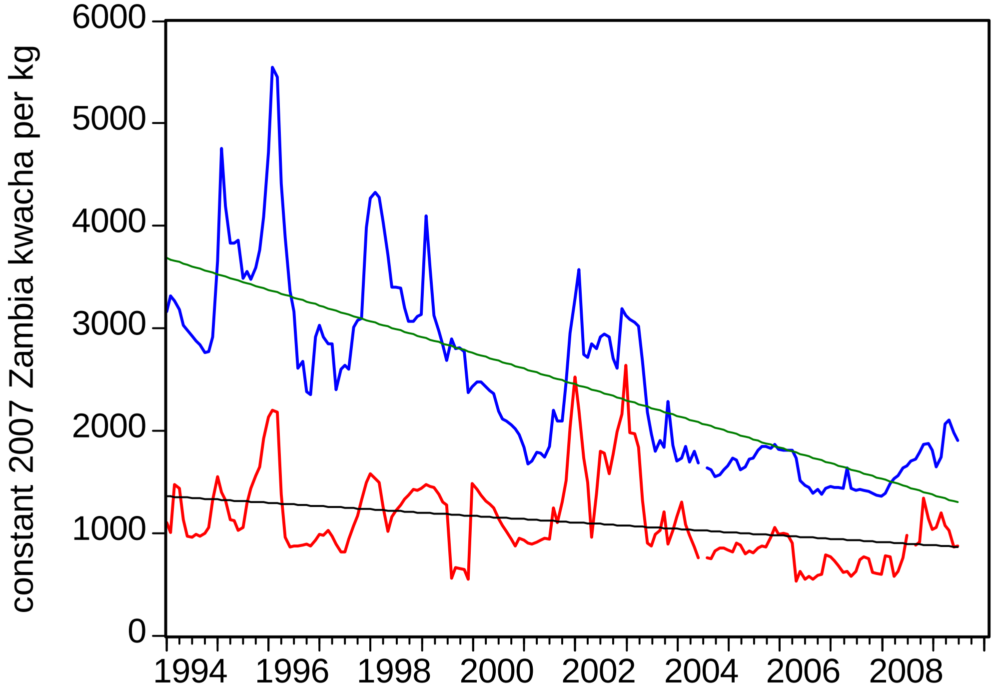
Maize milling/retail margins, Kenya



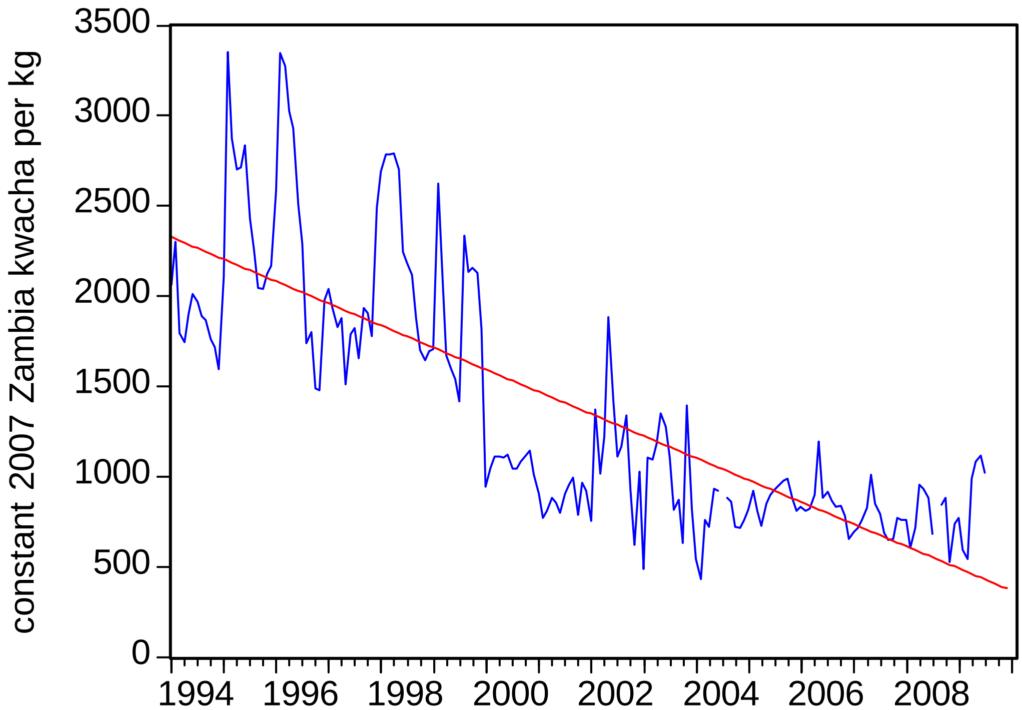
Maize milling/retail margins, Zambia



Maize milling/retail margins, Zambia



Maize milling/retail margins, Zambia



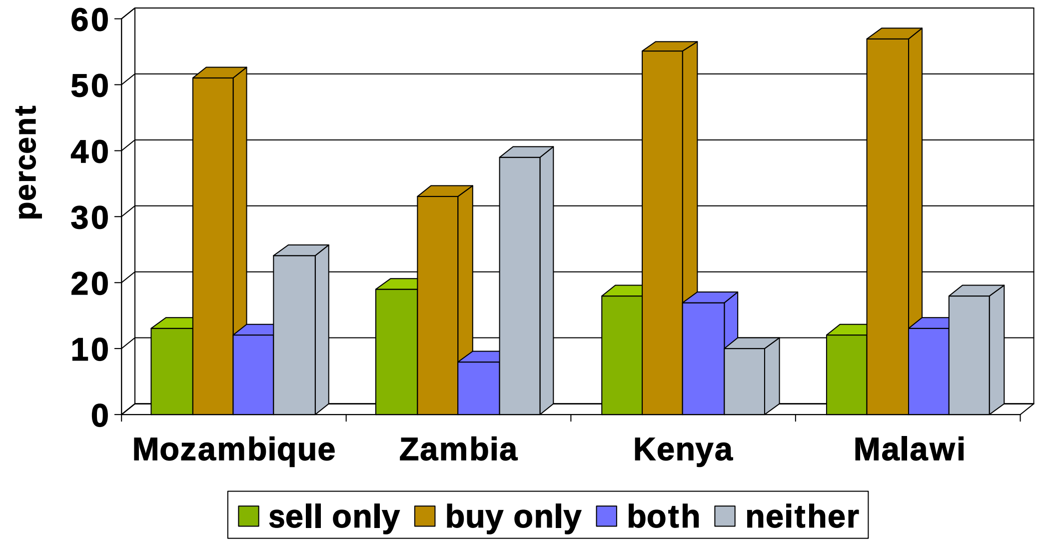
Competing models of roles of state and private sector in food markets:

Model 1	Model 2	Model 3
Rely on markets; state role limited to: • Public goods investment • Regulatory framework • Strengthening of institutions / defense of property rights • Policies supportive of private sector entry and competition	**Primary reliance on markets** **- but role for *rules-based* state operations** • e.g., buffer stock release to defend stated ceiling price • Marketing board purchases at stated floor price announced in advance • Transparent rules for initiating state imports	**Role for markets and *discretionary* state intervention** • Based on premise that private sector cannot ensure adequate food supplies in response to production shortfalls • Justification for unconstrained role for state interventions in markets to correct for market failures

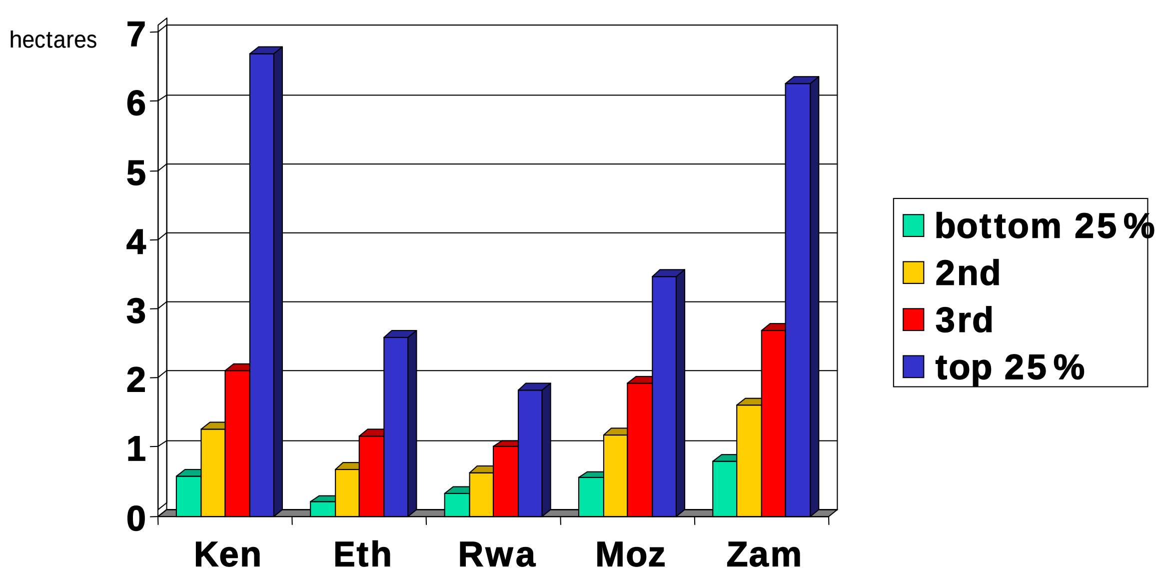
Message 2: However, there are major limitations for market development programs to transform most smallholder households into staple food sellers (implications for CAADP Pillar II and ACTESA)

Message 3: Effectively reaching the poorest of the poor will require supportive public investments to improve their access to land and assets while structural transformation kicks in over time

Smallholder Households' Position in the Maize Market



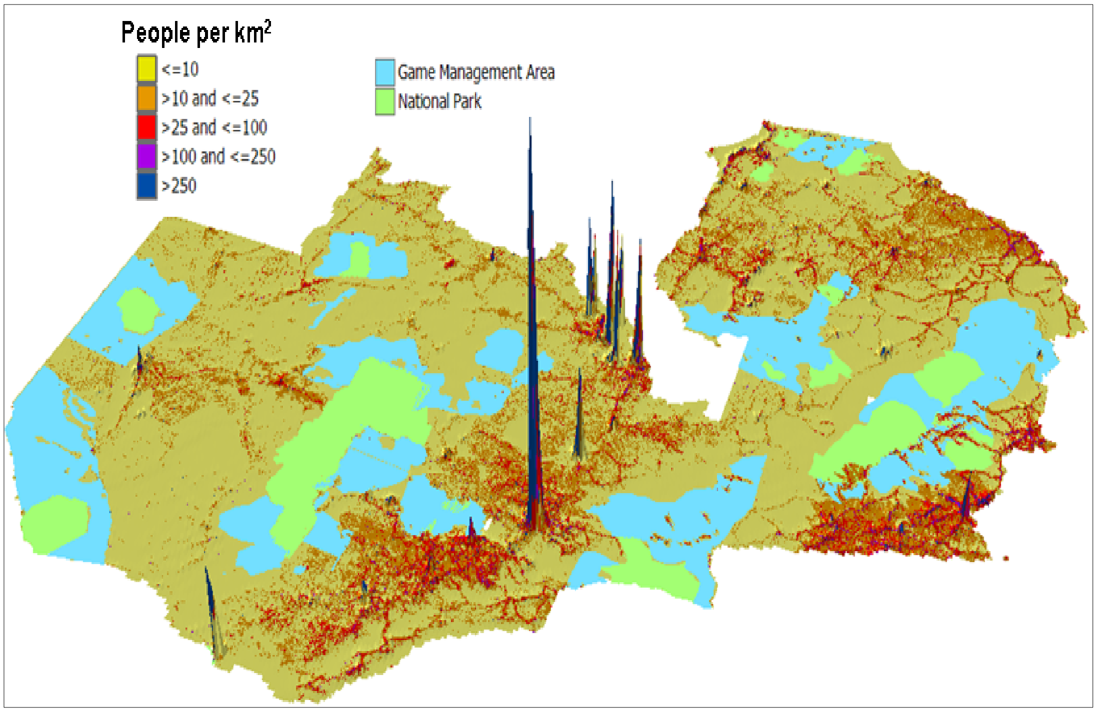
Farm size distribution: Small farm sector



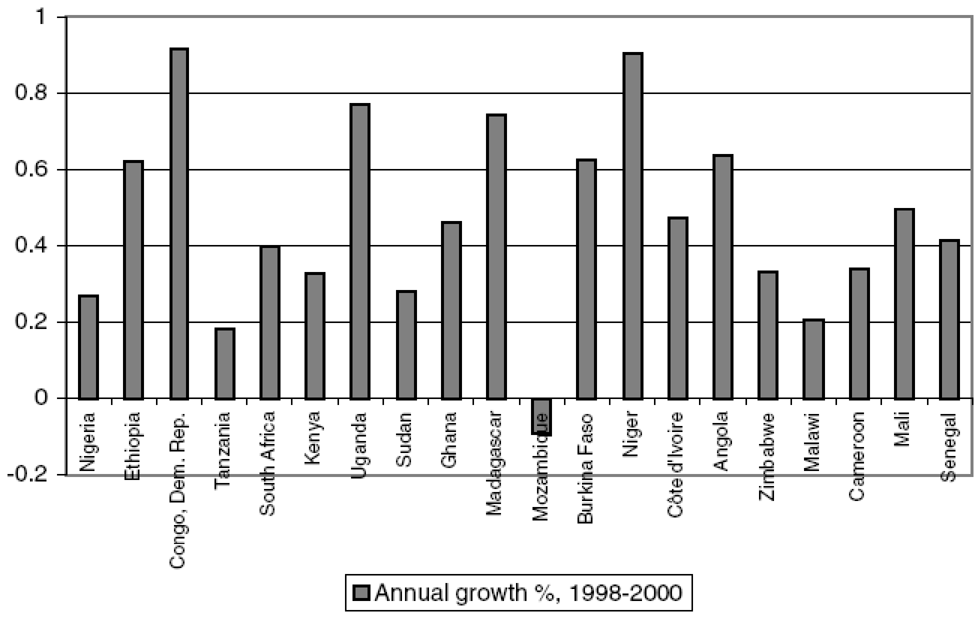
Characteristics of smallholder farmers, Zambia 2006/07

		N=	Farm size (ha)	Asset values (US$)	Gr. Rev., maize sales (US$)	Gr. Rev., crop sales (US$)	Total hh income (US$)
Top 50% of maize sales		31,328 (2%)	4.3	1,132	720	1163	2,932
Rest of maize sellers		328,561 (26%)	1.6	316	88	193	634
Households not selling maize		907,255 (72%)	0.9	231	0	97	415

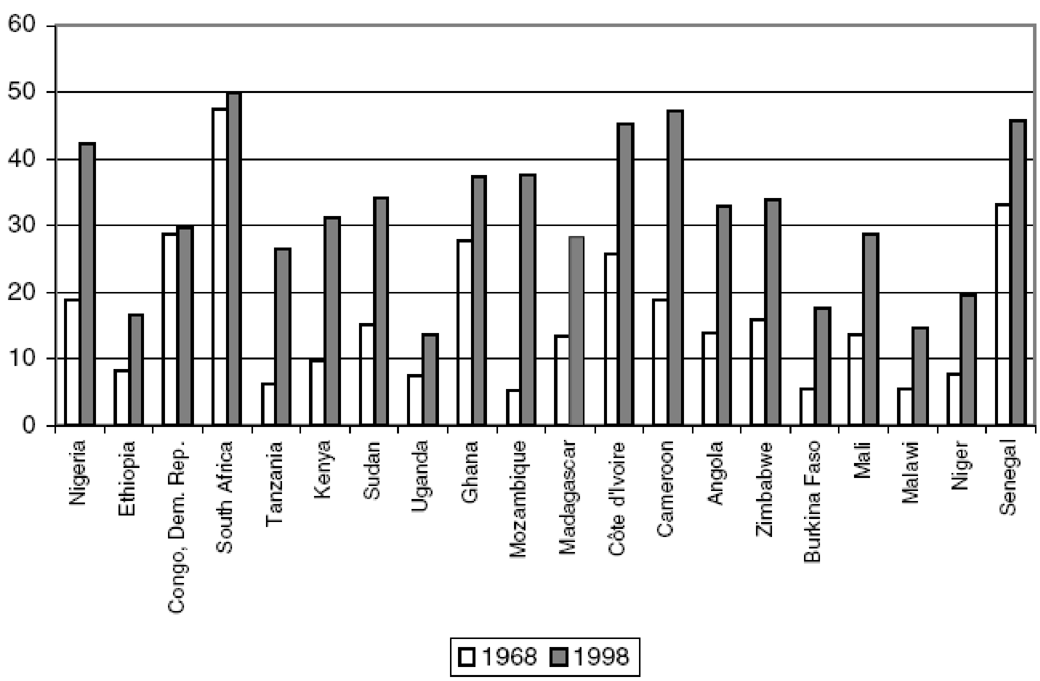
Population Density and Distribution Zambia 2007



Rural population growth rates



Share of urban population in total population, 1968 and 2005



Consequences of not addressing the land issue for the rural poor:

1. Unviable rural livelihoods (small landholdings and few productive assets) for the poorest are driving rapid urbanization, with all its attendant problems
2. Unviable rural livelihoods → rapid urbanization → rising national food deficits

Characteristics of smallholder farmers, Zambia 2006/07

		N=	Farm size (ha)	Asset values (US$)	Gr. Rev., maize sales (US$)	Gr. Rev., crop sales (US$)	Total hh income (US$)
Top 50% of maize sales		31,328 (2%)	4.3	1,132	720	1163	2,932
Rest of maize sellers		328,561 (26%)	1.6	316	88	193	634
Households not selling maize		907,255 (72%)	0.9	231	0	97	415

Message 4: Opening up new areas through public investments will be required to bring the poorest of poor into rural growth processes

- Public investment in infrastructure, education, services, water, etc., will facilitate re-settlement
  - e.g., Gokwe model in S. Rhodesia
  - This is the main component of a growth strategy for the poorest 25% in the short/medium run

Message 5: There is no real alternative to a smallholder-led strategy in most of SSA

Why?

1. Major progress in cutting poverty rates will not be made without broad-based inclusive agricultural growth
2. Structural transformation (Johnston and Mellor)
3. Collier's vision cannot result in lower rural poverty
4. Lipton: "virtually no examples of mass poverty reduction since 1700 that did not start with sharp rises in…income due to higher productivity in small family farms"

Message 6: The research record clearly indicates the kind of priority investments to guide CAADP

Why?

- Economist Intelligence Unit. 2008. Lifting African and Asian Farmers out of Poverty: Assessing the Investment Needs. Research report for the Bill and Melinda Gates Foundation, The Economist Intelligence Unit, New York.
- Fan, S., A. Gulati, and S. Thorat. 2007. Investment, subsidies, and pro-poor growth in rural India, Discussion Paper 716, Washington, D.C., International Food Policy Research Institute.

Ranking of Alternative Investments: Meta-Study Evidence from Asia and Africa

	The Economist	IFPRI study
Policies		
Road investment		
Agricultural R&D		
Agricultural extension services		
Credit subsidies		
Fertilizer subsidies		
Irrigation		

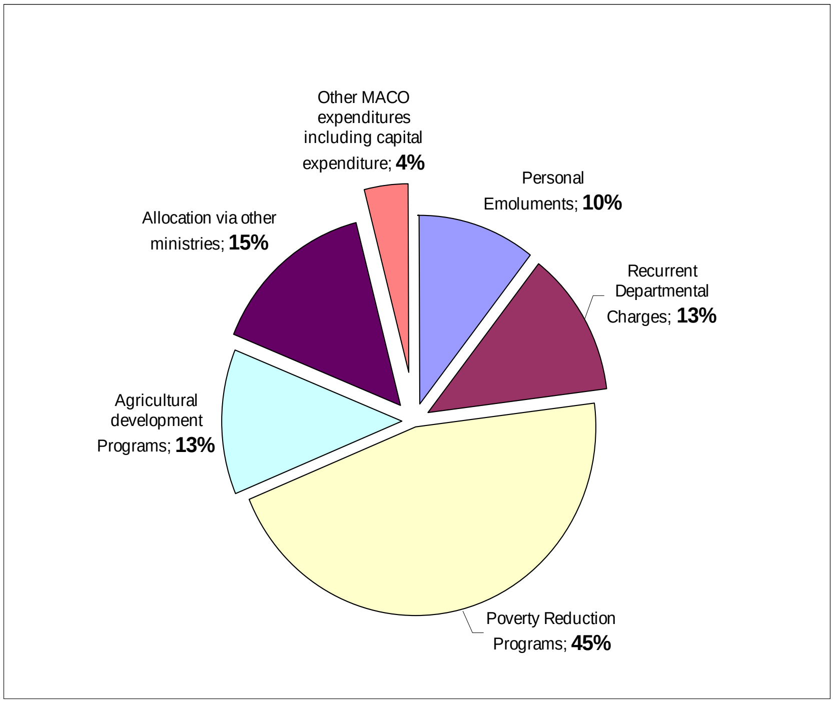
Ranking with respect to ***agricultural growth:*** Evidence from Asia

	The Economist	IFPRI
Policies	1	
Road investment	2	1
Agricultural R&D	3	2
Agricultural extension services	4	
Credit subsidies	7	3
Fertilizer subsidies	5	5
Irrigation	6	6

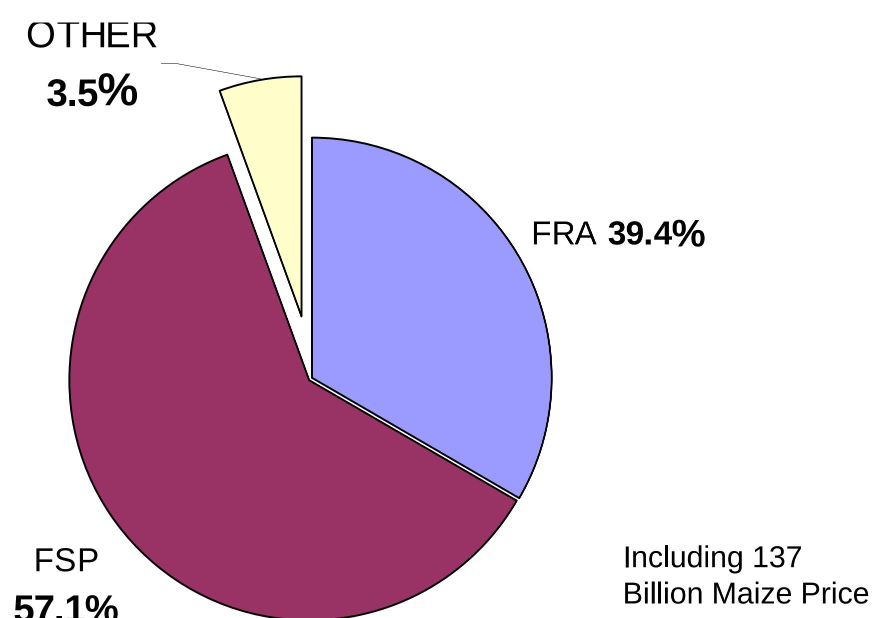
Ranking with respect to ***poverty reduction:*** Evidence from Asia

	The Economist	IFPRI
Policies	1	
Road investment	2	1
Agricultural R&D	3	2
Agricultural extension services	5	
Credit subsidies	7	3
Fertilizer subsidies	4	4
Irrigation	6	6

2009 Resource Allocation to Agriculture - Zambia



Composition of MACO Poverty Reduction Programmes 2009



- Government of Malawi 2008/09 Input Subsidy Program

  = 15% of National Budget

  = 80% of Agricultural Budget

What we count as "investment" under CAADP matters!!!

Main conclusions

1. Market reform effects after 20 years: There is now tangible evidence of improvements in smallholders' access to markets for both inputs and food

   → RECs to stress market-oriented policies in CAADP implementation
2. However, there are major limitations for market development programs to transform many smallholder farmers into staple food sellers (implications for CAADP Pillar II / ACTESA)
3. Effectively reaching the poorest of the poor will require CAADP investments aimed to improve access to land (while structural transformation kicks in over time)
4. No real alternative to a smallholder-led strategy in most of SSA.
5. Regional economic consortia should be encouraging governments to invest in ways that generate greatest returns

What about input subsidies?

- Summarizing analysis from Malawi and Zambia:
  - Mistargeted → disproportionately captured by the better off smallholders, not the poorest
  - Displaces commercial demand if untargeted subsidies are distributed in areas where commercial demand is high
  - Initial evidence that contribution to household livelihoods is not enduring
  - B/C ratios for Malawi in range of 0.76 to 1.30, lower than other uses of public funds
  - Massive foregone growth and poverty reduction from not using public funds to alternative uses with greater returns

Thank you