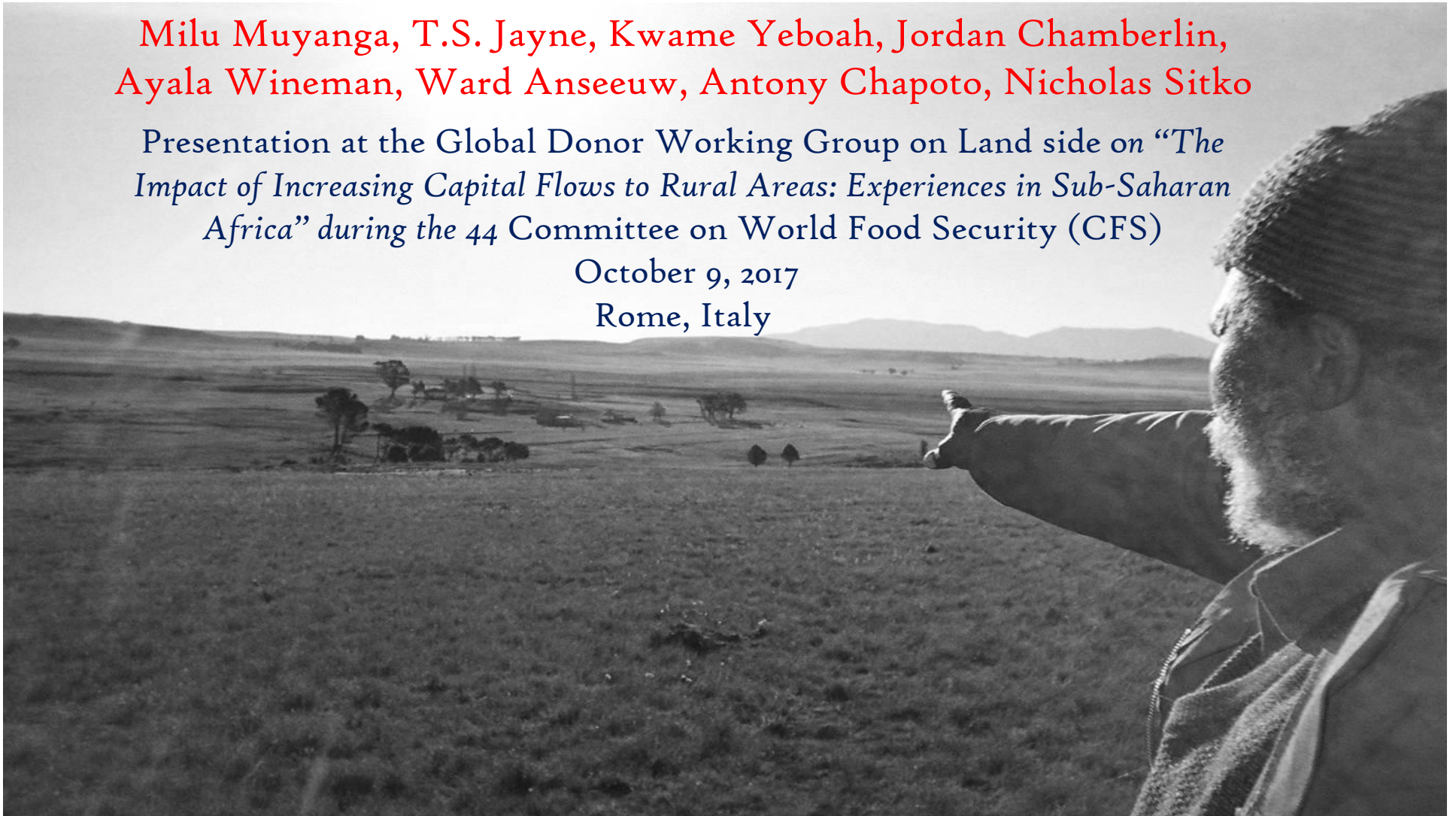


# Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions

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Presentation at the Global Donor Working Group on Land side on “*The Impact of Increasing Capital Flows to Rural Areas: Experiences in Sub-Saharan Africa*” during the 44 Committee on World Food Security (CFS)

October 9, 2017  
Rome, Italy





# FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative



**Acknowledgements:** The work highlighted here is jointly funded through the generous support of the American people through the United States Agency for International Development (USAID) under the Food Security Policy Innovation Lab and by the Bill and Melinda Gates Foundation under the Guiding Investments in Sustainable Agricultural Intensification Grant to MSU.



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# Outline

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1. Document how rapidly farm structure is changing
2. Characteristics of MS farmers
3. Causes
4. Consequences
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## Changes in farm structure in Tanzania (2008-2012), LSMS/National Panel Surveys

Farm size	Number of farms (% of total)		% growth in number of farms between initial and latest year	% of total operated land on farms between 0-100 ha		
	2008	2012		2008	2012	
0 – 5 ha	5,454,961 (92.8)	6,151,035 (91.4)	12.8	62.4	56.3	- 6.1%
5 – 10 ha	300,511 (5.1)	406,947 (6.0)	35.4	15.9	18.0	
10 – 20 ha	77,668 (1.3)	109,960 (1.6)	41.6	7.9	9.7	+ 6.1%
20 – 100 ha	45,700 (0.7)	64,588 (0.9)	41.3	13.8	16.0	
<b>Total</b>	<b>5,878,840 (100%)</b>	<b>6,732,530 (100%)</b>	<b>14.5</b>	<b>100.0</b>	<b>100.0</b>	

# Changes in farm structure in Ghana (1992-2013)

Ghana	Number of farms		% growth in number of farms	% of total cultivated area	
	1992	2013		1992	2013
0-2 ha	1,458,540	1,582,034	8.5	25.1	14.2
2-5 ha	578,890	998,651	72.5	35.6	31.3
5-10 ha	116,800	320,411	174.3	17.2	22.8
10-20 ha	38,690	117,722	204.3	11.0	16.1
20-100 ha	18,980	37,421	97.2	11.1	12.2
>100 ha	--	1,740	-	--	3.5
<b>Total</b>	<b>2,211,900</b>	<b>3,057,978</b>	<b>38.3</b>	<b>100</b>	<b>100</b>

51.1%

Source: Ghana GLSS Surveys, 1992, 2013, Jayne et al., 2016, using data from Ghana GLSS Surveys I and IV.

# Changes in farm structure in Zambia (2001-2012)

Farm size category	Number of farms		% growth in number of farms	% of total cultivated area	
	2001	2012		2001	2012
0 – 2 ha	638,118	748,771	17.3	34.1	16.2
2 – 5 ha	159,039	418,544	163.2	45	31.7
5 – 10 ha	20,832	165,129	692.6	14.3	25.0
10 – 20 ha	2,352	53,454	2272.7	6.6	15.0
20 – 100 ha	--	13,839	na	--	12.1
<b>Total</b>	<b>820,341</b>	<b>1,399,737</b>		<b>100</b>	<b>100</b>

52.1%

Source: Zambia MAL Crop Forecast Surveys, 2001 and 2012

# Changes in farm size distributions: Summary

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1. Number of small farms growing slowly
2. Share of area under small farms declining
3. Number of medium-scale farms growing rapidly
4. Share of area under medium-scale growing, and currently over 40% of farm holdings (> 25% of cultivated area)



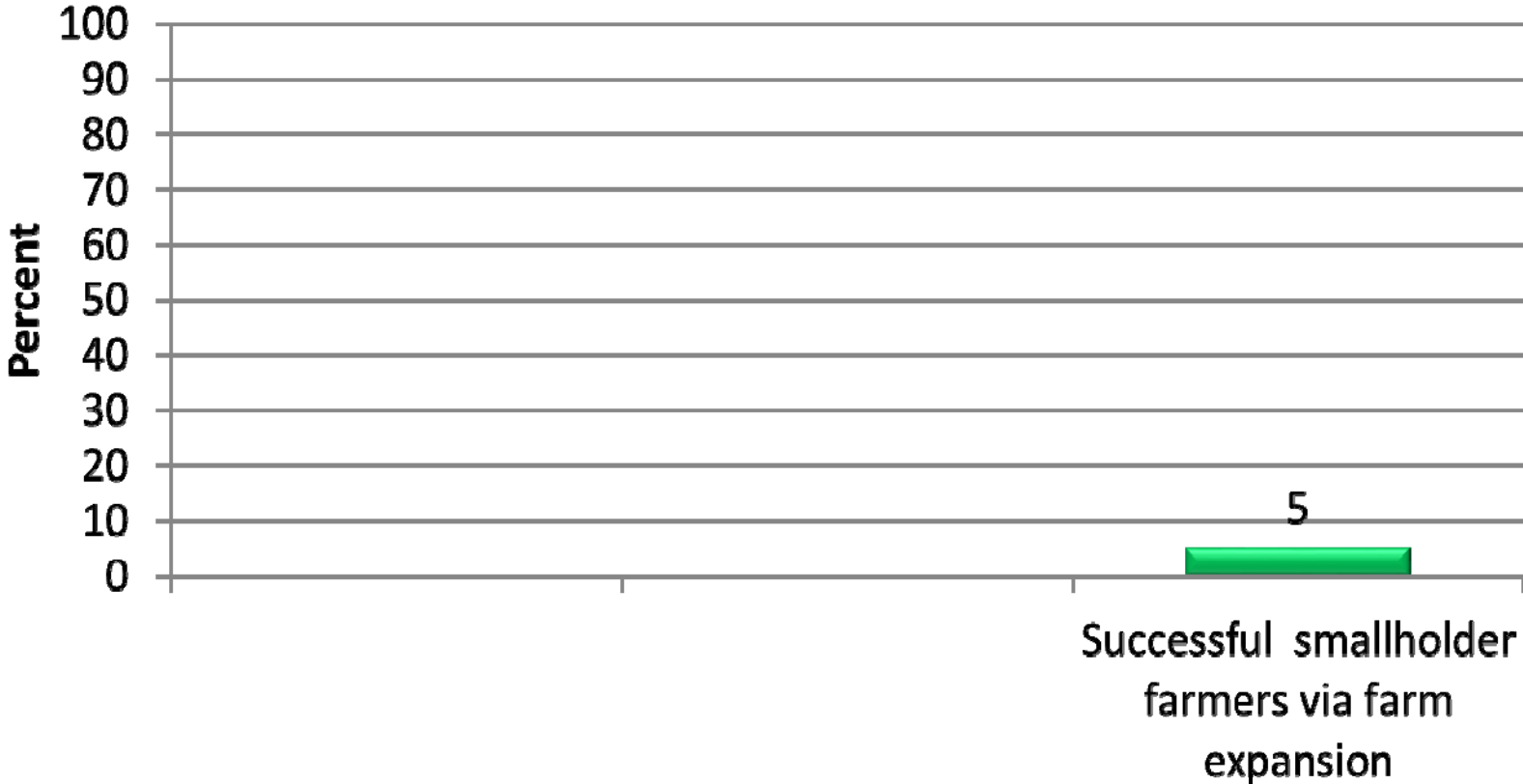
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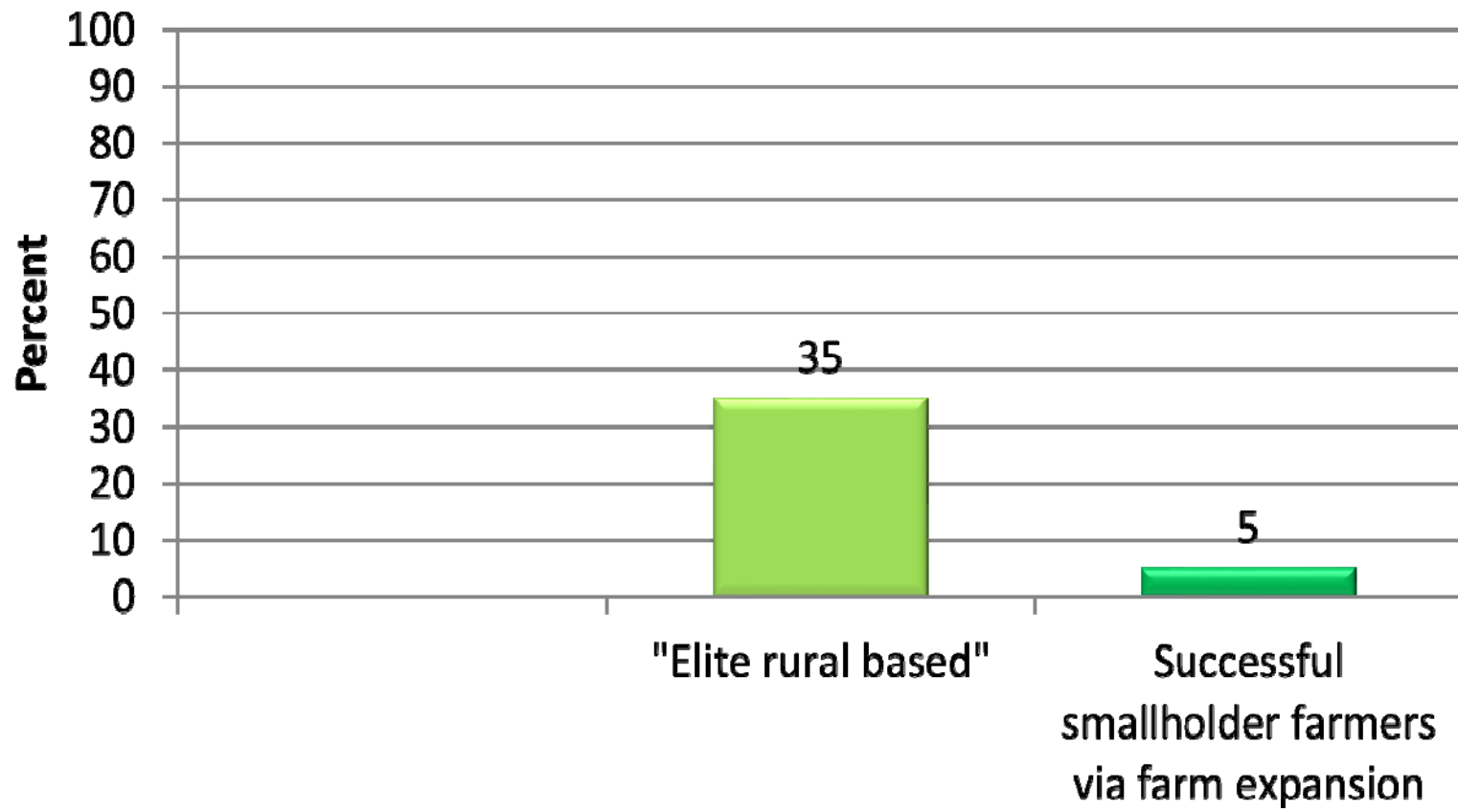
# Rise of the medium-scale farmers

## Three sub-categories of medium scale farmers (Kenya, Zambia, Ghana)



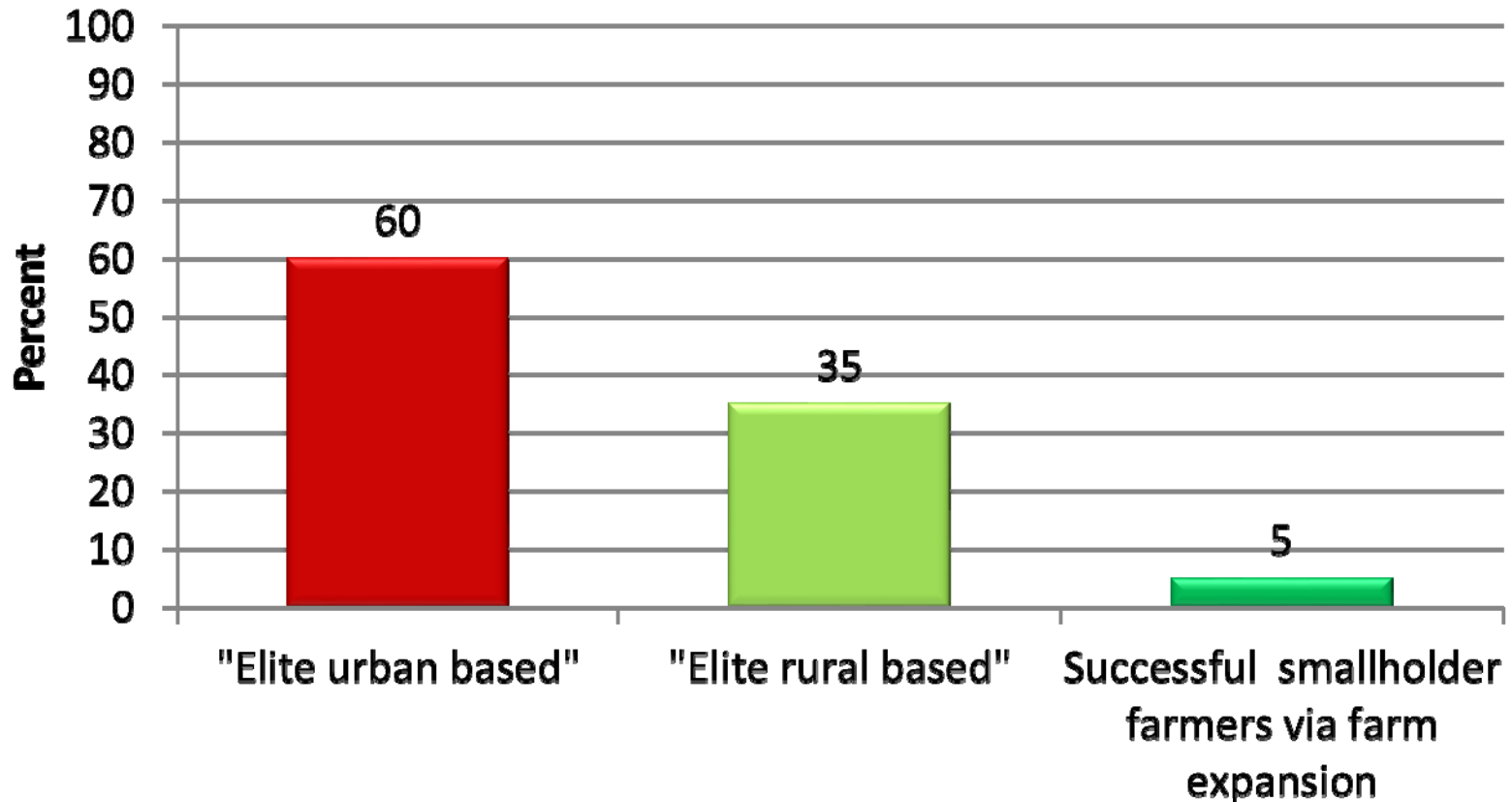
# Rise of the medium-scale farmers

## Three sub-categories of medium scale farmers: Kenya, Zambia, Ghana

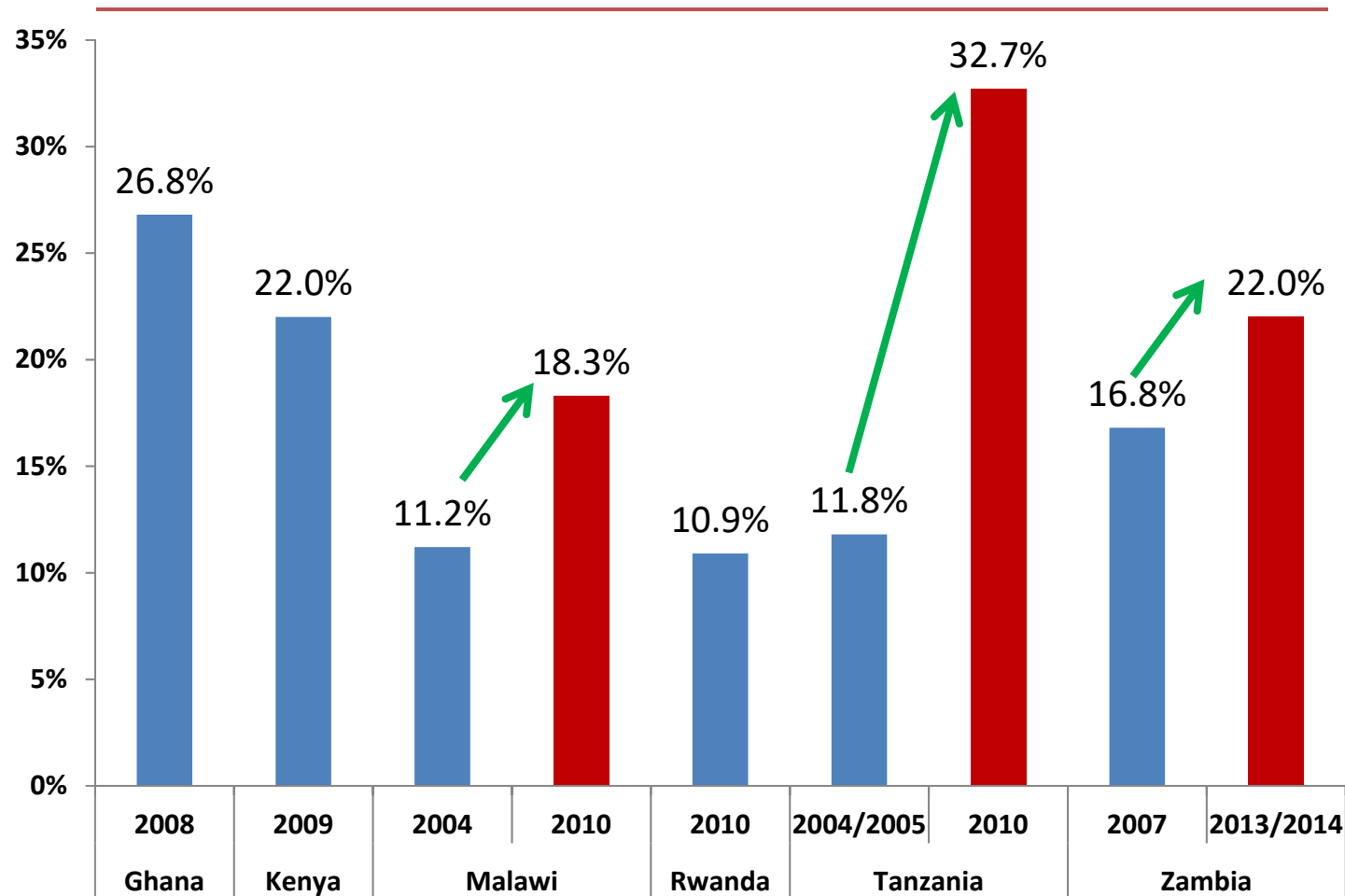


# Rise of the medium-scale farmers

**Three sub-categories of medium scale farmers: Kenya, Zambia, Ghana**



# % of National Landholdings held by Urban Households



Source: Demographic and Health Surveys, various years between 2004-2014.

# Type I: Urban-based investor farmer

	Mode of entry to medium-scale farming status: acquire farm using non-farm income	
	Zambia	Kenya
	(n=164)	(n=180)
% of cases	58	60
% men	91.4	80
Year of birth	1960	1947
Years of education of head	11	12.7
Have held a job other than farmer (%)	100	83.3
Formerly /currently employed by the public sector (%)	59.6	56.7
Current landholding size (ha)	74.9	50.1
% of land currently under cultivation	24.7	46.6
Decade when land was acquired		
1969 or earlier	1.1	6
1970-79	5.1	18
1980-89	7.4	20
1990-99	23.8	32
2000 or later	63.4	25

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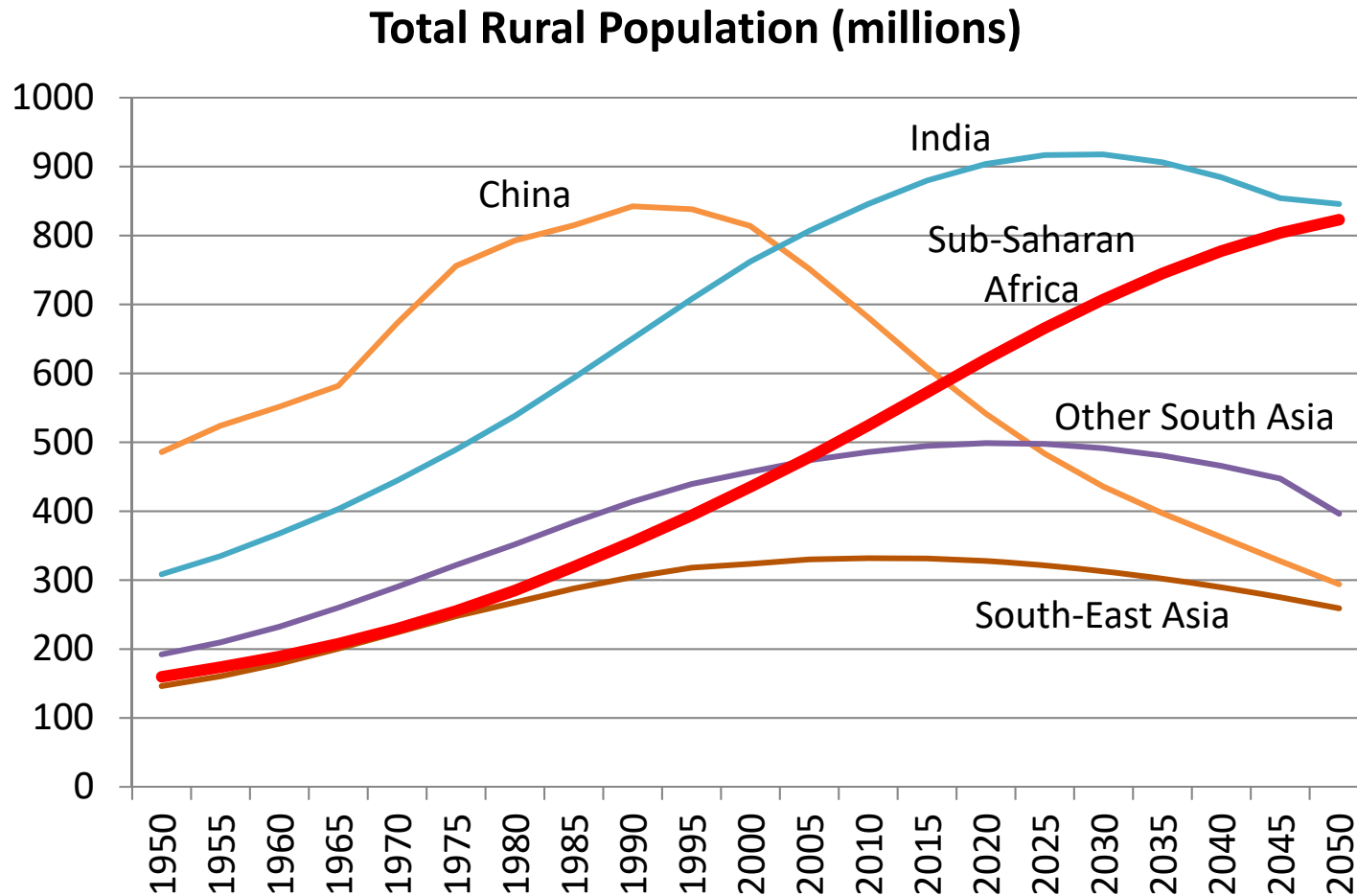
# Causes of changing farm size distributions

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1. Rise in world food prices – heightened investor interest in farmland
2. Urban farmer capture of land policy / farm lobbies
3. Rapid population growth
  - Fragmentation/subdivision in areas of favorable mkt access
  - Land inheritance declining
  - Rising land scarcity → land markets → rising land prices
  - Rising challenges of youth access to land → migration

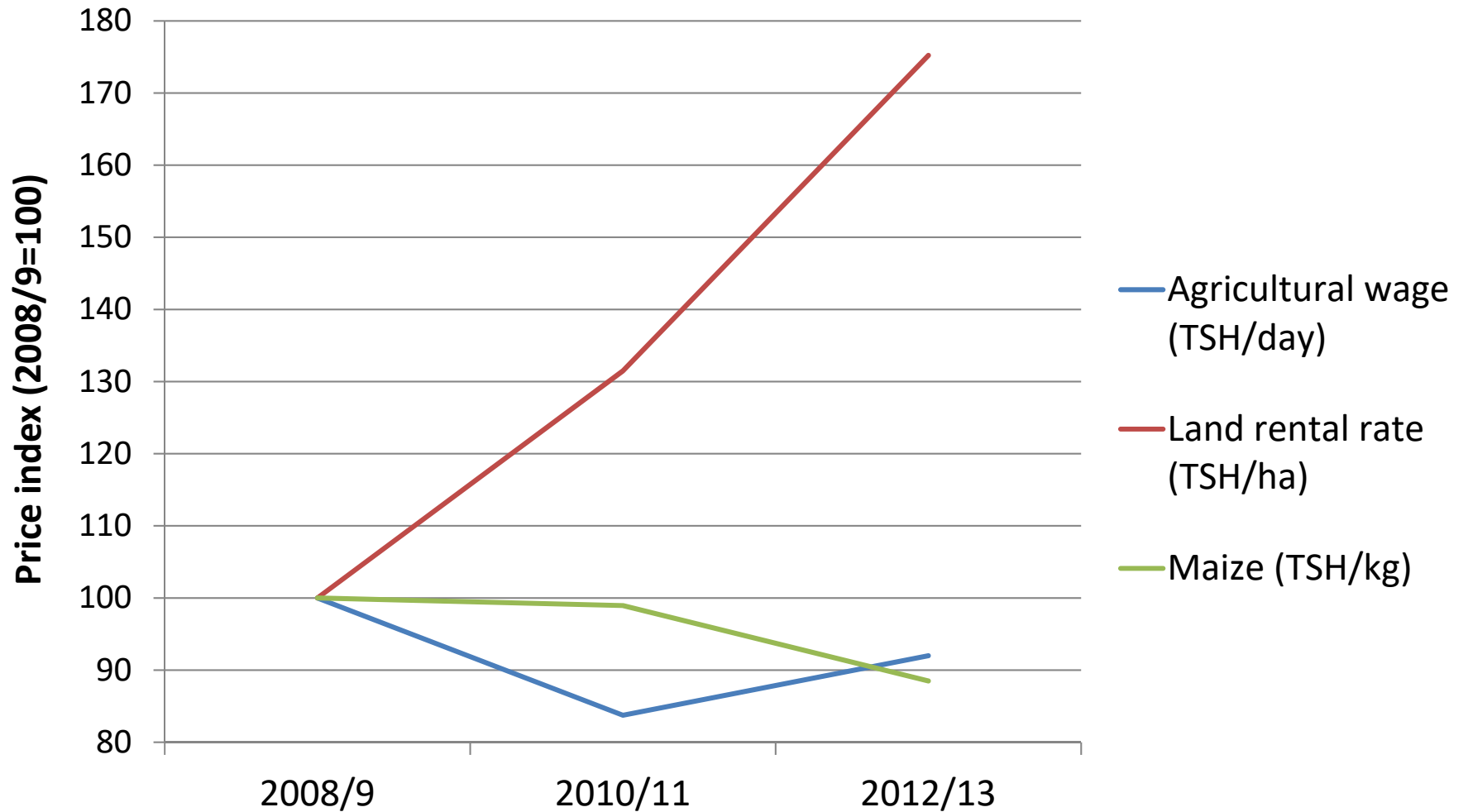


# Sub-Saharan Africa: only region of world where rural population continues to rise past 2050

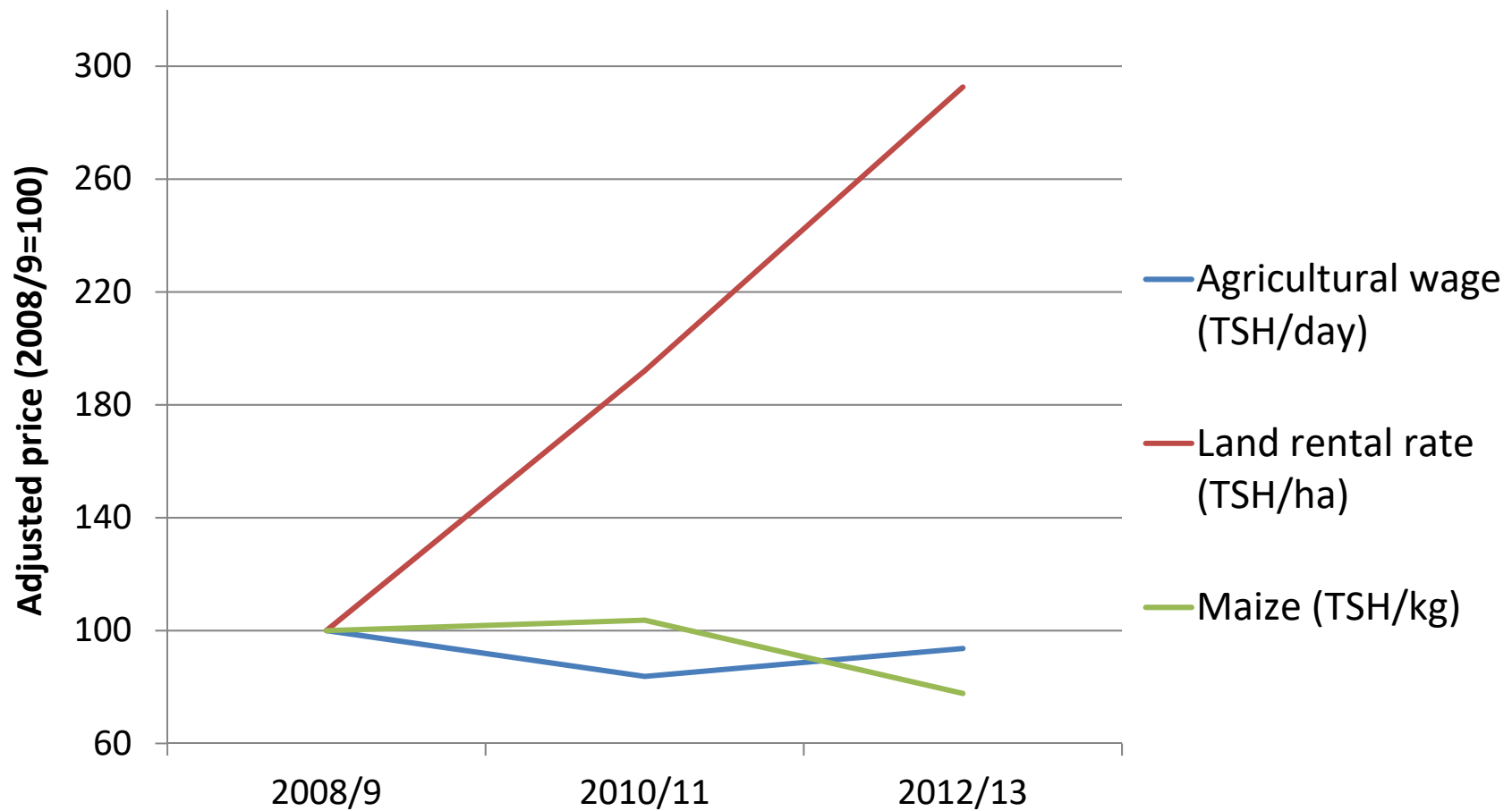


Source: UN 2013

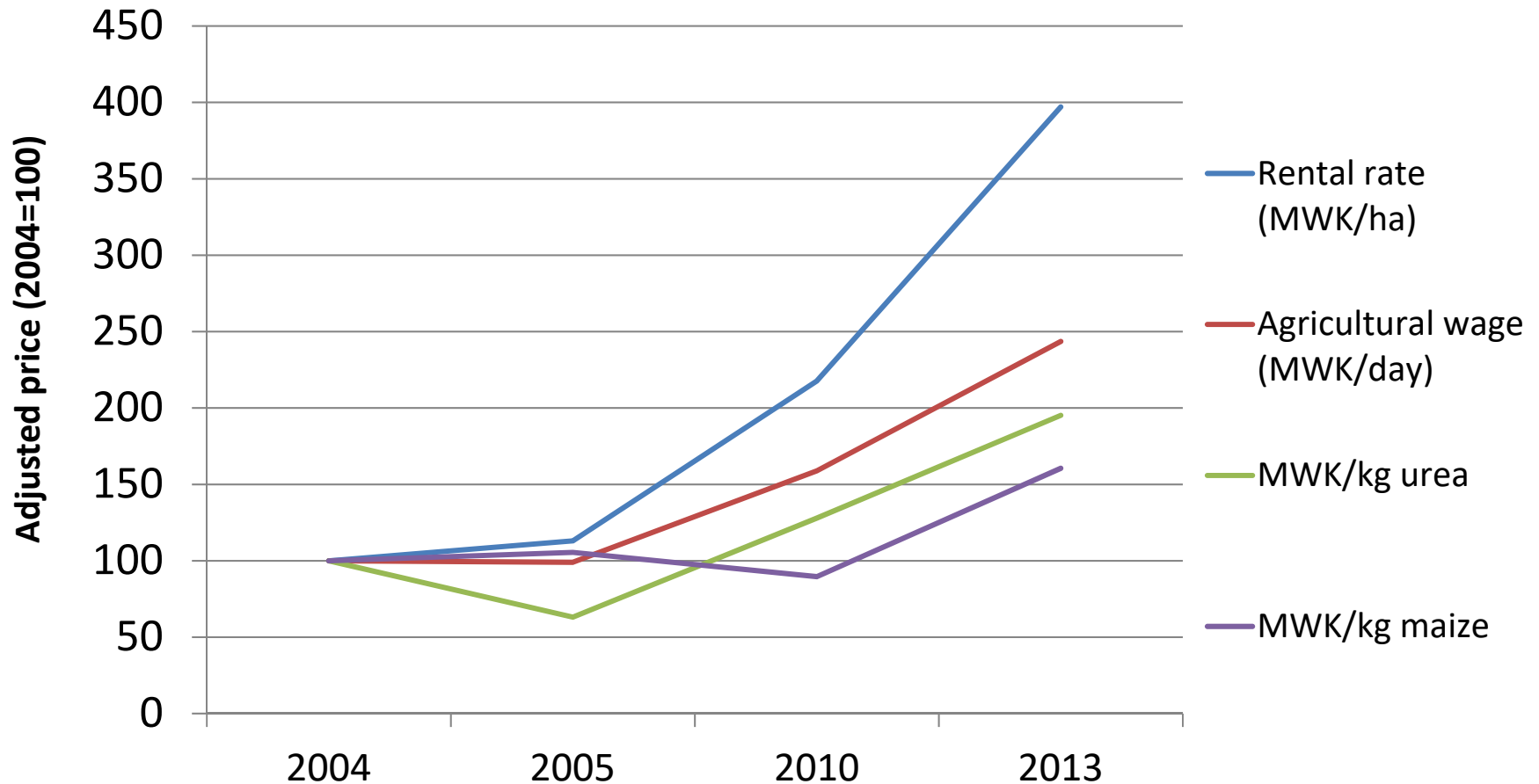
# Output and factor price indices, northern Tanzania



# Output and factor price indices, western Tanzania



# Output and factor price indices, rural Malawi, 2004-2013



Sources: IHS for land and wages; FEWSNET for urea and maize

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# Consequences of changing farm size distributions (+++)

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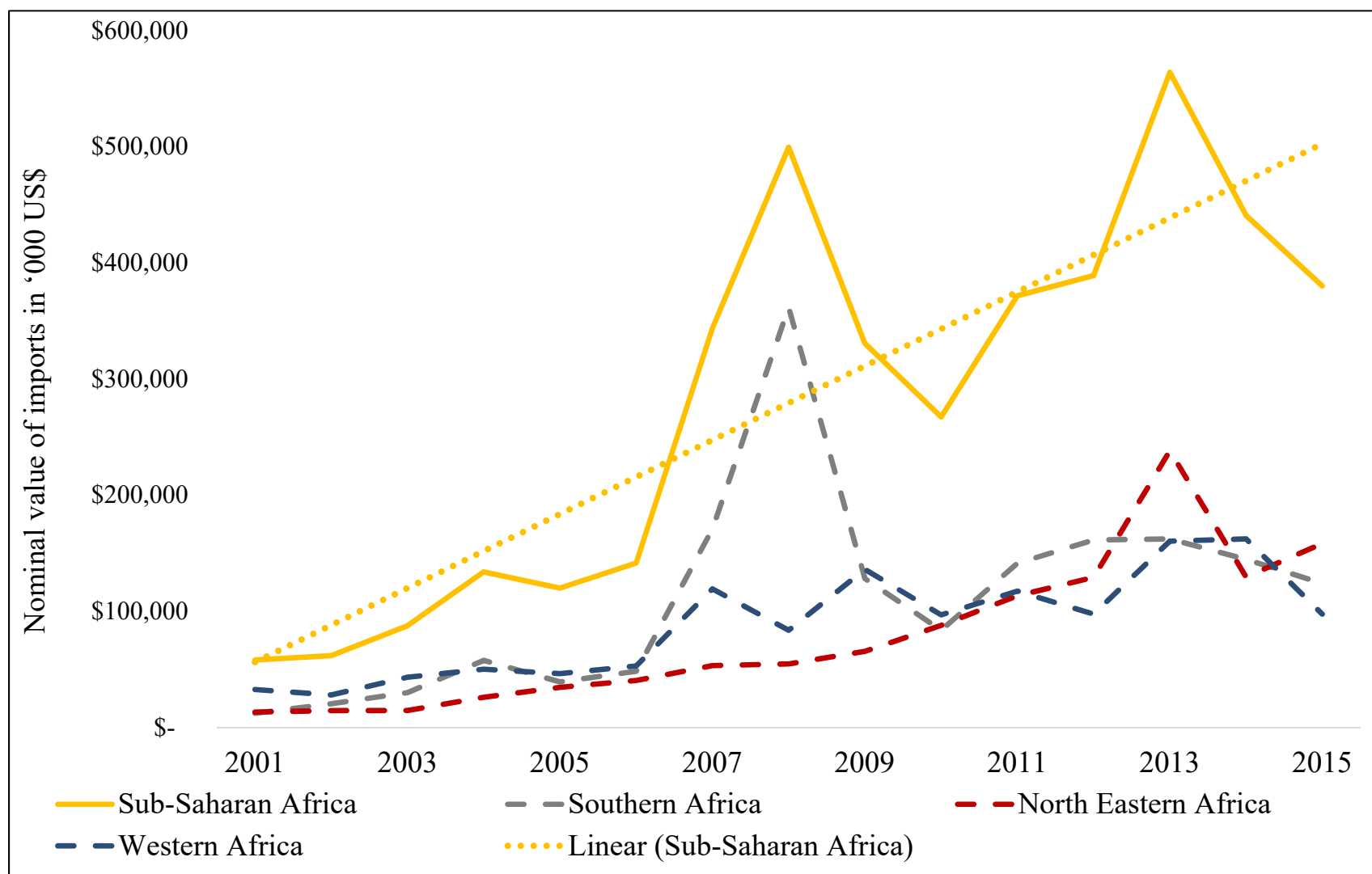
1. Rising use of **mechanization**
2. More **capital** using/labor-saving forms of agricultural production
3. Medium-scale farm contributing a large share of **marketed grains**- Kenya, Tanzania, Zambia
  - Selling to large grain traders
  - Higher prices due to reduced transaction costs
4. **Productivity** differences between small and medium-scale farms – limited evidence
  - But reasons to believe that capitalized and educated MS farms will be more productive

# Consequences of changing farm size distributions (---)

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5. Growing **land scarcity** driven by middle/high income urban people seeking to acquire land – not just for land
  - Speculation, housing/properties, farming
  - Rise of new towns converting formerly remote land into valued property
  
6. Rising **inequality** of farmland distribution
  - Some displacement
  - Rising land prices → straining youth access to land

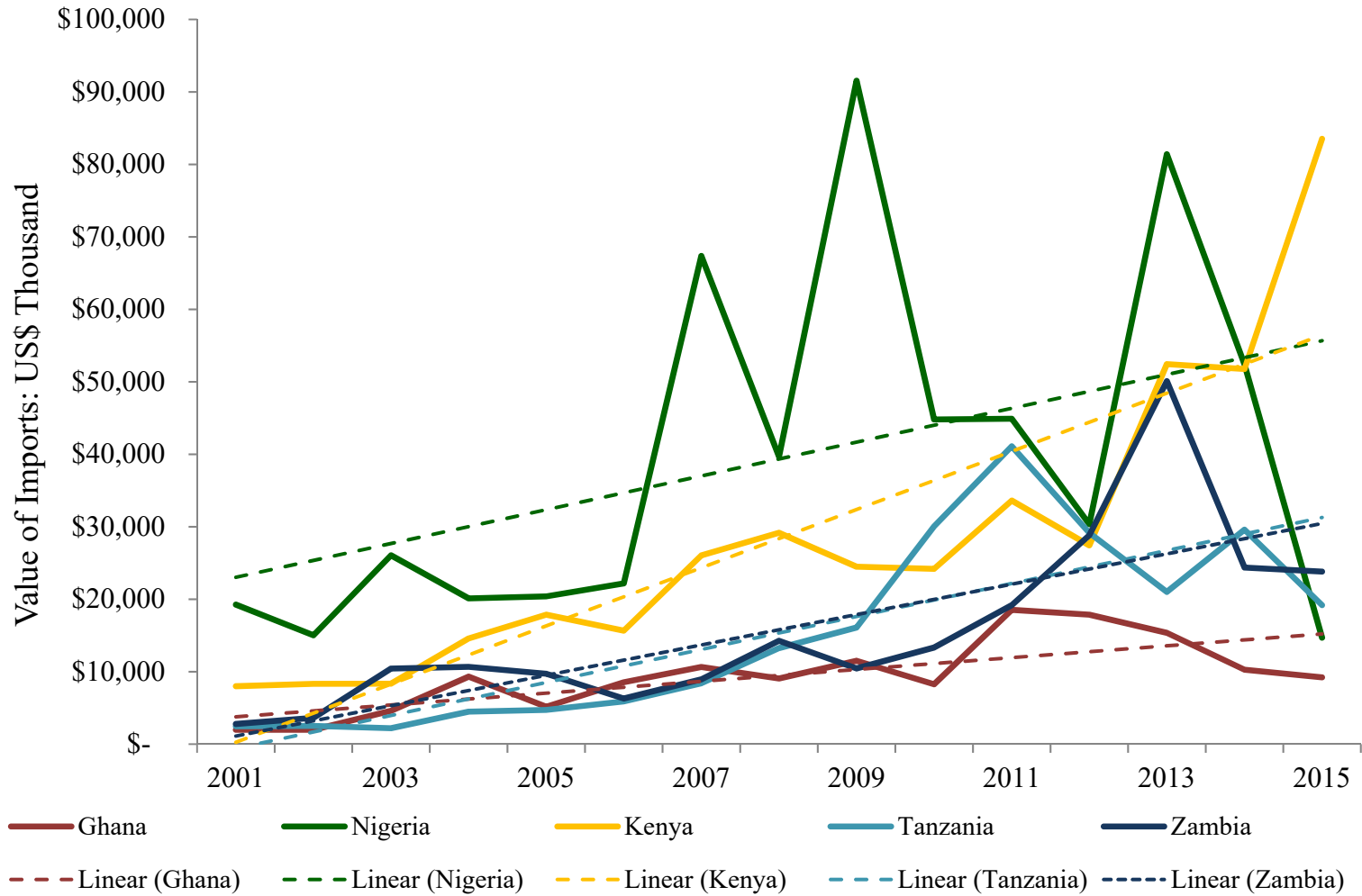
## Nominal value of tractor imports to Sub-Saharan Africa (excluding South Africa), 2001-2015



Source: vanderWesthuisen, forthcoming



# Nominal value of tractor imports in selective Sub-Saharan African countries (2001-2015)



Source: vanderWesthuisen, forthcoming

# GINI coefficients in farm landholding

	Period	Movement in Gini coefficient:
Ghana (cult. area) (GLSS)	1992 → 2013	0.54 → 0.70
Kenya (cult. area) (KIHBS)	1994 → 2006	0.51 → 0.55
Tanzania (landholdings) (LSMS)	2008 → 2012	0.63 → 0.69
Tanzania (area controlled) (ASCS)	2008	0.89
Zambia (landholding) (CFS)	2001 → 2012	0.42 → 0.49

Source: Jayne et al. 2014 (JIA)

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# Implications for policy

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## 1. The “transition” issue

- How to transform African economies from current situation to more diversified and productive economies

## 2. Agricultural productivity growth will be the cornerstone of any comprehensive youth livelihoods strategy:

- Ag productivity growth influences
  - Pace of labor force exit out of farming
  - Labor productivity in broader economy

# Implications for policy (cont.)

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3. Agricultural sector policies must anticipate and respond to:
  - Rising land prices, decline of inheritance, market as increasingly important mode of acquiring land
  - Resources needed for youth to succeed in farming (access to land, finance, etc.)
  - Distinguish between “trying to keep youth in agriculture” vs. “giving youth viable choices”

# Major challenges/research issues for land policies: How to effectively

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1. Strengthen **land use planning** to identify surplus agricultural land that can be allocated to investors without displacing local people
2. Encourage **access to unutilized land** to those who can raise agricultural productivity
3. Provide stronger **land rights for women**: while many African countries have new laws recognizing gender equality, implementation is weak, especially given continued dominance of customary practices, which tend to discriminate against women

Thank  
You