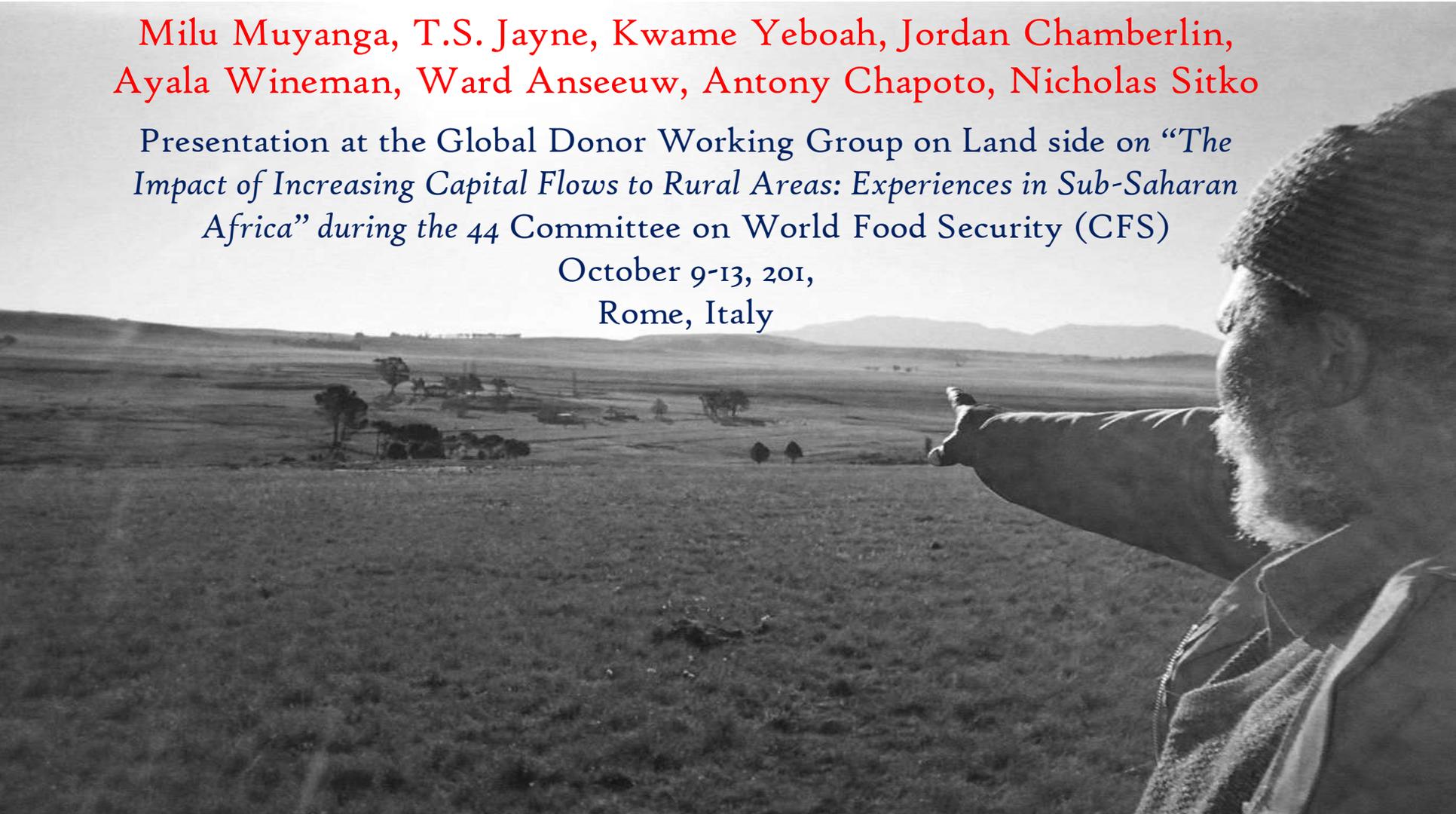


Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions

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Outline

1. Document how rapidly farm structure is changing
2. Characteristics of MS farmers
3. Causes
4. Consequences
5. Implications

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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	
Total	5,878,840 (100%)	6,732,530 (100%)	14.5	100.0	100.0	

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
Total	2,211,900	3,057,978	38.3	100	100

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
Total	820,341	1,399,737		100	100

52.1%

Source: Zambia MAL Crop Forecast Surveys, 2001 and 2012

Changes in farm size distributions: Summary

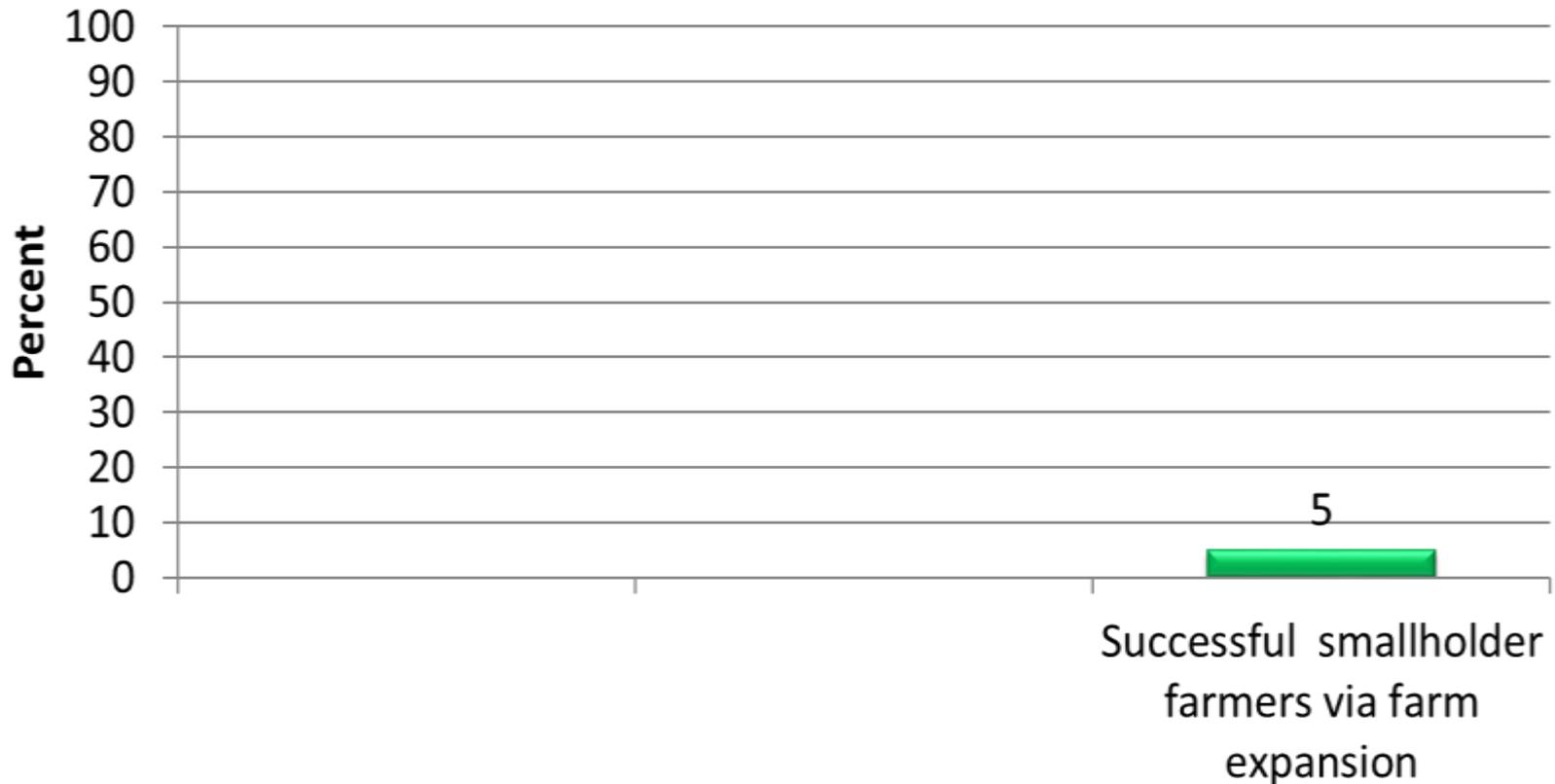
1. Number of small farms growing slowly
2. Share of area under small farms declining
3. Number of medium-scale farms growing rapidly
4. Share of area under medium-scale growing, and currently over 40% of farm holdings (> 25% of cultivated area)

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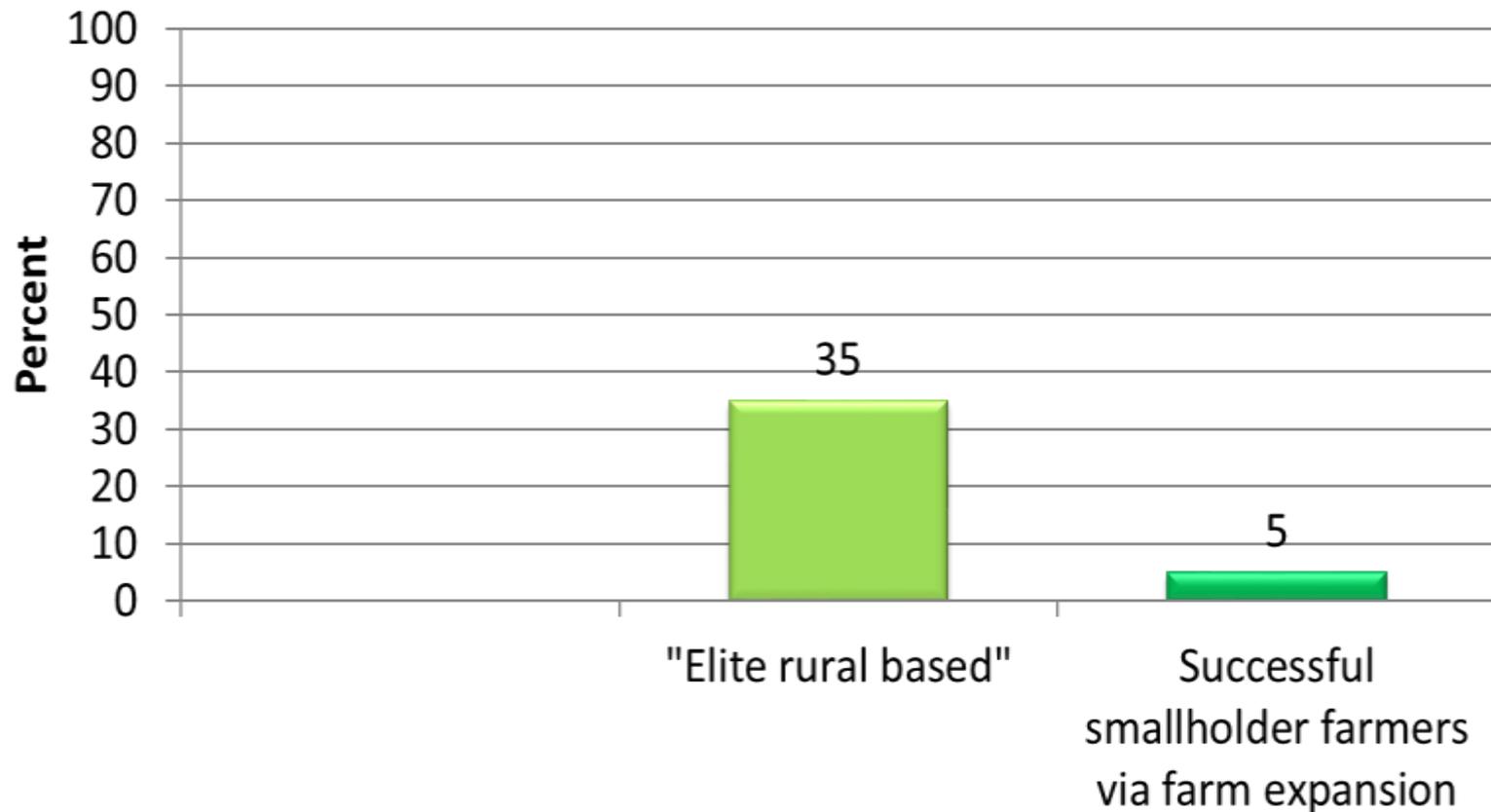
Rise of the medium-scale farmers

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



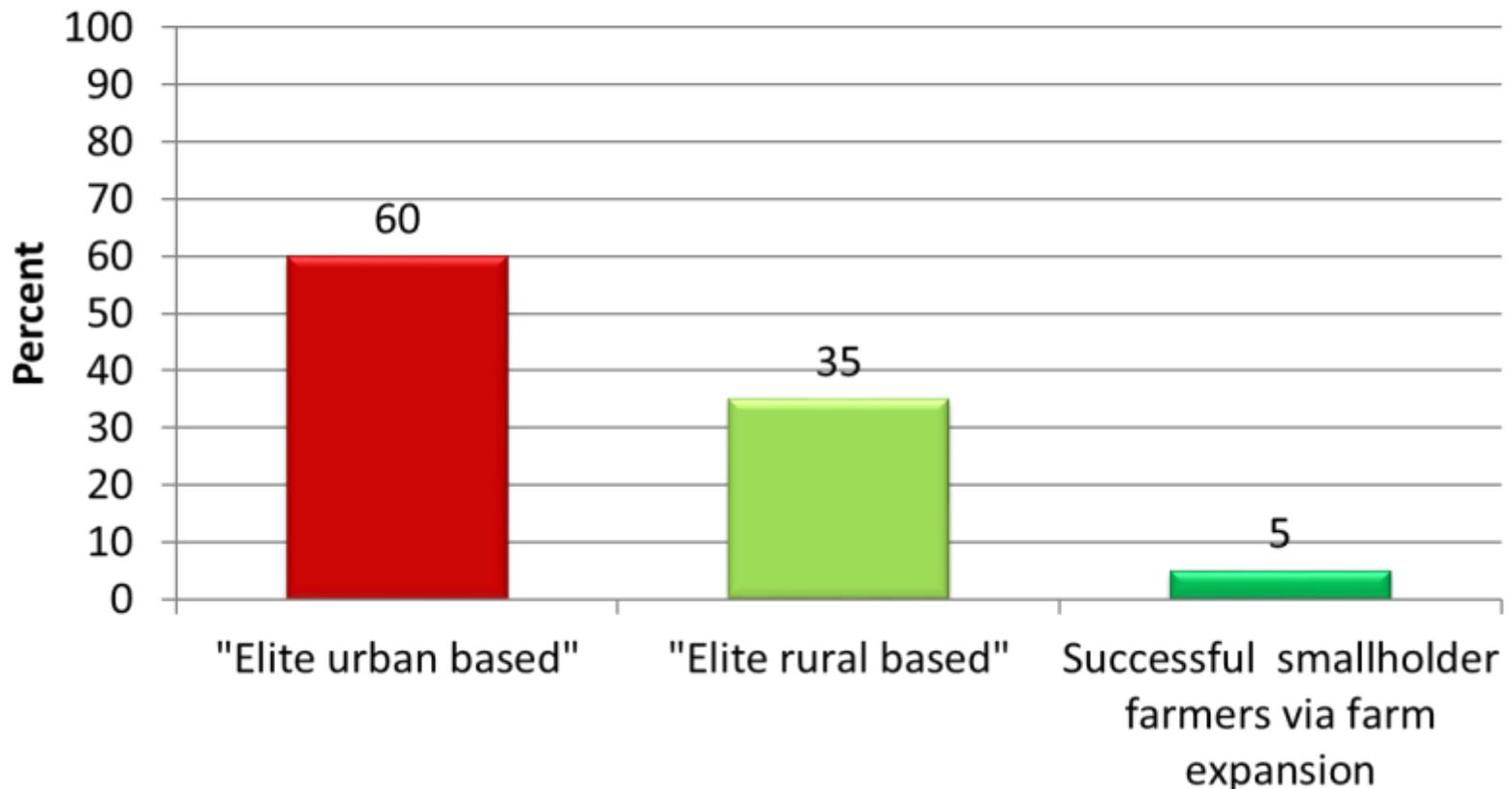
Rise of the medium-scale farmers

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

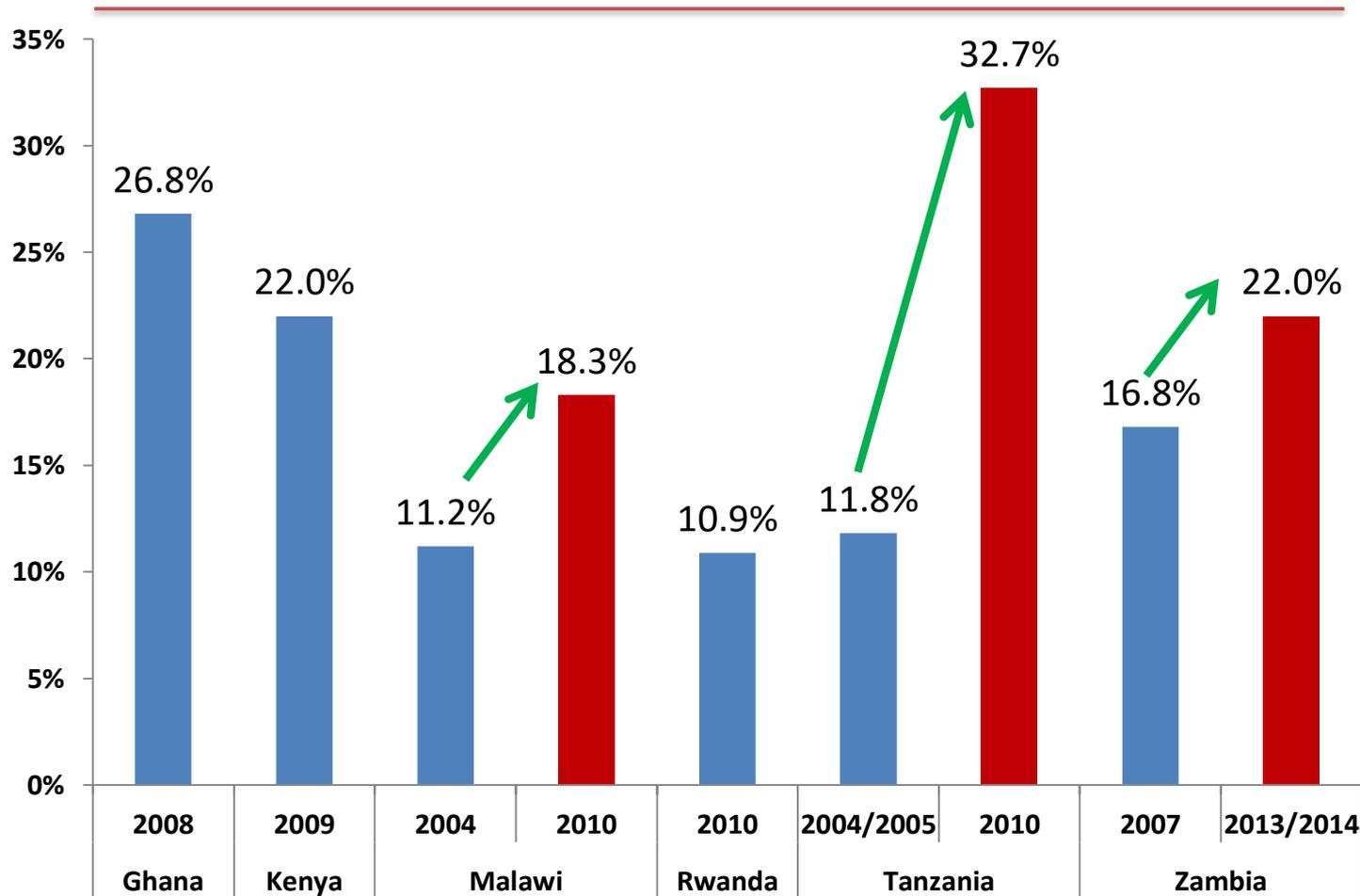


Rise of the medium-scale farmers

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

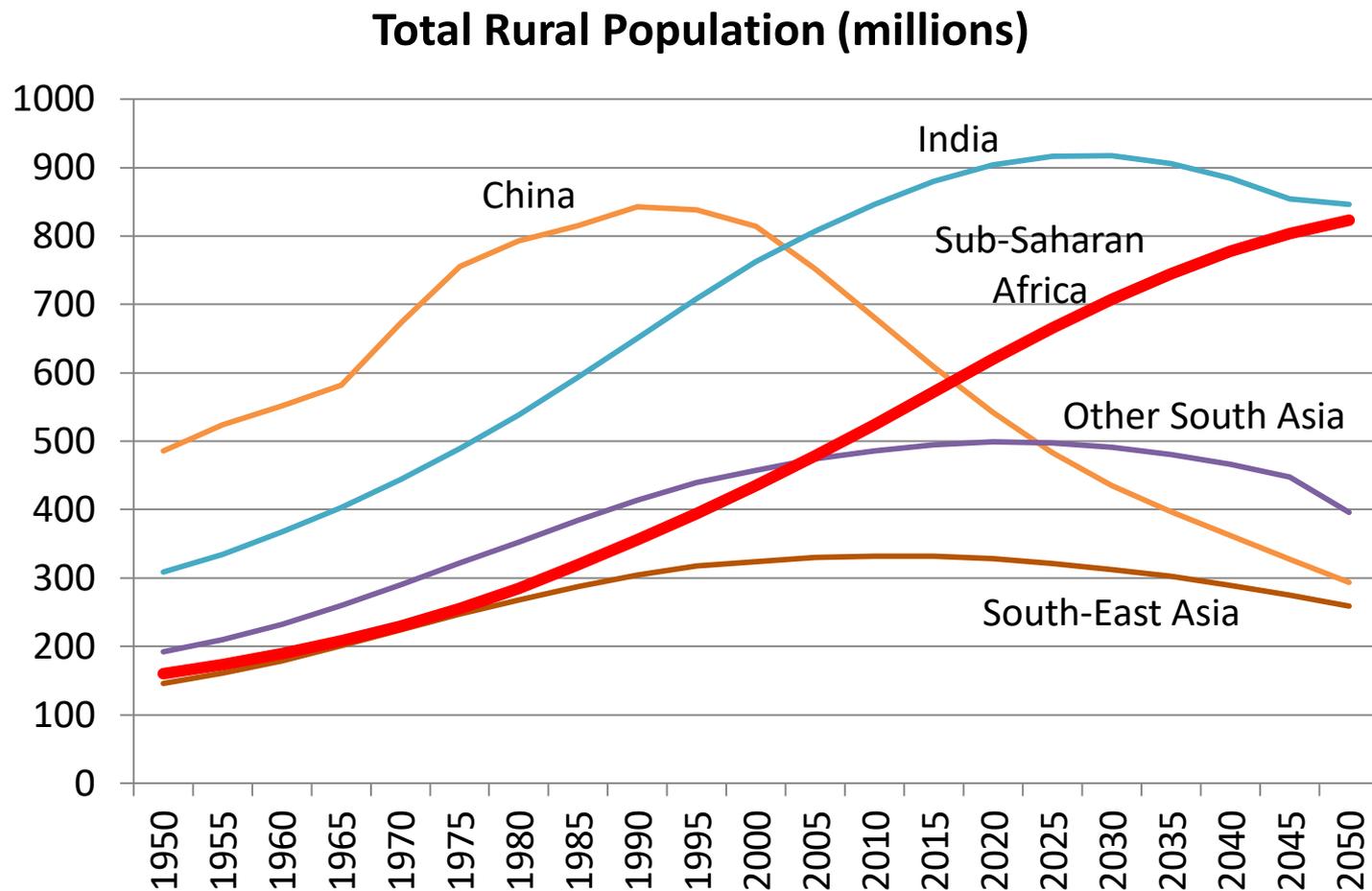
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Causes of changing farm size distributions

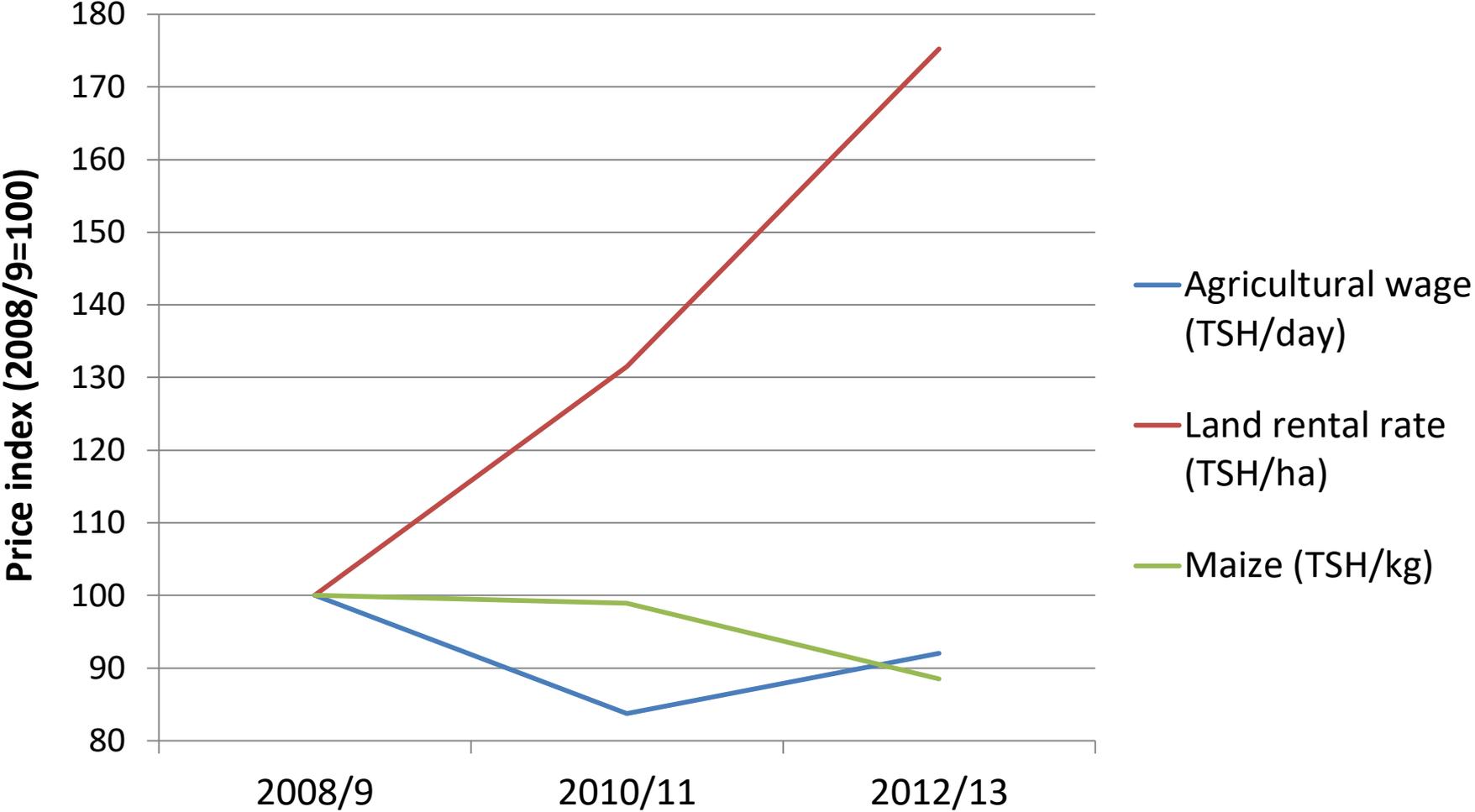
1. Rise in world food prices – heightened investor interest in farmland
2. Urban farmer capture of land policy / farm lobbies
3. Rapid population growth
 - Fragmentation/subdivision in areas of favorable mkt access
 - Land inheritance declining
 - Rising land scarcity → land markets → rising land prices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

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

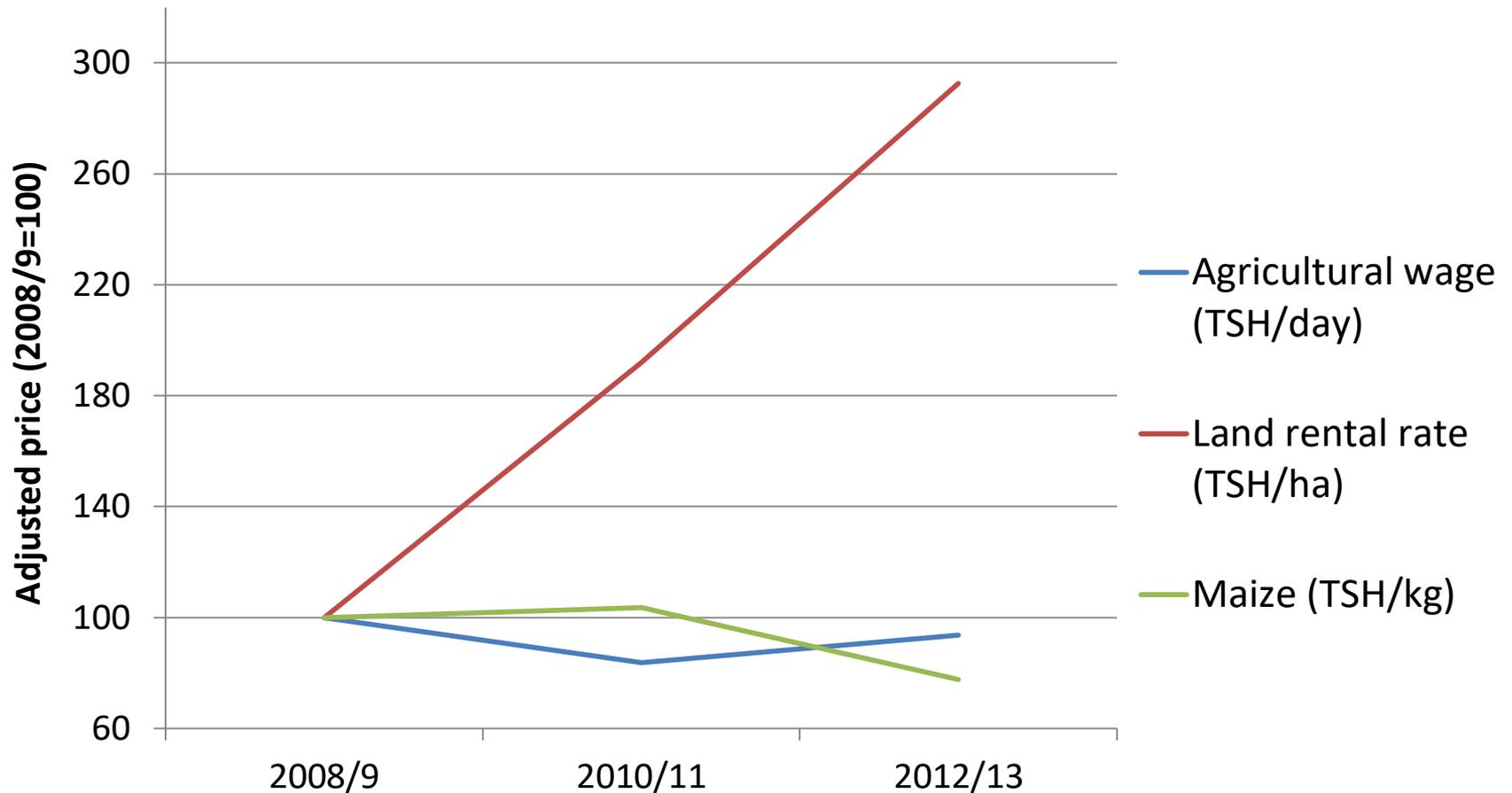


Source: UN 2013

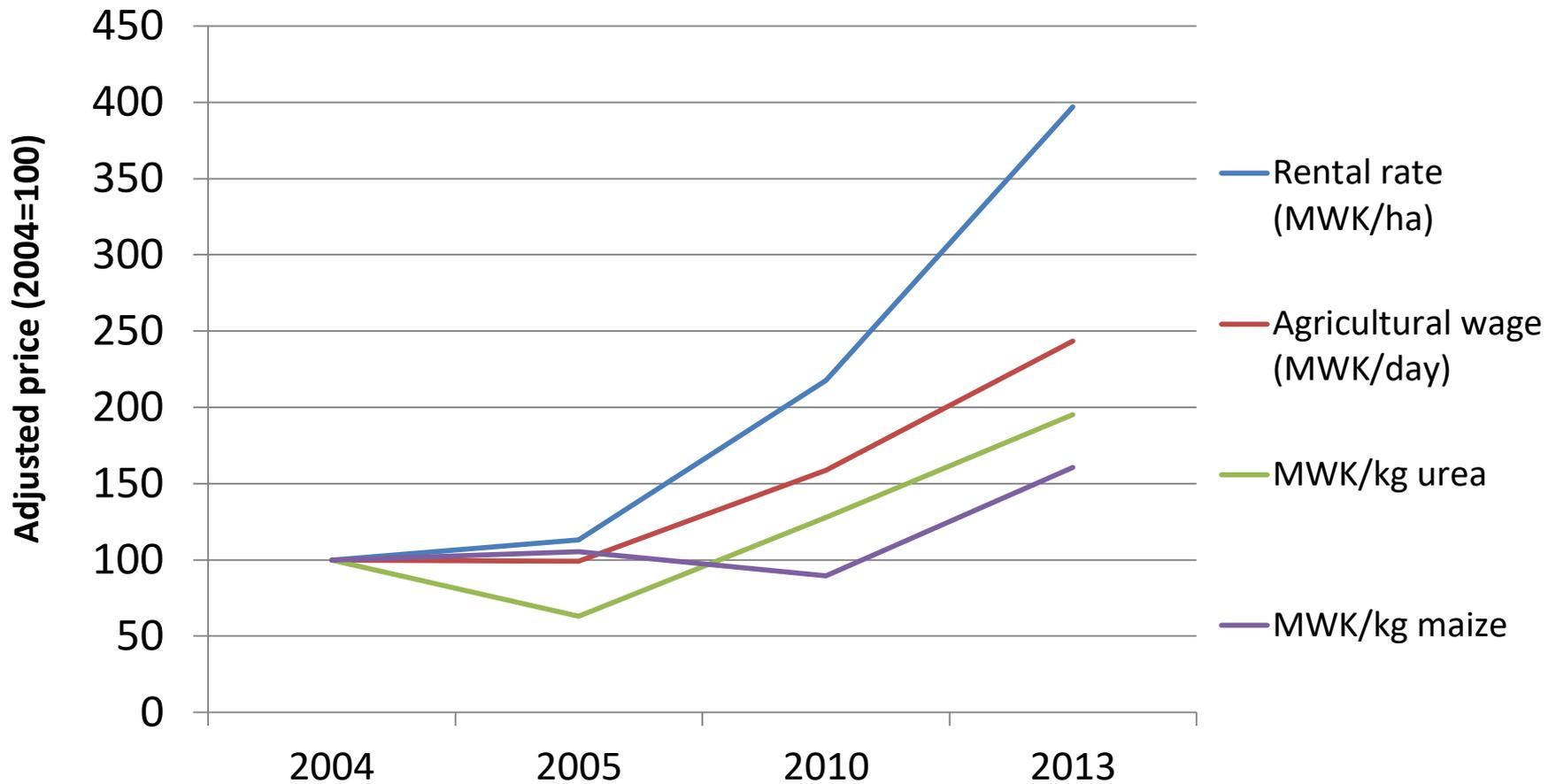
Output and factor price indices, northern Tanzania



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 (+++)

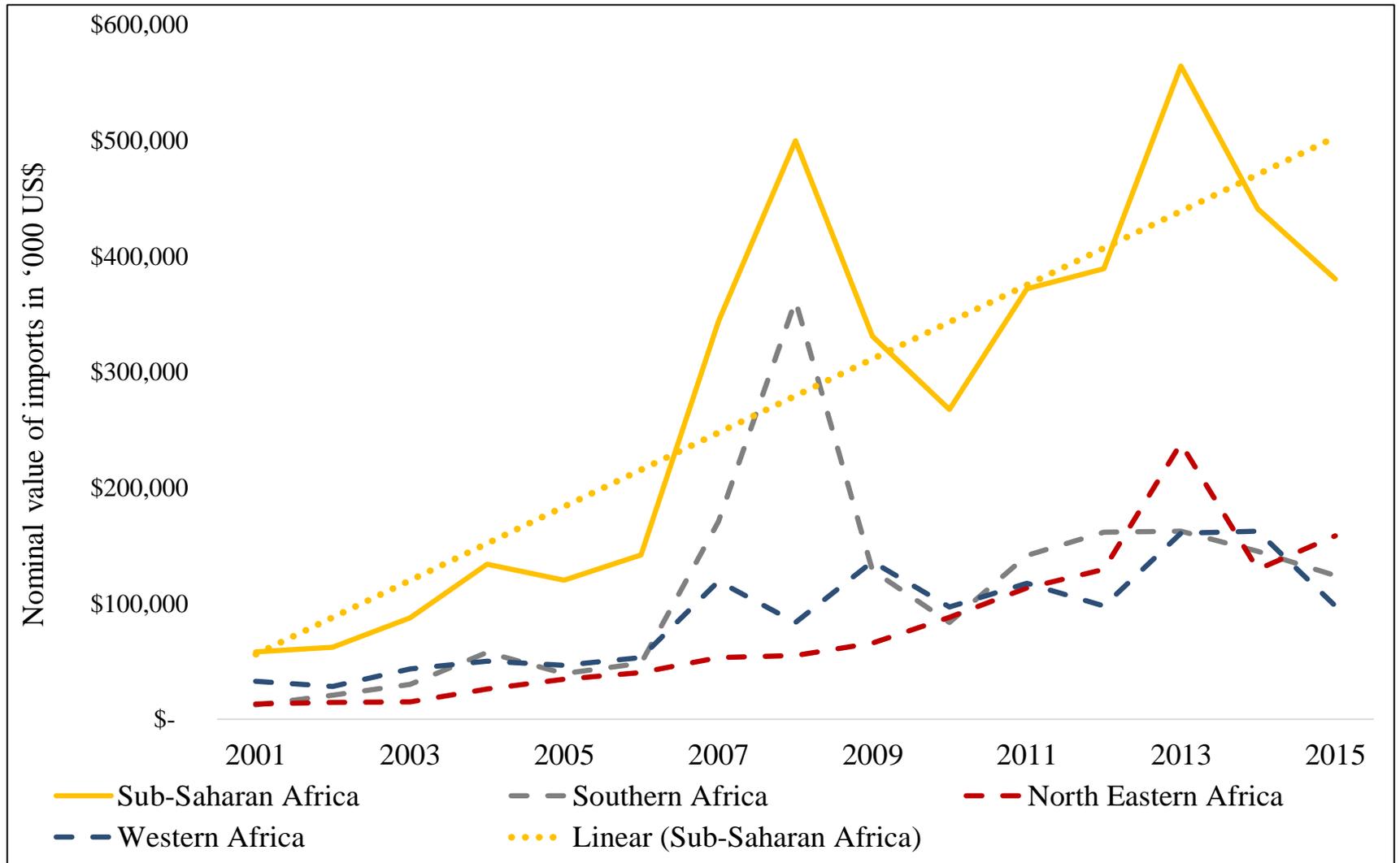
1. Rising use of **mechanization**
2. More **capital** using/labor-saving forms of agricultural production
3. Medium-scale farm contributing a large share of **marketed grains**- Kenya, Tanzania, Zambia
 - Selling to large grain traders
 - Higher prices due to reduced transaction costs
4. **Productivity** 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 (---)

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

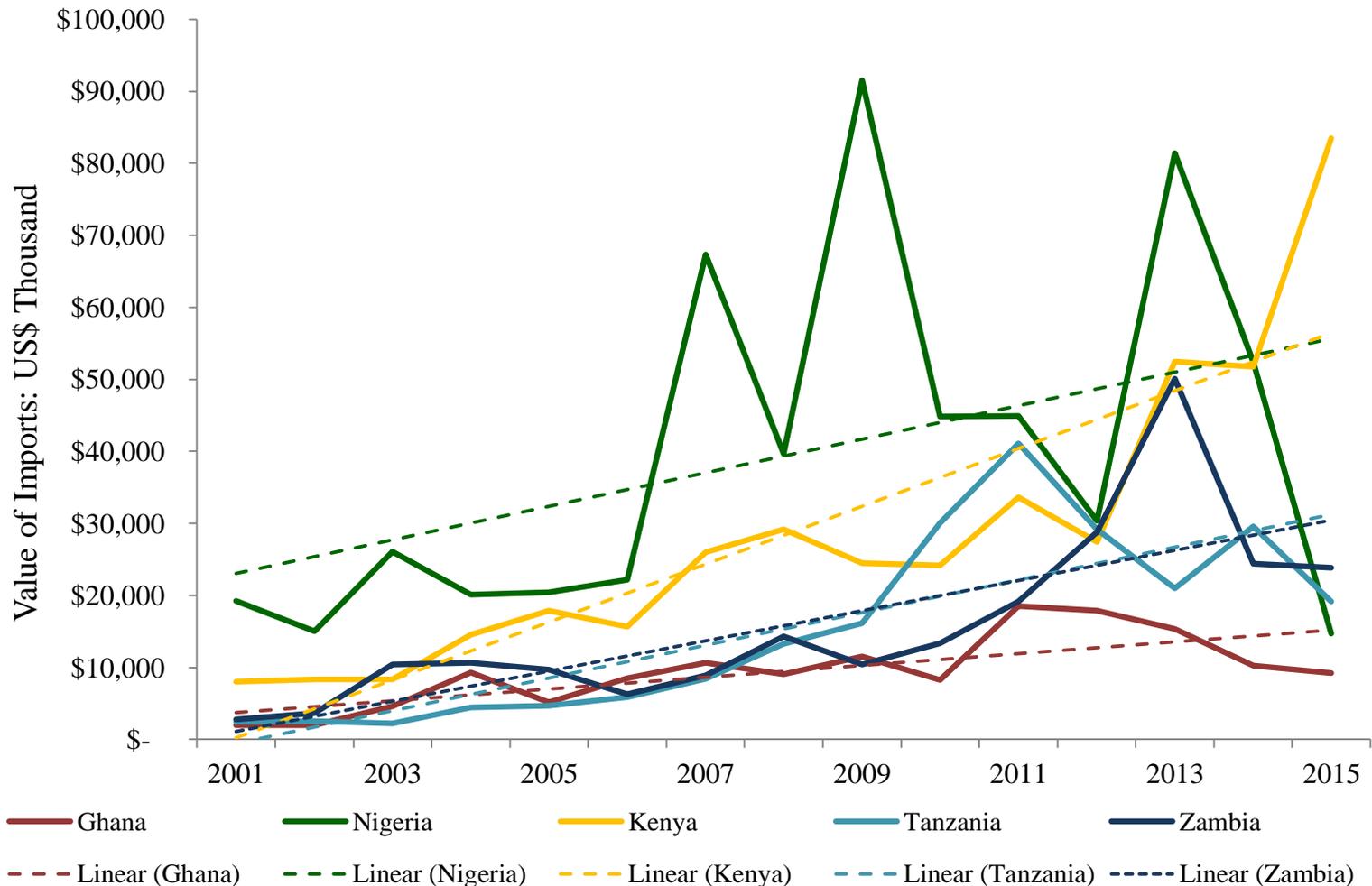
6. Rising **inequality** of farmland distribution
 - Some displacement
 - Rising land prices → straining youth access to land

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

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.)

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

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

