

**Integrating Food and Nutrition Security into Economic Transformation** and Industrialization Agenda:

How can agriculture be the driver rather than follower of economic transformation in Tanzania?



**New Dodoma Hotel, Dodoma** 

**14th - 16th February, 2018** 









































# The Changing Farm Structure in Africa: Causes, Consequences and Policy Implications

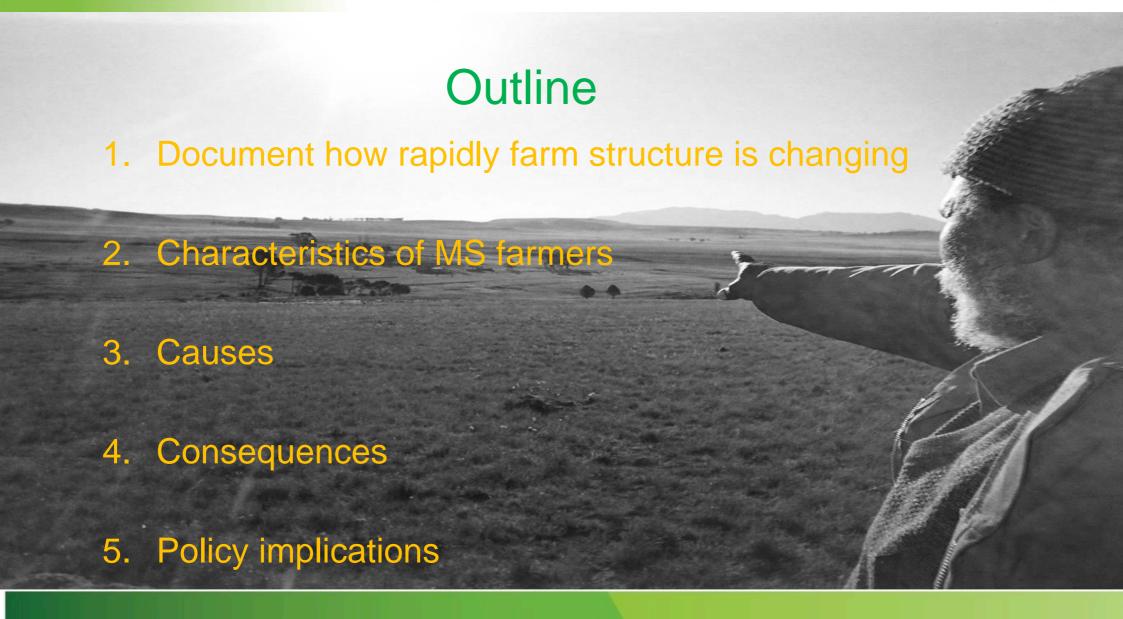
Milu Muyanga, T.S. Jayne, Isaac Minde, David Nyange, Kwame Yeboah, Jordan Chamberlin, Ayala Wineman, Ward Anseeuw, Antony Chapoto, Nicholas Sitko





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#### Changes in farm structure in Tanzania (2008-2012)

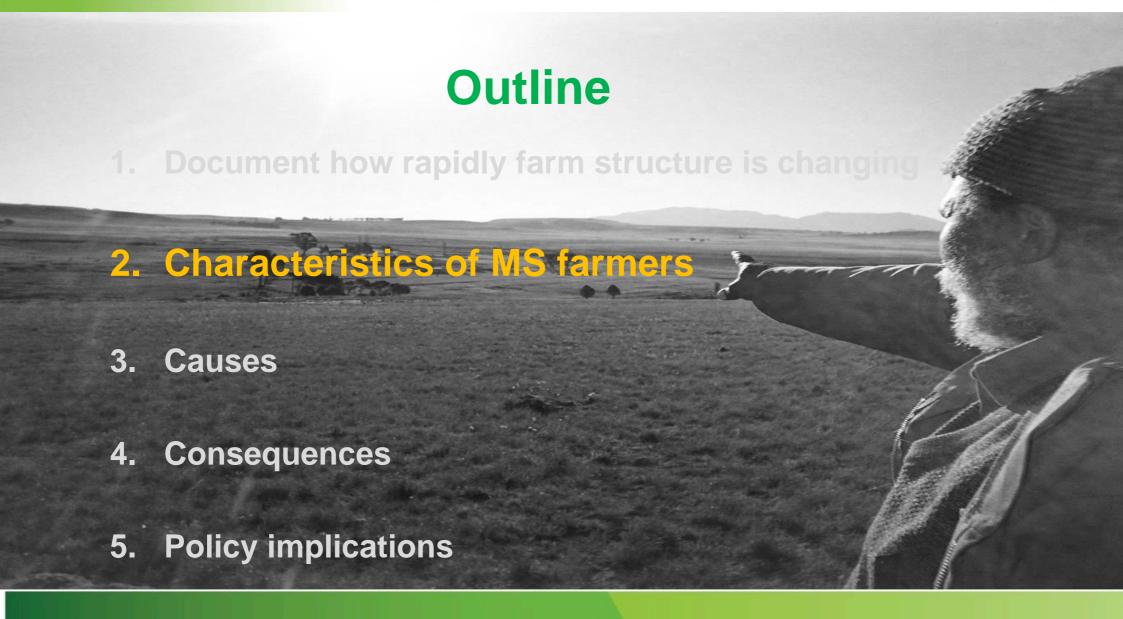
	Number of households (% of total)		% growth in number of farms between initial and latest year	% of total operated land on farms between 0-100 ha		
Farm size	2008	2012		2008	2012	
0 – 5 ha	5,454,961 (93%)	6,151,035 (91%)	12.8	62.4	56.3	- 6.1%
5 – 10 ha	300,511 (5%)	406,947 (6%)	35.4	15.9	18.0	
10 – 20 ha	77,668 (1%)	109,960 (2%)	41.6	7.9	9.7	+ 6.1%
20 – 100 ha	45,700 (1%)	64,588 (1%)	41.3	13.8	16.0	
Total	5,878,840 (100%)	6,732,530 (100%)	14.5	100.0	100.0	



#### 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)







#### Rise of the medium-scale farmers

#### Pathways into medium-scale farming:

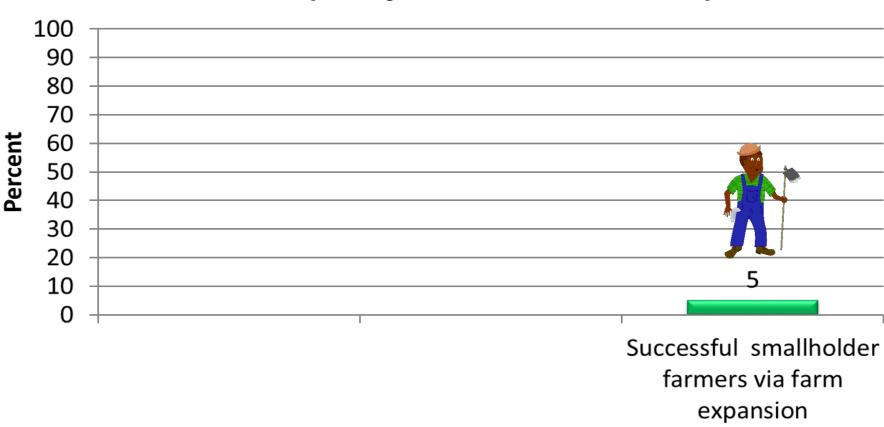
- ✓ Smallholders gradually transitioning to large-scale farming-Farm-led entry
- ✓ Land acquisition using savings from non-farm employment-Non-farm-led (lateral) entry

Who are the medium-scale farmers?

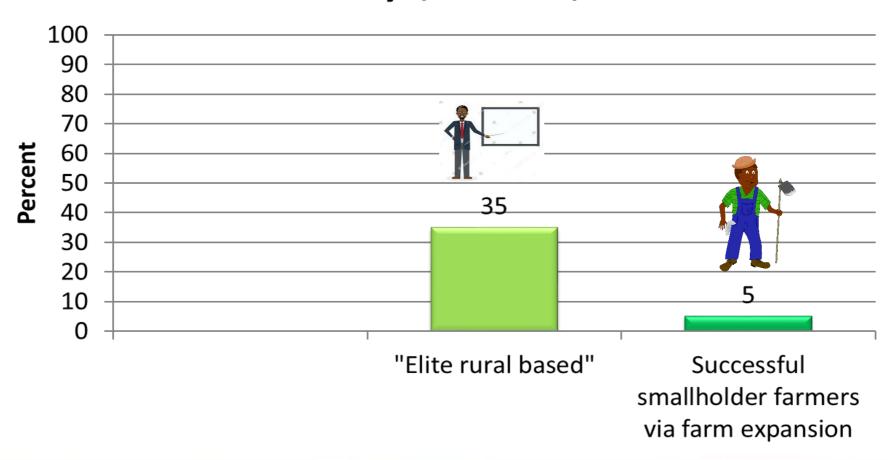
✓ Characteristics of MS farmers



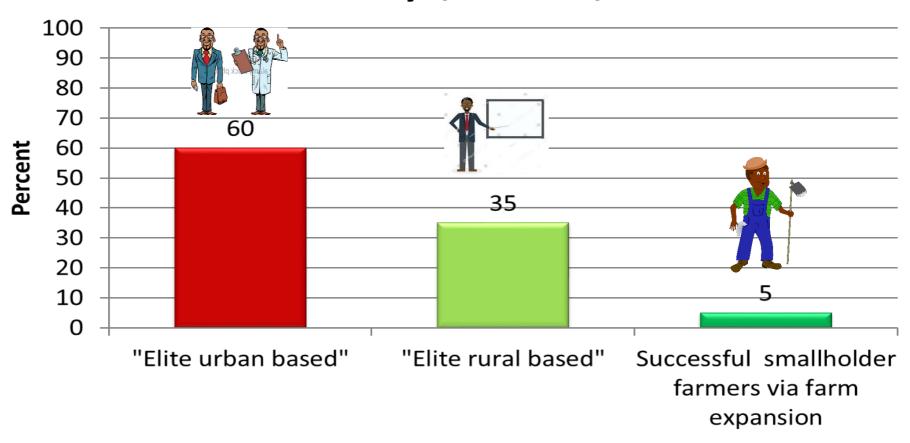
# Three sub-categories of medium scale farmers (Kenya, Zambia, Ghana)



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

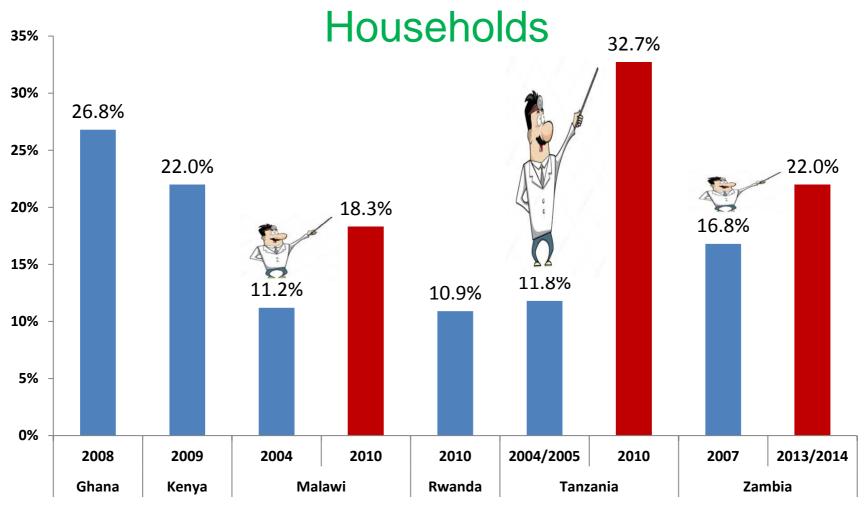


# Three sub-categories of medium scale farmers: Kenya, Zambia, Ghana





#### % of National Landholdings held by Urban









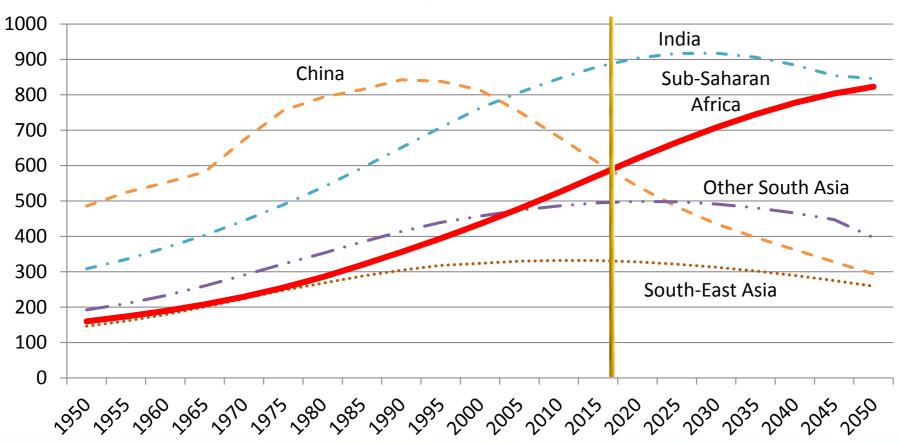
#### Causes of changing farm size distributions

- Rise in world food prices heightened investor interest in farmland
- Elite capture- urban-farmer and farmer lobbies capture of land and agricultural policies
- 3. Rapid population growth
  - Increased competition of land resource- skyrocketing land prices
  - Fragmentation/subdivision in areas of favorable market access
- 4. Rise of new towns converting formerly remote land into valued property



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

#### **Total Rural Population (millions)**



Source: UN (2013)





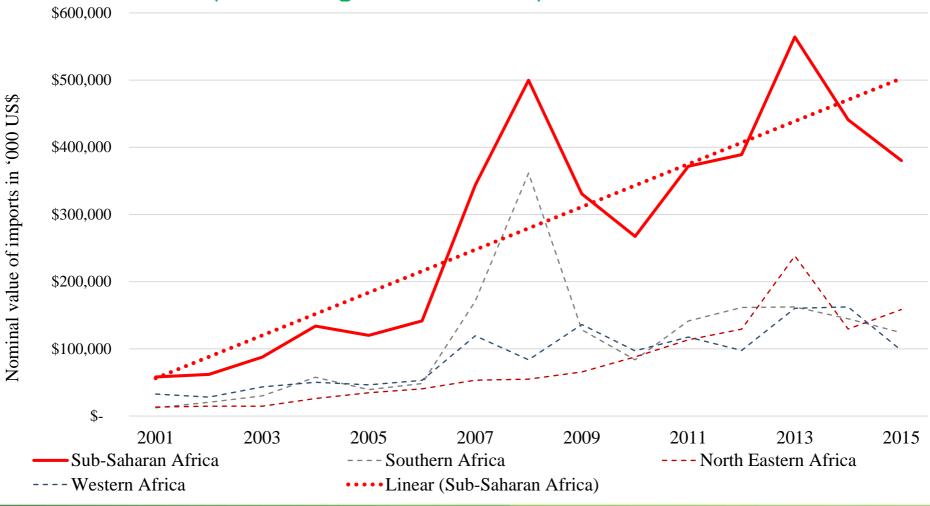


#### Consequences of changing farm size distributions (+)

- 1. More use of capital and labor-saving forms of agricultural production
  - Rising use of mechanization e.g. tractor use
  - Possible spillovers from medium-scale farms to smallholders → inputs and output
- 2. Vent-for-surplus [e.g. Tanzania, Zambia]
  - Medium-scale farm contributing a large share of agricultural output
  - Sell to large-scale traders → reduced transaction costs → higher prices
  - Increased agricultural output>> growth multipliers to agro-processing
- 3. Productivity differences between small- and medium-scale farms limited evidence
  - But reasons to believe that capitalized and educated farmers will be more efficient

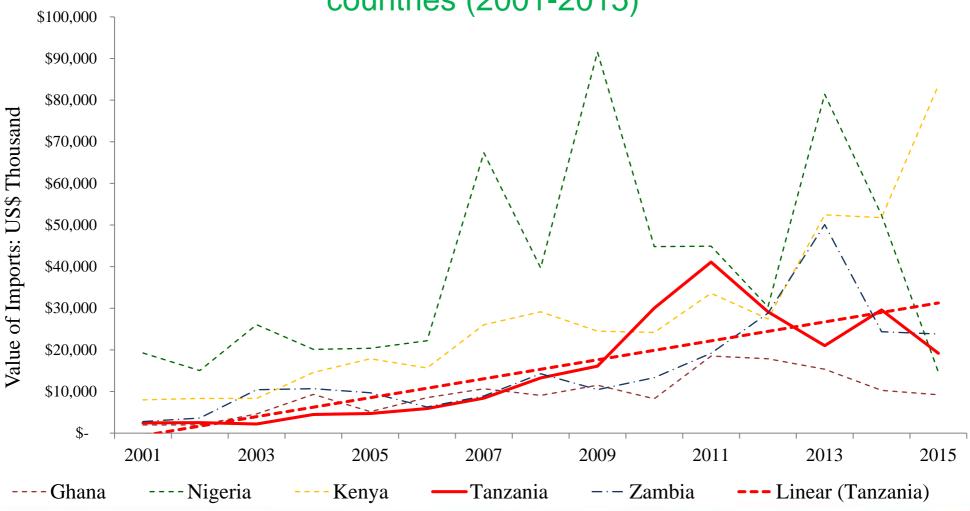


### Nominal value of tractor imports to sub-Saharan Africa (excluding South Africa), 2001-2015





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





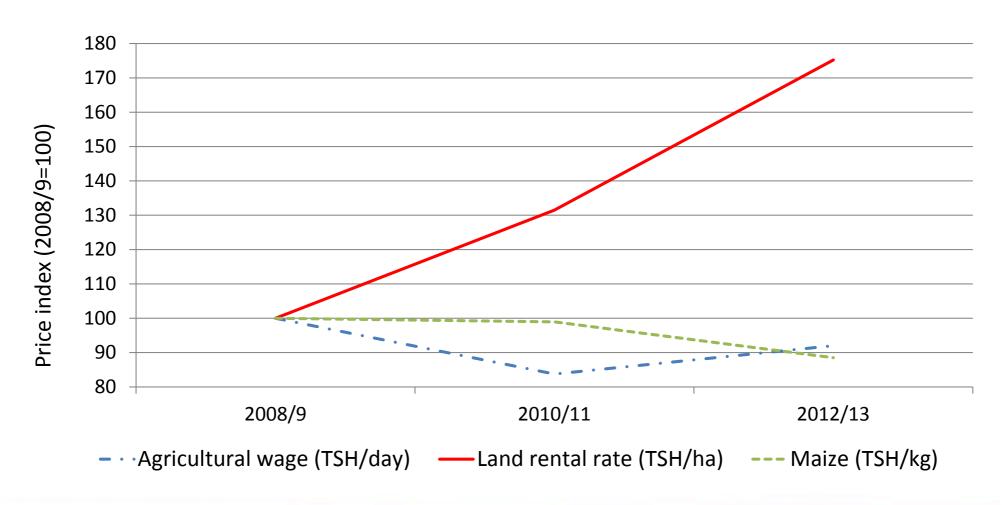
#### Consequences of changing farm size distributions (-)

#### 4. Enclosure

- Elite use control of state processes to appropriate public and community lands for private benefit
- Growing land scarcity driven by middle/high income urban people seeking to acquire land
- 6. Rising inequality of farmland distribution
  - Are medium-scale farms expanding onto new land or displacing smallholders?
  - Rising land prices → straining smallholders, women and youth access to land
- 7. Is mechanization displacing agricultural employment?
  - Limited non-farm employment opportunities
  - Push factors-led rural to urban out-migration

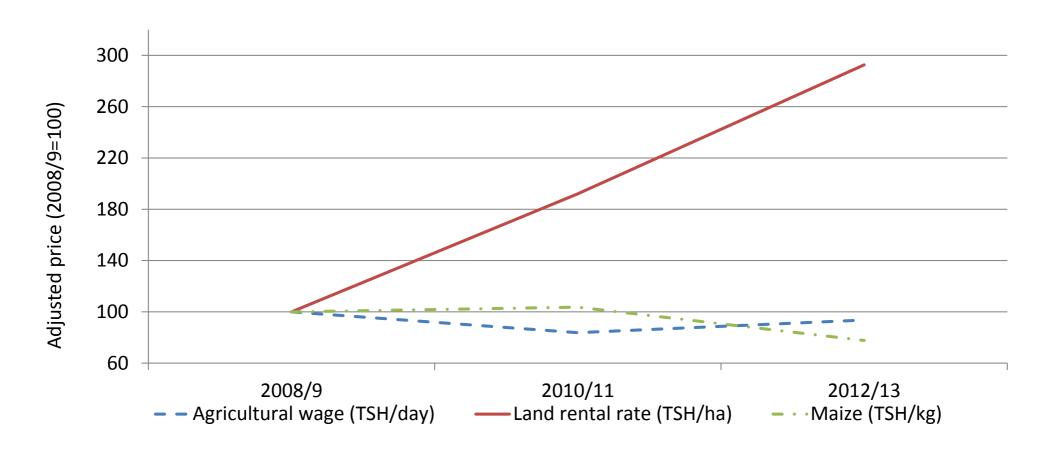


#### Output and Factor Price Indices: Northern Tanzania





#### Output and Factor Price Indices: Western Tanzania

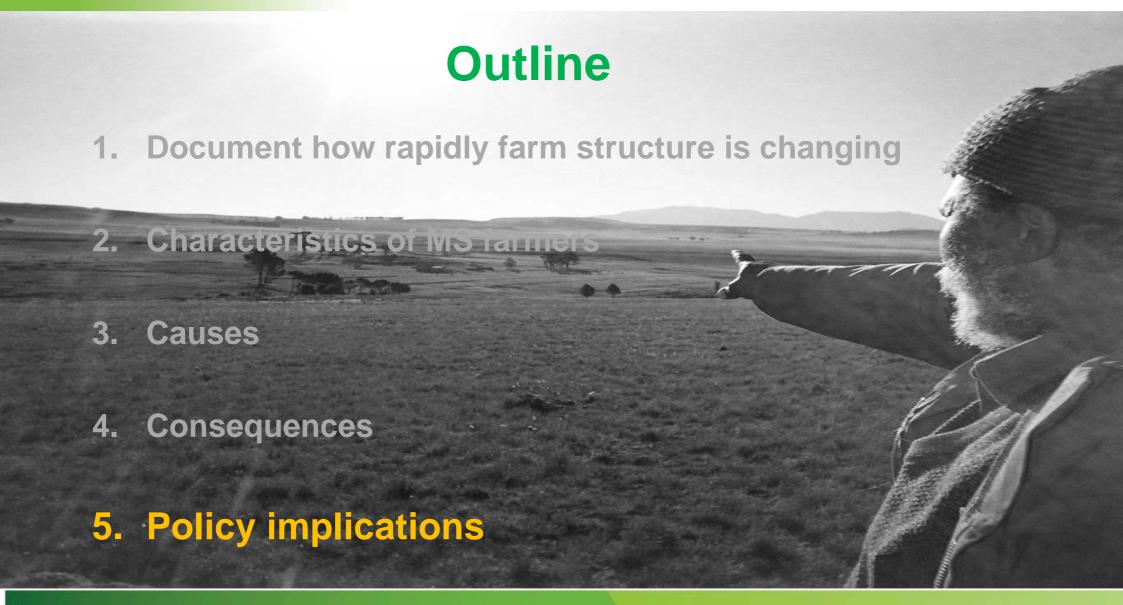




#### Inequality: GINI coefficients in farm landholding

	Period	Movement in Gini coefficient:
Ghana (cult. area) (GLSS)	1992 -> 2013	o.54 <del>&gt;</del> o.70
Kenya (cult. area) (KIHBS)	1994 → 2006	o.51 <del>&gt;</del> o.55
Tanzania (landholdings) (LSMS)	2008 -> 2012	o.63 <del>&gt;</del> o.69
Tanzania (area controlled) (ASCS)	2008	0.89
Zambia (landholding) (CFS)	2001 > 2012	o.42 > o.49







#### Implications for policy

- 1. The "transition" issue is still alive in sub-Saharan Africa
  - How to transform African economies from current situation to more diversified and productive economy
- Agricultural productivity growth will STILL be the cornerstone of any inclusive economic development and improved livelihoods:
  - Ag. productivity will influence the pace of growth in non-farm jobs (multiplier effects)
  - Ag. productivity will influence pace of labor force exit out of farming
  - Ag. productivity will influence labor productivity in broader economy
- Multiplier effects may be much weaker when agricultural land is concentrated among medium-scale farms



#### Strategic policies to increase ag. productivity

- 1. Invest in R&D and institutional capacity building to generate new knowledge
- 2. Develop robust and effective extension systems to facilitate access to productivity enhancing technologies
- 3. Improve coverage and quality of physical infrastructure (energy, road, communication, etc.)
- 4. Facilitate access to productivity enhancing inputs (e.g. fertilizer), markets, and resources (e.g. land, finance, etc.)
- 5. Develop youth-centered programs to make farming profitable for young people
  - Distinguish between "trying to keep youth in agriculture" vs. "giving youth viable choices"
  - Promote mentoring by successful farmers (youth mentors)
- 6. Provide stronger land rights for women



### Three categories of activities that promote structural transformation

- 1. Actions that the private sector will undertake on its own
  - Example: distribution of inputs to areas where demand is strong
- Actions that the private sector will undertake if governments create a favorable 'enabling environment'
  - Example: distribution of inputs to areas where demand would be strong with improved road, port, communications infrastructure
- 3. Actions that the private sector will not do under most circumstances and that governments must do
  - Example: Infrastructure, education, R&D, extension services



## Tomorrow belongs to people who prepare for it today -- African Proverb--



Source: Traub, Lulama et al. (2017)

# THANKYOU



































