

Agricultural land dynamics and land policy in rural Tanzania

Milu Muyanga (MSU), Isaac Minde (MSU/iAGRI), David Nyange (MSU/MALF), Ntengua Mdoe (SUA), Charles Mgeni (SUA), Christopher G. Magomba (SUA), Judith V. Rejea (SUA), Ayala Wineman (MSU), T.S. Jayne (MSU)

Presentation at the 2nd Annual Agricultural Policy Conference
Dar Es Salaam, Tanzania
February 25, 2016



Agricultural transformation



Standard version of the structural transformation model (Mellor, 1976; Johnston and Kilby, 1975)

Farming is the primary source of employment for the majority of the population

Structural transformation process start with agricultural productivity growth

Smallholders but productive farmers with sufficient land produce a surplus

Money from the surplus production stimulates demand for goods and services

This in turn stimulates jobs in various off-farm sectors

Rural-urban migration, and gradual urbanization follows

Slow or negative rate of population growth in rural areas and land consolidation

Agriculture declines in its relative share of total GDP over time

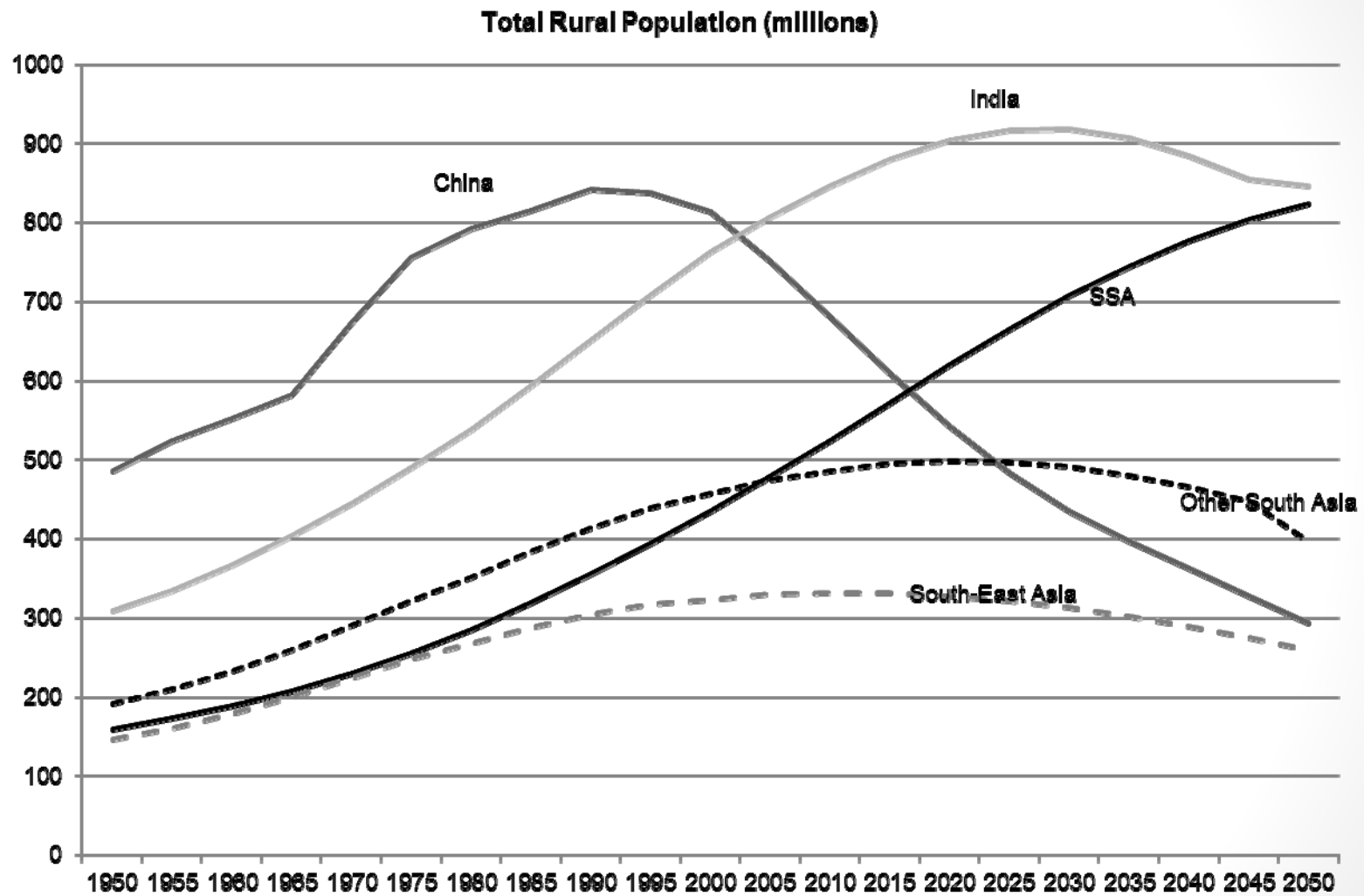
Standard structural transformation model may be a poor fit for some parts of Africa

1. Rising rural population densities leading to declining land sizes



2. Rapid changes in farm structure associated with the expansion in recent years of “emergent” farmers

Total rural population projections



Source: UN Pop Council, 2013

Standard structural transformation model may be a poor fit for some parts of Africa

1. Rising rural population densities leading to declining land sizes
 - Unsustainable forms agricultural intensification
 - Degraded soils- leading to soil-induced poverty traps
2. Rapid changes in farm structure associated with the expansion in recent years of “emergent” farmers
 - Farm structure may be changing rapidly as a result
 - One-way direction flow of employment from farm to off-farm sectors may not generally apply in Africa



Healthy soils are the foundation of food production



2015
International
Year of Soils

healthy soils for a healthy life

Policy questions

1. How to move from a situation where ISPs are the cornerstone of agricultural development to a holistic program of sustainable productivity growth?
2. What would such a holistic program look like?
3. How to achieve it?



Standard structural transformation model may be a poor fit for some parts of Africa

- I. Rising rural population densities
 - Declining land sizes and unsustainable forms of agricultural intensification
 - Unsustainable forms agricultural intensification
 - Degraded soil-induced poverty traps
2. Rapid changes in farm structure associated with the expansion in recent years of “emergent” farmers
 - One-way direction flow of employment from farm to off-farm sectors may not generally apply in Africa
 - Farm structure may be changing rapidly



Landholding sizes [Agric. Sample Census Survey 2007/08]

Landholding category	Landholding (ha)	Number of farmers	As % of total	Land controlled (ha)	As % of total area
1 ha and less	0.58	1,801,085	33.19	1,040,010	7.77
1-5 ha	2.18	3,111,927	57.35	6,779,527	50.66
5-10 ha	6.88	340,736	6.28	2,345,525	17.53
10-20 ha	13.01	118,547	2.18	1,542,855	11.53
20-50 ha	26.29	49,315	0.91	1,296,627	9.69
50-100 ha	65.98	3,131	0.06	206,559	1.54
over 100 ha	146.29	1,172	0.02	171,455	1.28
Total	2.47	5,425,913	100.00	13,382,558	100.00

9%

42%

Who are the medium-scale (emergent) farmers and what is driving their growth?

- Is this growth driven by farmers who began as smallholders, and now transitioning to a large scale status through the capital and assets accumulation?
- Is the growth driven by institutions and policies (deficient policies) that encourage investment in land acquisitions by individuals from non-agricultural employment
- How does their agricultural productivity compare to that of the smallholders?



Zambia, Kenya and Ghana case studies

- Majority of them used **non-farm entry pathway** into medium scale farming
 - Urban and rural elites
 - They are relatively well-educated
 - Use their savings from non-farm jobs and connections
 - Cultivate less than 50% of their land

One-way directional farm to off-farm employment may not generally apply in Africa

- Rural and urban-based groups engaged primarily in non-farm employment may have incentives to own and invest in land and farming
- They have a relative advantageous position to do so after having overcome constraints related to:
 - Access to capital; management expertise; social entr ; ability to navigate complex traditional and/or statutory land institutions



There is emerging evidence indicating that small may not be beautiful

1. Limitation in the past studies- overcome them:
 - Explore the IR hypothesis over a much wider range of farm sizes
 - Measure productivity in different ways for robustness checks
 - Account for both labor and fixed costs
2. **Small has become way too small**- soil degradation
3. Modern technology enabling medium-scale farms to break away from past disadvantages



Available national datasets are unsuitable to understand changes in farm structure

1. Sample proportional to population and tend to systematically under-sample medium and large farms
2. Often exclude non-smallholder farming sectors by default or design
3. Tend not to prompt urban households about farmland they may cultivate or own away from their main urban residences



Policy questions

1. Production efficiency, while relevant, should it be the ONLY factor in guiding agricultural and land policies
 - Which scale has the largest multiplier and employment effects?
 - Which scale has the highest marginal propensity to consume?
2. All depends on the government's development objective:
 - Production for domestic food self sufficiency and export market?
 - Broad based growth for reduced food insecurity and poverty reduction?



Policy questions

- I. Production efficiency, while relevant, should not be the ONLY factor in guiding agricultural and land policies
 - Which scale has the largest multiplier and employment effects?
 - Which scale has the highest marginal propensity to consume?
2. What is the government's development objective?
 - Production for domestic food self sufficiency and export market?
 - Broad based growth for reduced food insecurity and poverty reduction?



Ongoing agricultural land research work in Tanzania



Research areas [I]

1. *Agricultural land access and policy implications in rural*

Tanzania:

- Examines the rate of land expansion of medium- and large-scale farms and to consider the policy implications

2. *Land access and rural youth livelihood opportunities:*

- Assess constraints to land access for youth, differentially for young women and young men, and examine the effects of such constraints on youth migration



Research areas [II]

3. *Spillover effects from medium/large farms to smallholder:*

- Assess the spillover effects (e.g. in new technology, access to credit and extension services, employment, etc.) from medium/large-scale to the neighboring smallholders in the SAGCOT zone

4. *Smallholder vs medium-scale farms productivity and efficiency:*

- Revisits the inverse farm size – productivity relationship (IR) hypothesis. This is important especially in the context of changing farm structure. Who is more productive/efficient between small-scale and larger-scale farms?



Research areas [III]

5. *Rural-to-rural, rural-to-urban, urban-to-rural migration:*

- The primary aim of this study is to investigate the impact of migration on land access and off-farm income sources.

6. *Impacts of Certificate of Customary Right of Occupancy (CCROs) on farm investments and reduced land-related conflicts:*

- This study examines the characteristics of the CCROs beneficiaries. Who are they -- age, gender, socio-economic, etc.)? Do CCROs have influence on investment on land? What is the impact of CCROs on farm productivity?



Research areas [IV]

7. *Landlords and sellers in rural Tanzania:*

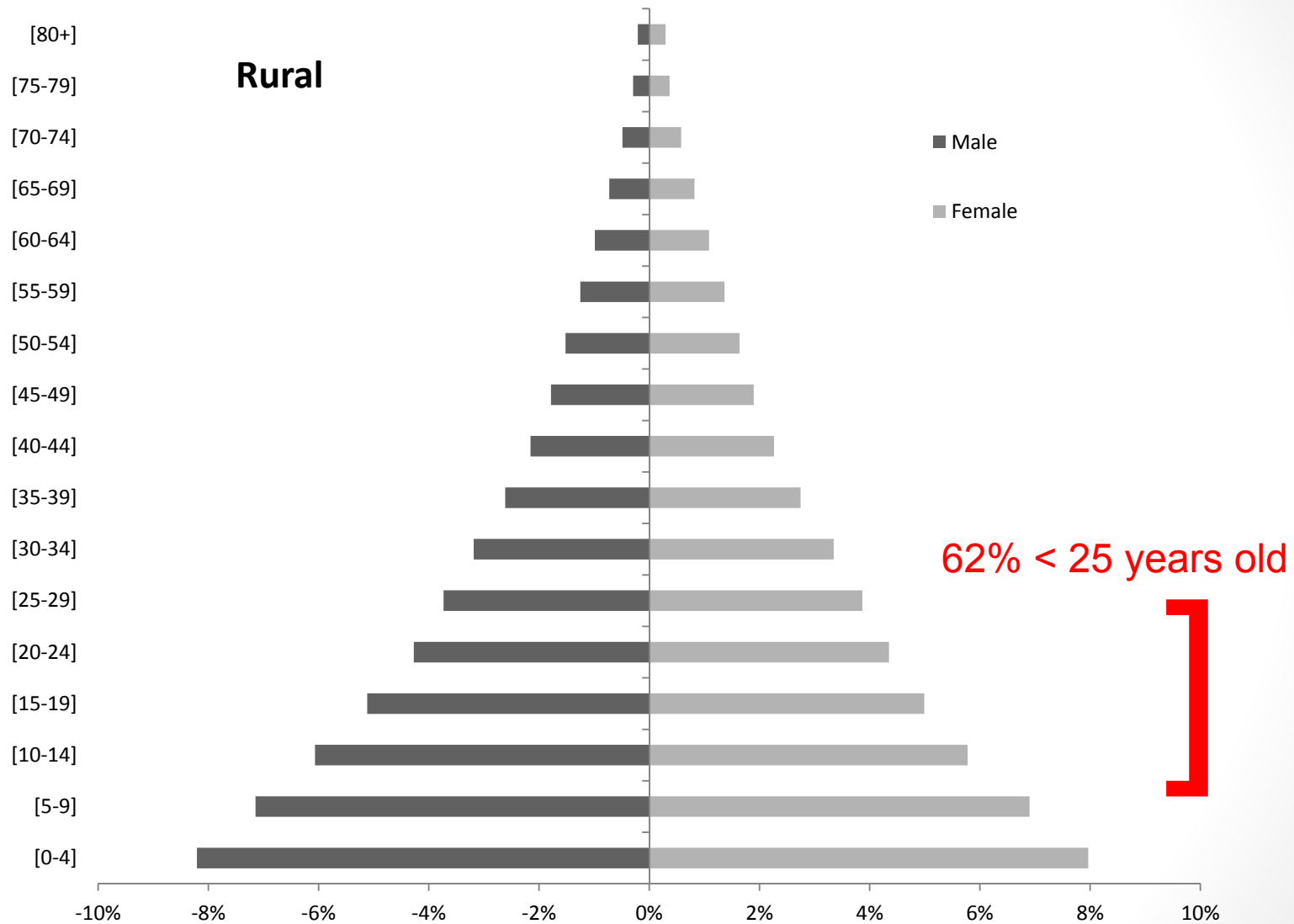
- The study will seek to explain the discrepancy between reports of renting in and renting out land (and/ or buying and selling land), and will provide a characterization of landlords (sellers) not otherwise captured in rural surveys.



Concluding remarks



Age pyramids, rural SSA, 2015



Source: UN Pop Council, 2013

Conclusion

- Land policies will determine whether millions of rural Tanzanians will make a decent livelihood
 - How supportive the land allocation and agricultural policies are to smallholders, women and youth?
- African leaders may soon realize that **political stability** will depend on how the remaining land is distributed and the profitability of family farming



TO-DOLIST
NOTHING



INI APAMBANA
KWA ARDHI YETU
HADI MWISHO



ARUMERU

Kundi la vijana lavamia shamba la mwekezaji la Arusha Coffee Estate

Acknowledgements



USAID
FROM THE AMERICAN PEOPLE

