

SMALLHOLDER LAND ACCESS IN KENYA: ARE THE CURRENT LAND INSTITUTIONS AND POLICIES FOSTERING BROAD-BASED AGRICULTURAL GROWTH?

Milu Muyanga & T.S. Jayne

Agricultural, Food and Resource Economics Department

Michigan State University, USA

Presented at the World Bank Annual Conference on Land and Poverty 2013,
World Bank, Washington DC, USA, April 8-11, 2013



Introduction

- Smallholder farmers constitute the bulk (70%) of agricultural producers in Africa
- Majority of them are poor
- Agricultural-led growth strategy has been touted as solution for reductions in poverty in this region
 - Agricultural-led economic growth
 - Poverty reduction
 - Enhanced food security
- Yet, stagnant agricultural productivity, widespread rural poverty, and high food insecurity still persist
- Smallholder farming is sliding into landlessness situation as population density rises



Study objective

- The study investigates the potential for an inclusive agricultural growth using Kenya as a case study
 - Are land institutions and policies in Kenya making it possible for a broad-based smallholder led agricultural growth process as enjoyed in much of Asia?
 - **Asian green revolution** was a small farm phenomenon broadly based agricultural growth contributed greatly to rural poverty reduction and structural transformation



Motivation

- Many African countries are characterized by inequality in land ownership and access
 - Countries that have been least successful in reducing rural poverty are characterized by highly unequal landownership
- Increase in the number of medium scale (emergent) farmers in many African countries over the last decade
 - Is this growth driven by farmers who began as smallholders, and now transitioning to a larger scale status through the capital and assets accumulation?
 - Is the growth driven by institutions and policies (or lack of them) that encourage investment in land acquisitions by individuals from



Study questions

- How is landholding evolving in the densely populated regions in the country?
- How are the households responding to shrinking farm sizes?
- How are land sales and rental markets affecting the distribution of landholdings?
- What are their characteristics of the medium-scale farmers in Kenya?
- What modes of land acquisition did they embrace? build up their landholding scale to the current levels?



Data sources

- Focus group discussions
 - 14 sites in the country
 - In the high and low densely regions
- Semi-structured survey with 200 medium scale farmers [5-20ha]
- Egerton University/Tegemeo Institute Rural Household Survey
 - Panel dataset tracking roughly 1,300 small-scale farm households in 5 survey waves over the 13-year period from 1997 to 2010



Results: Smallholder mean landholding (ha) --panel data

	Pop. density quintile	Survey year				Panel average
		2000	2004	2007	2010	
Landholding (hectares)	5 [highest]	1.28	1.22	1.38	1.36	1.35
	4	1.63	1.62	1.85	1.58	1.68
	3	2.06	2.13	1.69	1.59	1.89
	2	2.90	3.23	2.88	2.47	2.99
	1 [lowest]	3.80	4.46	4.28	3.79	4.25
Landholding per adult equivalent (hectares)	5 [highest]	0.28	0.29	0.35	0.30	0.31
	4	0.34	0.37	0.47	0.36	0.38
	3	0.45	0.50	0.49	0.45	0.47
	2	0.55	0.61	0.56	0.63	0.59
	1 [lowest]	0.83	0.96	0.93	0.95	0.92
Area cultivated in the main season (hectares)	5 [highest]	0.99	0.94	0.85	0.79	0.89
	4	1.18	1.26	1.22	1.03	1.17
	3	1.54	1.36	1.16	0.99	1.27
	2	1.73	1.79	1.54	1.30	1.58
	1 [lowest]	1.98	1.87	1.74	1.59	1.80



Land sales markets: Gini indices of smallholder land sizes

Region	Survey year			
	2000	2004	2007	2010
Eastern Lowlands	0.38	0.38	0.38	0.38
Western Lowlands	0.36	0.37	0.38	0.38
Western Transitional	0.38	0.38	0.38	0.38
High Potential Maize	0.52	0.52	0.52	0.52
Western Highlands	0.37	0.37	0.38	0.38
Central Highlands	0.39	0.39	0.39	0.39
Marginal Rain Shadow	0.43	0.43	0.43	0.43
Overall	0.51	0.51	0.52	0.52



Land rental markets: Gini indices of smallholder land sizes

Region	Survey year			
	2000	2004	2007	2010
Eastern Lowlands	0.38	0.38	0.38	0.38
Western Lowlands	0.36	0.37	0.37	0.38
Western Transitional	0.39	0.38	0.37	0.37
High Potential Maize	0.55	0.51	0.51	0.51
Western Highlands	0.38	0.38	0.38	0.37
Central Highlands	0.38	0.42	0.38	0.39
Marginal Rain Shadow	0.42	0.42	0.41	0.40
Overall	0.53	0.51	0.51	0.51



Landholding by entry strategy into medium-scale farming

Strategy		Started farming owning 5ha or less			Started farming with more than 5ha			Overall		
		Mean	N	%	Mean	N	%	Mean	N	%
Farm-led growth	Initial	1.89	31	16	27.62	51	26	17.89	82	41
	Current	26.83			54.86			42.40		
Non-farm led growth	Initial	2.03	58	28	25.89	60	30	14.16	118	59
	Current	33.11			42.91			38.33		
Total	Initial	1.98	89	44	26.69	111	56	15.69	200	100
	Current	30.27			48.60			40.22		



Medium-scale farmers landholding characteristics

Variable	Farm-led growth strategy	Non-farm led growth strategy
Land under crop	54%	46%
Land acquired through purchases (%)	64%	85%
Land owned with title (%)	59%	79%
Decade when land was acquired (prop)		
1969 or earlier	29%	6%
1970 through 1979	24%	18%
1980 through 1989	20%	20%
1990 through 2000	18%	32%
2000 or later	9%	25%

Medium-scale farmers' background and historical information

	Farm-led growth strategy	Non-farm led growth strategy
Heads had non-farm job	17%	84%
_civil servant	71%	68%
_private sector	29%	32%
Heads had business	52%	42%
Heads level of education:		
_informal	12%	7%
_primary	43%	24%
_secondary	27%	22%
_post-secondary	18%	47%
Father to household head:		
_landholding owned (ha)	94.68	45.06
_non-farm job	33%	38%
_some formal education	35%	40%

Medium-Scale Farmers landholding and productivity

	agricultural entry			lateral entry			Overall		
	5-25 ha	25-50 ha	mean	5-25 ha	25-50 ha	mean	5-25 ha	25-50 ha	mean
N	56	26	82	95	23	118	151	49	200
Landholding (ha)	18.62	69.99	42.40	14.39	81.84	38.33	16.17	75.53	40.22
Area under crop (ha)	11.53	35.33	22.55	8.62	38.95	19.38	9.84	37.02	20.85
Prop. of area under crop	0.62	0.50	0.53	0.60	0.48	0.51	0.61	0.49	0.52
Crop production ('000KSh)/ ha owned	82.32	78.20	80.41	65.04	96.55	76.22	72.30	86.79	78.17
Crop production ('000KSh)/ ha cultivated	132.03	136.71	134.20	100.50	161.82	122.26	113.75	148.47	127.82
Fertilizer use ('000KSh)/ha cultivated	12.13	12.16	12.14	11.91	11.27	11.68	12.01	11.74	11.90
Fertilizer use (kg)/ha cultivated	261.49	265.69	263.43	257.79	243.99	252.89	259.35	255.53	257.80
Landholding (ha) / tropical cow*	0.42	0.89	0.64	0.57	1.25	0.81	0.51	1.06	0.73
Livestock value ('000KSh)/ha owned	97.41	76.10	87.55	145.70	44.51	109.79	125.40	61.31	99.44

Smallholder landholding and productivity

	0<ha<=1	1<ha<=2	2<ha<=3	3<ha<=5	overall
N	66	83	51	36	236
Landholding (ha)	0.59	1.36	2.37	3.99	1.76
Area under crop (ha)	0.55	1.15	1.51	2.23	1.22
Prop. of area under crop	0.93	0.84	0.64	0.56	0.69
Crop production ('000KSh)/ ha owned	104.46	59.76	53.22	64.20	63.55
Crop production ('000KSh)/ ha cultivated	112.32	71.18	83.50	114.87	91.77
Fertilizer use ('000KSh)/ha cultivated	9.40	9.10	9.58	8.93	9.22
Fertilizer use (kg)/ha cultivated	159.08	153.63	163.10	152.22	156.46
Landholding (ha) / tropical cow*	0.02	0.11	0.36	0.75	0.26
Livestock value ('000KSh)/ha owned	1,420.64	299.94	139.13	76.56	158.17

Conclusions

- Access to land is limiting agricultural production in the densely populated regions
 - Small landholding sizes due to continued sub-division
 - Land sales and rental markets are not working for the smallholders
- Medium scale farmer growth appears to be primarily the outcome of political and economic processes related to land administration and public spending
 - Access to land markets is concentrated in the hands of those with social and political capital conferred through public sector employment
 - Little evidence of small-scale farmers accumulating capital through agriculture and scale expansion





**Thank
you**