

Livestock or the pen: the effects of inheritance and education on poverty among pastoralists

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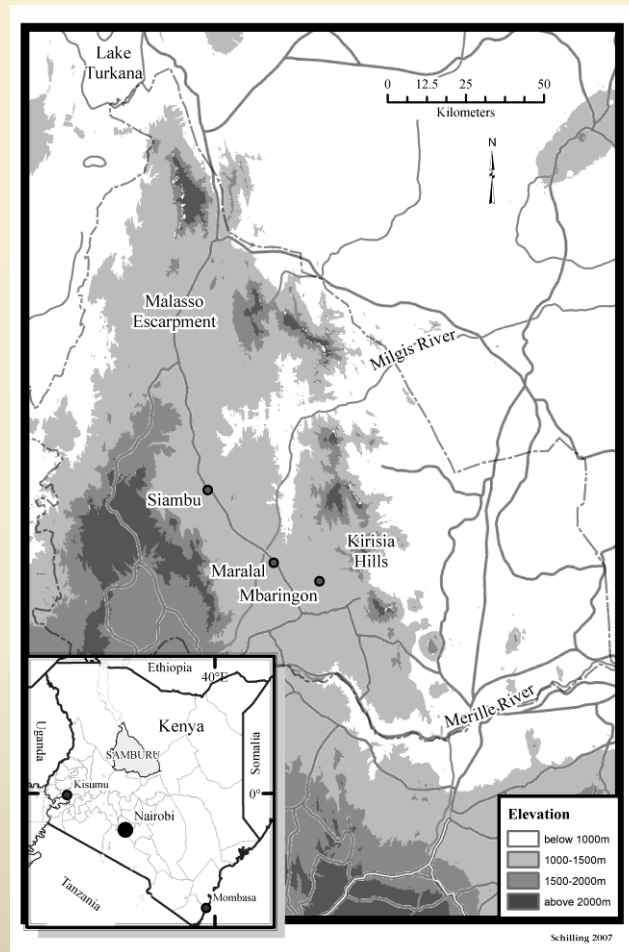
The Problem

- Poverty among pastoralist livestock herders in Kenya
 - Persistent drought
 - Falling per capita livestock holdings
 - Lag in access to formal education
 - Few alternatives to pastoralism

Questions

- Key questions:
 - What are the current practices of livestock inheritance and formal education among Samburu pastoralists? (qual interviews)
 - Is livestock wealth/poverty transmitted intergenerationally in this community? (survey data and regression analysis)
 - Is formal education associated with increases in wealth and income for this population? (survey data and regression analysis)

Field site: Samburu District Kenya











Methods

- In-depth interviews with 16 informants; 4 father-son pairs, 8 individuals
 - practices of livestock inheritance and perceived affects of inheritance
 - Decision-making regarding enrolling children in school; attitudes about education
- Household survey (n=156; 128 used)
 - Demographics, income, livestock wealth, education, parental wealth, livestock inheritance

Description of Survey Sample

Variables	Mean	StDev	Range	Median	Mode
<i>Dependent Variable</i>					
Son's current wealth in TLU	15.93	22.94	0 – 174.24	8.68	0
<i>Independent Variables</i>					
Father's wealth in TLU	158.58	426.14	0 – 4036	92.92	0
Inheritance in TLU	19.16	25.76	0 – 144	8.92	0
Income (KES)	99,331.72	104,890.2	0 – 687,800	69,980	16,800
Household size	9.27	3.89	3 – 26	8	7
Age	55.22	12.03	33 – 85	53.90	47
Years of Education	1.95	3.84	0 – 18	0	0
<i># of Wives</i>					
	Frequency	Valid %			
0	2	2			
1	83	65			
2	35	28			
3	6	5			
4	1	1			
<i>Community</i>					
Siambu	68	53			
Mbaringon	60	47			
<i>Formal Education</i>					
Yes	40	32			
No	86	68			

Findings 1

- Qualitative interviews find:
 - Inter vivos transfers of livestock significant and help distribute wealth across sons and houses within a household
 - Post-mortem inheritance limited to eldest sons and entails assumption of father's role as head of family
 - History of resistance to formal education giving way to investments in formal education due to perceived benefits to education such as employment, skills, and knowledge

Regression Analysis: Inheritance

	Ordinary Least Squares		Quintiles by Son's current Wealth	
	Without interaction	With interaction	Without Interaction	With Interaction
	<i>b</i> (SE)	<i>b</i> (SE)	<i>b</i> (SE)	<i>b</i> (SE)
<i>Predictors</i>				
Inheritance in TLU	-.006(.001)	.007(.007)	-0.011(.009)	0.012(.015)
Father's wealth in TLU	.002(.001)	.002(.001)*	0.001(.002)	0.004(.002)
<i>Covariates</i>				
Income	.000(.000)*	.000(.000)*	0.000(.000)*	0.001(.000)*
AAME	.064(.030)*	.092(.032)*	0.130(.066)	0.200(.075)*
Age	.001(.009)	-.001(.009)	0.009(.019)	0.008(.019)
Years of Education	-.073(.028)*	-.063(.028)	-.121(.060)	-0.102(.061)
Interaction		-.000(.000)*		0.000(.000)*
Model Fit				
<i>F</i> Statistic	6.635*	6.762*		
Adjusted R ²	.275	.312		
LogLik			263.98	258.94
χ ²			24.31*	29.35*
Deviance			263.98	258.94
Nagelkerke R ²			.247	.290

Regression Analysis: Education and Income

Independent variable	Parameter estimate (<i>b</i>)	<i>t</i>	<i>p</i>
Years of education	4674.72	2.57	.011
Son's wealth	2103.06	6.32	.000
AAME	-200.85	-.09	.926
Age	-5.19	-.01	.993

$N=121$, $F(4,117) = 11.41$, $p < .0001$, Adjusted $R^2 = .256$

Findings 2

- Quantitative regressions find:
 - Parental wealth positively associated with son's wealth—structural advantages of membership in a wealthy family
 - Amount of livestock inherited not necessarily associated with current wealth
 - Parental wealth moderates livestock inheritance—inheritance more effective for wealthier than poorer households
 - Formal education associated with increased income, but not with livestock wealth

Limitations

- Cross-sectional, not longitudinal design
- Small sample size
- Not having father-son pairs in the survey sample
- Measurement of income

Policy Implications

- Given increase in educational investments by households, more attention should be paid to educational access, quality, and opportunities following education
- Risk and uncertainty in the environment lead to instability in livestock holdings, so policies should seek to mitigate risks in appropriate ways.