

Dynamics and Determinants of Chronic Poverty in Western Kenya: Starting Point, Location and Diversification

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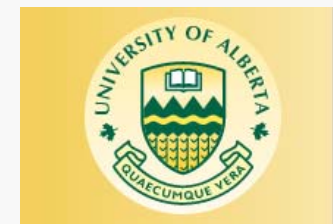
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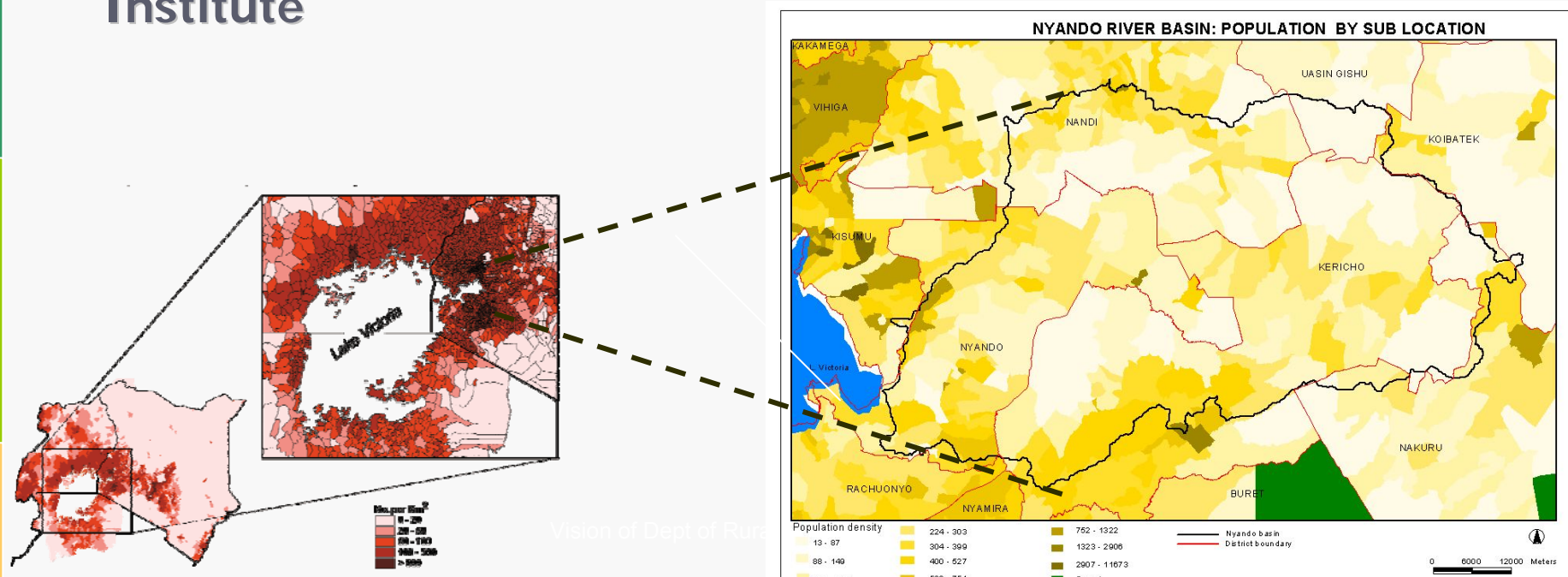
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Study Site: Nyando Basin, Western Kenya

- ▶ Nyando river is one of 11 rivers flowing into Lake Victoria
- ▶ Variety of land tenure regimes, population densities and agro-ecological conditions
- ▶ Poverty rate in the administrative areas (locations) that comprise the basin vary from about 30 percent to more than 70 percent
- ▶ Study conducted under Safeguard and SCALES projects financed through the International Water Management Institute



Objectives of this study

- ▶ 1. Identify determinants of poverty levels and dynamics
 - Specific livelihood strategies?
 - Diversification of on-farm and off-farm options?
 - Location?
- ▶ 2. Gather evidence about chronic poverty and geographical poverty traps
- ▶ 3. Identify implications for poverty reduction strategy in Nyando river basin / Western Kenya



Data collection (1/2)

- Purposively select 14 villages to represent range of conditions across the Nyando basin (all between 60 and 150 households)



Data collection (2/2)

- ▶ The Stages of Progress method + additional data on household livelihood strategies were collected for every household (now, 10 years ago, 25 years ago)
- ▶ Poverty and prosperity lines were used to categorize households as poor, non-poor, or relatively prosperous (now, 10 years ago, 25 years ago)
- ▶ Reasons for changes or lack of change in the stage of progress over time, were also noted
- ▶ Complementary household survey conducted (not reported here)



Data Analysis (1/2)

1. Descriptive Statistics

- Stages of progress ladders, poverty lines, and prosperity lines were assembled for each village
- Poverty dynamics are assessed through the construction of transition matrices for the two time to the present time
- Descriptive statistics were also used to describe changes in livelihood activities across the three time periods



Data Analysis (2/2)

2. Ordered logistical regression

- An econometric model of the determinants of poverty-prosperity changes for 1995- 2005
- Models for three groups of households based on poverty conditions ten years ago, i.e. poor, non-poor and prosperous as of 1995:
 - ▶ Poor → poor, nonpoor, prosperous
 - ▶ Nonpoor → poor, nonpoor, prosperous
 - ▶ Prosperous → poor, nonpoor, prosperous
- Explanatory variables: livelihood activities practiced at the beginning and end of the period (Binary), number of agricultural and non-agricultural practiced at the beginning and end of period, village fixed effects

Results: poverty transitions

1. Transition of poverty states during 25 year period (toward middle, toward poverty)

Initial Stage	Stage 10 y later	Frequency	Percentage	Stage 25y later	Frequency	Percentage
P (17.8%)	1	↓ 92	54.4	1	→ 90	53.3
	2	↓ 70	41.4	2	→ 71	42.0
	3	7	4.1	3	8	4.7
	Total	169	100.0	Total	169	100.0
NP(51.4%)	1	46	9.4	1	↑ 128	26.2
	2	→ 399	81.6	2	↑ 315	64.4
	3	44	9.0	3	46	9.4
	Total	489	100.0	Total	489	100.0
PR(30.9%)	1	13	4.4	1	55	18.7
	2	↑ 132	44.9	2	↑ 159	54.1
	3	↑ 149	50.7	3	↑ 80	27.2
	Total	294	100.0	Total	294	100.0

Results: reasons

2. Qualitative reasons (as revealed by households, from 10 years ago to the present time)

- The main reasons why households moved into poverty were death of a major income earner, poor health, and high health expenses
- The main reasons that households were able to stay out of poverty were income from farming, hard work, receiving salary from a family member, and investment in education



Results: livelihood strategies

- ▶ 3. Descriptive analysis of livelihood strategies
 - Cultivation of cereals most common strategy for all groups in 1995 and 2005
 - Livestock production more common among the initially prosperous and non-poor groups than the initially poor
 - Providing casual labour is most prevalent among the poor
 - The most common NON-AG livelihood activity for the prosperous group is now trade, while the non-poor are equally involved in trade and casual labour.
 - both AG and NON-AG diversification is more prevalent among the initially prosperous and non-poor groups than the poor group, now and 10 years ago.



Results -- ordered logit

Initial Status					
Poor (Regression1)		Non-poor (Regression2)		Prosperous (Regression3)	
ME on Poor to Non-poor		ME on Non-poor to Prosperous		ME on Remain in Prosperous	
+ effects	- effects	+ effects	- effects	+ effects	- effects
CerealsN	CerealsP	riceP	cerealsN	Plantation cropsP	
RiceN	RiceP	Plantation cropsP	Plantation cropsN	VegP	VegN
PulsesN		LivestockN	RootcropN RootcropP	No of ag N	
LivestockP LivestockN		No of agN		SugarcaneN	
No of ag N		No of non-agN	root cropsN	riceN	CasualN
LivestockP		VegN		No of non-agP	
Formal jobN FormaljobP		FormaljobN	Casual jobN	Formal jobN	
N= now (2005), P= Past (1995) ME= Marginal effects					

Conclusions

- ▶ Chronic poverty is a major problem, maybe more important is systematic and growing poverty during 1995 – 2005
- ▶ Ill health and death were most important reasons for households falling into poverty
- ▶ Casual labour is always associated with households that become poor and stay poor.
- ▶ Formal sector employment is a key strategy for getting out of poverty and remaining out of poverty.
- ▶ Agricultural activities had different effects at different times
- ▶ Diversification in AG and NON-AG matters positively in getting out of poverty
- ▶ Village-level fixed effects very important for initially poor, but less important for households starting nonpoor or prosperous

Implications

- Poverty Reduction Strategies should consider:
 - Geographical poverty traps, especially for the poorest
 - Which agricultural activities should be stressed in revitalization of agriculture?
 - Presence of chronic poverty and worsening poverty (ie One Illness Away)
 - Promoting AG and NON-AG diversification

