

# Measuring the Effects of Prime-Age Adult Mortality on Rural Households in Kenya

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## Implications for Programs

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- Target widowed (female-headed) households
- AIDS-education programs aimed at high-income men
- Re-consider calls for low-input ag. technology
- Programs to overcome gender barriers to women's participation in selected crops
- Invest in long-term economic growth

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## Objectives

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1. To Estimate Impact of Adult Death on:
  - Household Composition
  - Agricultural Production
  - Non-farm income
  - Assets
2. Programmatic Implications

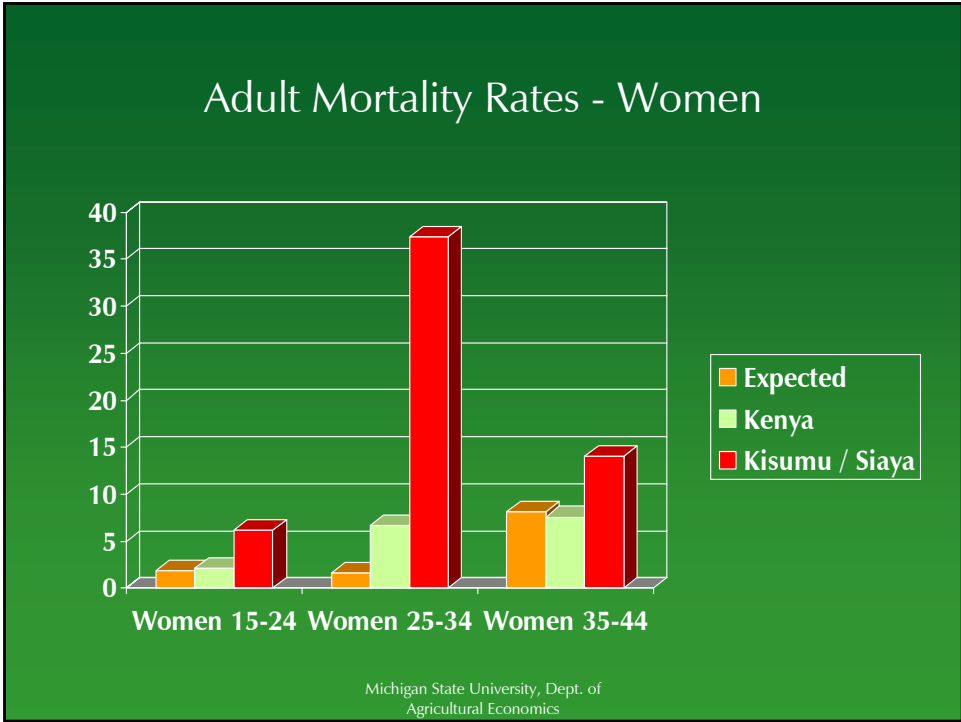
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## Data

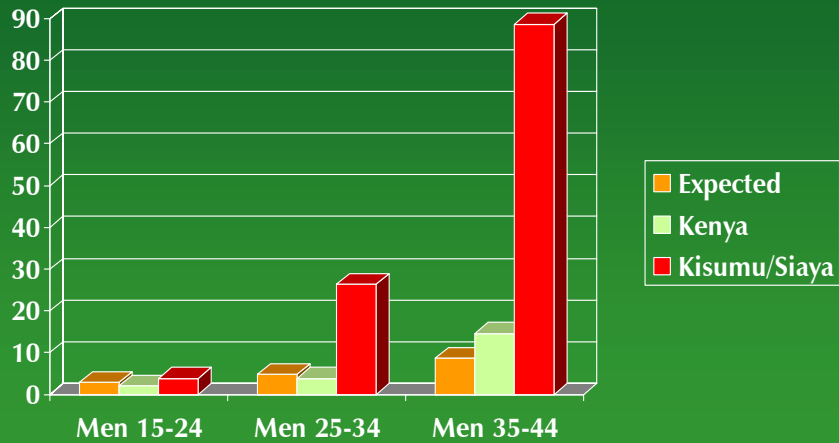
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- Two-year Panel (1997, 2000)
- Nationwide survey – 22 districts
- 1,422 / 1,500 households revisited
  
- Focus-group (post-analysis) discussion

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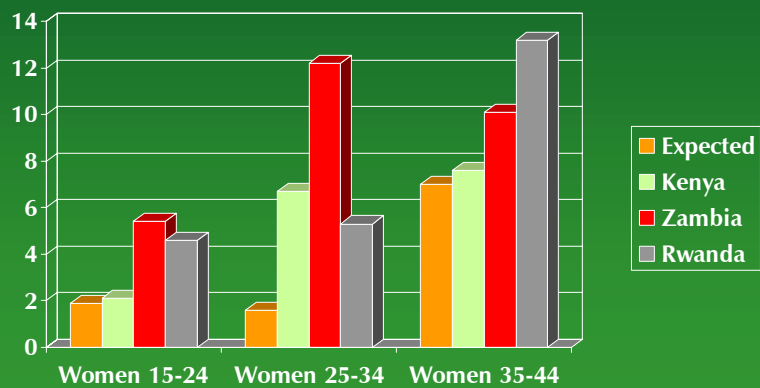


## Adult Mortality Rates - Men



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## HIV-Negative Adult Mortality Rates vs. Those Observed in Kenya, Zambia, Rwanda



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## Finding 1: Important Gender Differences in Prevalence of Adult Death

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- Afflicted Men
  - 49% were in highest income quartile
  - About half were household heads
- Afflicted Women
  - Not correlated with income
  - Likely to be daughters in households
- However, many NGOs target low-income people (e.g., ag. wage laborers)
- IMPLICATION: Campaigns Need to Also Target High-Income, High-Status Men

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## Finding 2: Effect on Household Composition Depends on Who Dies

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- Head-of-household death → - 1.5 members
  - Older daughters more likely to leave
    - In 60% of these cases: marriage
    - Major loss in adult labor
- Female head/spouse death → - 2.1 members
  - Young boys and girls leave the household
- Death of other adults → hh often gained new adult member; these hhs incur less of an economic shock

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### Finding 3: Gender Effects of Mortality on Crop Cultivation

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- Death of male head → - 0.9 acre to sugarcane, horticultural crops
- Death of female head → - 1.8 acre to cereals, tubers

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### Finding 4: Effects of Farm Production Sensitive to Gender, Position in HH

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- Death of Male hh-head → 45-68% reduction in value of crop output
- Death of Female head/spouse → less dramatic but still negative
- Why Effects of Male Head Death are Greater?
  - High frequency of females leaving after male hh-head dies
  - Loss of female ag. labor to care giving
  - Loss of higher-return crops
  - Widows may face uncertain land rights

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## Finding 5: Greatest decline in farm assets among hhs suffering male hh-head mortality

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- Mainly sell off small animals and farm equipment
- Cattle assets actually increase after male head dies (bride dowry from daughters leaving)

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## Finding 6: Loss of Off-Farm Income

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- Death of Female Head/Spouse:  
-\$438 per year (not significant)
- Death of Male Head  
-\$193 (highly significant)

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## Effects of Adult Death – Rwanda (% of households noting effect)

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- 59% -- reduced agricultural labor
- 37% -- reduced income
- 18% -- drew off savings
- 16% -- increased debt
- 38% -- deterioration in quality of food
- Effects on children: school dis-enrollment, send away to relatives, less supervision
- Effects of morbidity similar to those of mortality

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## Zambia: Un-afflicted vs. Afflicted Households (median values)

	Male-headed households (no death)	Female-headed households (widowed)
Landholding size (hectares)	2.47	1.62
Crop production value (Kw)	549,804	339,148
Household Income (Kw)	858,864	411,801

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## Finding 7: Little Indication that Households are Able to Recover Quickly

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- Effects on afflicted hhs equally severe regardless of when prime-age mortality occurred between 1997 and 2000.

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## Implications

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- Need Special Targeting Assistance to Widowed Households due to Male Adult Mortality
- More secure land rights for women
- Need to Overcome Gender Barriers to Women's Participation in Training Programs for Cash Crops

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## Implication - 2

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- Widow Inheritance, common in Nyanza Province, needs more public campaign attention.
- Targeting strategies aimed at widows may reduce need for widow inheritance and other risky behaviors

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## Implication - 3

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- Not Clear that Focus Should be Put on Low-Input Ag. Tech
  - Adult Mortality also depletes capital and land
- What Provides Higher Returns?
  - Less intensive cultivation of available land
  - vs.
  - more intensive cultivation of smaller fields, rent out the rest

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## Implication - 4

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- Economic Growth Improves Capacity for Households / Communities to Adjust to Prime-Age Death
- Need to Maintain Critical Investments in
  - Agricultural Technology
  - Market Development
  - Democracy and Governance
  - Education

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## Implications - 5

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- However, Programs Needed to Mitigate Long-Term Drag on Economic Development
  - AIDS orphans
  - Primary school enrollment decline
  - Loss of inter-generational knowledge transfer
  - Lower productivity of businesses

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- **Balance needed between**
  - **Investing in Long-Term Productivity**
  - vs.**
  - **Making It Possible for People to Contribute to the Future**

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