

Impacts of Prime-age Adult Mortality in Mozambique: Gender Matters



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Motivation

Mozambique's HIV prevalence rate of 16.2% is among the highest in the world, and the epidemic reaches both urban and rural households. Illness and premature death of adults in rural households can have many effects on household livelihoods. For the agricultural sector to respond, it is critical to understand the effects of the loss of adults on income and productive assets, including land, livestock and labor.

Key questions:

Are households with a death more likely to have labor availability problems? Are they more likely to lose land and livestock over time than other households? Are they more likely to have experienced reductions in income or to have fallen into or remained in poverty than households without a death? Does it matter who dies (gender and role within household) or where the household lives?

Methods

- Panel data set of 4,095 households in TIA 2002 revisited in TIA 2005, with demographic/health/mortality component, providing a nationally-representative rural sample, primarily oriented to agricultural and income information (Survey: TIA 2002 and TIA 2005).



Dataset enables examination of the dynamics of households to assess the impact of prime-age (PA) adult mortality on rural households' demographic composition, land and livestock assets, income and poverty.

Methods of analysis

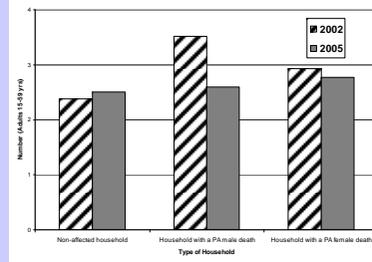
- Identification of households that have suffered the illness death of a prime age (PA) adult, where prime age is 15-59 years of age.
- Empirical approach to estimate differences between households with a death and those that have had no such loss in the previous three years (difference in differences and multiple regression with first differences)

Findings

#1. Households with a male prime age death are less likely to be able to bring in new adults than households with a female prime age death

As Figure 1 and Table 1 indicate, when a PA male dies, the household is less likely to be able to bring in new members than when a PA woman dies. This means that widow-headed households are the most vulnerable to labor shocks and loss of skills/knowledge.

Figure 1: Number of Adults in Households, with and without a death, by gender, 2002 & 2005



- Households with a male death, net loss of 1.1 adults
- Households with a female death, net loss of 0.3 adults



POLICY IMPLICATION: Net labor effects depend strongly on who dies and household composition. Interventions should be designed based on needs that vary by gender and household composition. Widow-headed households are the most likely to have labor problems.

#2. Impact on household assets and income varies by region and by gender of the person who has died

As Table 1 shows, nationally, households with a male death suffer significant losses to both land and livestock. Effects of a female death are not significant, except in the case of landholding in the North/Center of the country.

Table 1 Impact of adult mortality on household demographics, assets, and income, by gender and region

	National		Center/North		South	
	PA male death	PA female death	PA male death	PA female death	PA male death	PA female death
No. of adults	-1.049 ***	-0.254 *	-1.038 ***	-0.318 *	-1.073 **	-0.135 ns
Landholding	-20.5% **	-18.3% *	-20.2% *	-22.0% *	-20.0% ns	-10.8% ns
Livestock	-34.3% **	9.7% ns	-37.9% **	4.3% ns	-21.6% ns	17.4% ns
Crop income	-41.5% **	-8.0% ns	-49.4% **	-13.5% ns	-10.9% ns	4.1% ns
Non-farm income	-72.9% **	25.7% ns	-63.4% ns	94.3% ns	-88.9% **	-54.1% ns
Total income	-25.2% **	18.4% ns	-26.4% **	11.9% ns	-21.3% ns	26.1% ns
Total income/AE	3.8% ns	37.4% ns	1.6% ns	40.8% ns	9.4% ns	27.3% ns

Source: TIA 2002 and TIA 2005.
Note: NS = not significant; * = significant at 10% level; ** = significant at 5% level; and ***=significant at 1% level. PA=Prime age (15-59 years).

Due to limited opportunities for women, when a PA male dies, households suffer significant losses in crop income, especially in the North/Center, and in off-farm income, especially in the South.

POLICY IMPLICATION: Improved tenure rights for women are important. Increasing women's access to cash cropping extension, credit and marketing services would contribute to reducing impact of death. Similarly, increasing women's access to education and credit would enable greater participation in off-farm income with higher returns.

Table 2: Mobility of households above and below the poverty line, from 2002 to 2005

Poverty Categories	Households	
	With at least 1 PA death	With no PA deaths
	(%)	
Stayed Poor	49.7	50.4
Became Poor	18.2	15.3
No longer Poor	21.5	17.1
Stayed Non-poor	12.8	14.9

#3. Households with a death are no more likely to fall into poverty or remain in poverty than other households.

As Table 2 shows, the majority of households with a death fall in the category of staying in poverty or falling into poverty. The same is true of households without a death. Focusing poverty reduction measures to those affected by adult illness and death risks missing many of the poor while potentially including many relatively non-poor.



POLICY IMPLICATION: Heterogeneity of affected households and of impacts requires targeting and more disaggregated approaches in the design of interventions.

Indicators beyond 'adult mortality' are required to help identify affected households most in need of immediate assistance, such as households with a male head death and/or those with low assets or incomes and poor nutritional indicators.

Different interventions may be needed, depending upon the types of losses suffered by the households and the opportunities in the region.

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