



# Security of Widows' Access to Land in the Era of HIV/AIDS: Panel Survey Evidence from Zambia

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## OUTLINE

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- Background
- Motivation
- Objectives
- Data and methods
- Findings
- Conclusion
- Discussion

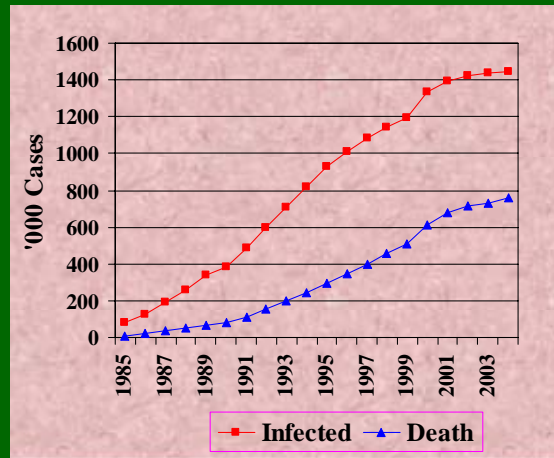
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# HIV/AIDS Situation in Zambia

.....Background

- ❑ First confirmed case in 1984
- ❑ End of 1989
  - 450 000 infected
- ❑ End of 2001
  - About 1.3 million infected, 85% adults
  - Orphans – more than 1 million
- ❑ Averaging 78 000 HIV infections and 42 000 deaths per year over the entire period
- ❑ Currently, about 1.5 mil infected

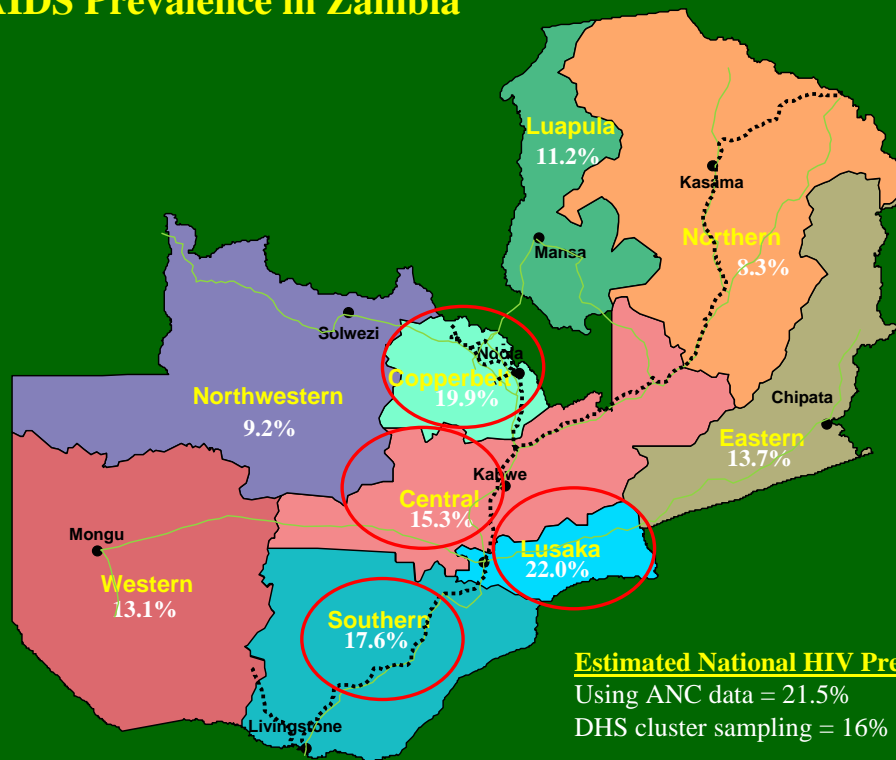
Fig 1: Numbers of HIV/AIDS infection and AID-related Deaths in Zambia, 1985-2004



Source: Ministry of Health and CSO, Zambia

# HIV/AIDS Prevalence in Zambia

.....Background



**Estimated National HIV Prevalence**  
 Using ANC data = 21.5%  
 DHS cluster sampling = 16%

## Land Inheritance Patterns in Zambia

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- In Southern Africa, 60% of small farmers are women and they make up about 75% of the food production and processing workforce (UNECA, 2003).
  
- Women rarely own or have control over land they cultivate (Milimo, 1990, Amstrong, 1992 Mutangadura, 2004; WLSA, 1997; Shezongo-Macmillan, 2005; UNECA, 2003).
  - Inheritance of land and other property and productive assets is almost always the prerogative of the deceased man's male kin.

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## .....Land Inheritance Patterns in Zambia

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- Two land tenure systems exist in Zambia :
  - Customary and statutory land tenure systems
  
- Customary land tenure system
  - traditional authorities (chiefs and/or village headman) allocate vacant land to families and individuals
  - No title deeds to the land and the land cannot be sold.
  - 94% of total land area under this system
  - Tribal authorities rarely allocate land directly to women (Mutangadura, 2004).
  - Virilocal marriages in both patrilineal and matrilineal communities tend to reinforce the lack of women's direct access to, control over, and ownership of land in Zambia.

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## .....Land Inheritance Patterns in Zambia

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### □ Statutory system:

- individual land owners have title deeds to their land and can sell, rent, mortgage or transfer any part of that land.
- 6% of total land area is under statutory system
- women have the right to own land
- socio-economic and cultural factors such as illiteracy, the high cost of land, lack of capital, and patriarchal attitudes among men prevent women from applying to lease or own land (UNECA, 2003; Keller, 2000; Republic of Zambia, 2005).

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## MOTIVATION

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### □ The HIV/AIDS pandemic has substantially increased the number of widow-headed households in Africa.

- Using nationally representative rural survey data: rose from 9.4 % to 12.3% between 2001 and 2004 in Zambia

### □ Huge number of conceptual and qualitative studies highlight gender inequalities in property rights.

- e.g. widows face difficulties in retaining access to land after the death of their husbands

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## MOTIVATION

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- ❑ However, there remains limited quantitative evidence on:
  - the extent to which widows lose their rights to land after the death of their husbands
  - whether widows lose all or part of the land they were formerly controlling?
  - the characteristics that influence the likelihood of widows losing land rights

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## OBJECTIVES

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- ❑ To assess how households' land cultivation is affected after the death of the male household head (and headed by a widow) compared to households not incurring mortality
- ❑ To determine the characteristics that influence the extent to which widows lose their access to land
- ❑ To identify implications for social protection, poverty alleviation and HIV/AIDS mitigation strategies

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## DATA

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- Nationally-representative panel data of smallholder rural farm households in Zambia
  - CSO/MACO/FSRP/MSU
  - surveyed in May 2001 and May 2004
- 5342 households were successfully re-interviewed
  - Of which:
    - 574 households incurred illness-related prime-age mortality.
    - 91 households incurred male head of household death (73 widow-headed, 18 headed by another person)
  - Our interest is the 73 widow headed households

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## ESTIMATION MODEL

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$$\Delta L = \alpha + \beta D^w + D^w * X^w \beta + D^w * X^h \beta + \dots$$

- $\Delta L$  - change in land access (hectares)
- $D^w$  - HHs headed by a widow in 2004
- $X^w$  - widow characteristics
- $X^h$  - initial household characteristics

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## Factors hypothesized to influence widow's ability to retain land

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- Widow characteristics ( $X^w$ )
  - Age
  - Years of education
  - Widow's relation to village headman
- Initial household characteristics ( $X^h$ )
  - Wealth status
  - Household composition (numbers of prime-age males, females, and children)
  - Deceased husband's relation to the village headman
  - Number of years settled in locality
  - HHs in villages adhering to matrilineal vs. patrilineal land inheritance rules

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## DATA LIMITATIONS

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- Land cultivated as a proxy for land access
- Why? –HH total landholding size not recorded in second wave
- Problematic because changes in cropped land may not reflect land access but rather a shortage of labor.
- We consider a set of variables related to social ties and how they interact with mortality shocks.
  - widow's and deceased husband's relation to the village headman
  - matrilineal vs. patrilineal land inheritance rules
  - # of years in which the households' clan settled in the area

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## FINDING 1

- Land cultivated between 2001 and 2004 declined among both afflicted and non-afflicted but declined most among households becoming widow headed .

Table 1: Average  $\Delta$  in cropped area by HH type

Household Type	Change between 2001 and 2004
Non-afflicted	-7.6%
Other deaths (not widow headed)	-14.3%
Male head death (widow headed)	-36.2%

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## FINDING 2

- Widow-headed households:
  - were least likely to increase cropped area
  - most likely to reduce their cropped area
  - most likely to suffer a greater than 50% decline in cropped land

Table 2: Changes in cropped land: % HHs by HH type

Household Type	% HH increased cropped land	% HH reduced cropped land	% HH with more than 50% decline
Non-afflicted (no deaths)	50	45	19
Other deaths (not widow headed)	45	48	21
Male head death (widow headed)	38	58	27

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## FINDING 3

- To some extent, older widows are protected against loss of land access compared to younger widows.

Table 3: Simulations of the %age change in cropped land

Profile	Widow age 50 & above	Wealth status	Children age 6-14	Widow related to head	Years settled in locality	Δ in cropped land
1	No	Mean	Mean	Mean	Mean	-45%
2	Yes	Mean	Mean	Mean	Mean	-13%

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## FINDING 4

- Having more children age 6-14 (prime-age male and females-the impact is negative but insignificant) does not protect the widow from losing land access after the death of her husband.

Table 4: Simulations of the %age change in cropped land

Profile	Widow age 50 & above	Wealth status	Children age 6-14	Widow related to head	Years settled in locality	Δ in cropped land
1	Yes	Non-poor	Mean (2.2)	Mean	Mean	-34.2%
2	Yes	Non-poor	5.00	Mean	Mean	-67.5%

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## FINDING 5

- Initially relatively wealthy households are particularly vulnerable to losing land access.

Table 5: Simulations of the %age change in cropped land

Profile	Widow age 50 & above	Wealth status	Children Age 6-14	Widow related to head	Years settled in locality	Δ in cropped land
1	Yes	Poor	Mean	Mean	Mean	+9%
2	Yes	Non-poor	Mean	Mean	Mean	-34.2%

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## FINDING 6

- Widows whose family has kinship ties to the village authorities are less likely to face a severe decline in land cultivation after the death of their husbands.

Table 6: Simulations of the %age change in cropped land

Profile	Widow age 50 & above	Wealth status	Children Age 6-14	Widow related to head	Years settled in locality	Δ in cropped land
1	Yes	Non-poor	5	No	Mean	-73.4%
2	Yes	Non-poor	5	Yes	Mean	-12.4%

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## FINDING 7

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- The negative impact of mortality of the male head of household on cropped land is not mitigated by the number of years the household was settled in the locality.

Table 7: Simulations of the %age change in cropped land

Profile	Widow age 50 & above	Wealth status	Children Age 6-14	Widow related to head	Years settled in locality	Δ in cropped land
1	Yes	Non-poor	5	Yes	Mean (15)	-12.4%
2	Yes	Non-poor	5	Yes	20	-23.8%

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## FINDING 8

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- There appears to be no difference between widows living in matrilineal versus patrilineal villages.
  - both are at risk to losing their rights to productive assets including land to their brothers and/or uncles.

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## CONCLUSION

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- ❑ The view that widows and their dependents in rural areas of Africa face greater livelihood risks in the era of HIV/AIDS is somewhat supported by the nationally-representative survey results in Zambia.
  
- ❑ Efforts to safeguard widows' rights to land through land tenure innovations involving community authorities may be an important component of social protection, poverty alleviation, and HIV/AIDS mitigation strategies.

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## .....Conclusion

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- ❑ The Poverty Reduction Strategies being conceived and implemented in many African countries may provide a vehicle for addressing property grabbing and widows' access to land and other productive assets.
  
- ❑ Rural communities' resilience and resistance to the AIDS epidemic tend to be related to how they treat the most vulnerable parts of the community:
  - so mobilizing support among traditional authorities to better understand the social and economic impacts of existing land inheritance institutions may have high economic, social, and health payoffs.

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# WANT TO KNOW MORE??

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**Food Security Group of Related Research :**

**<http://aec.msu.edu/fs2/index.htm>**

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**Table 8: Descriptive statistics**

Attributes	Mean	10pctile	90pctile
Widows age 18-33 (=1)	0.20	-	-
Widows age 34-49 (=1)	0.35	-	-
Widows age 50 and above (=1)	0.45	-	-
Children 6 to 14 years in 2000	2.24	1	5
Prime-age males excluding deceased	1.13	0	2
Prime-age females excluding deceased	1.22	0	2
Husband related to headman (=1)	0.31	-	-
Spouse/Widow related to headman (=1)	0.098	-	-
Number of years settled in locality	15	5	31
HH in matrilineal inheritance village (=1)	0.62	-	-

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