Prime Age Adult Mortality and Household Livelihood in Rural Mozambique: Preliminary Results and Implications for HIV/AIDS Mitigation Efforts

Annex Tables: Results from TIA 2002

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Annex Table 1. Number of TIA 2002 Households with Member Deaths, New Arrivals, Departures, and Illness, January 1999 - 2002; Overall and by Age Groups

Households with Changes in Composition, as Indicated	Households in Sample	% of Households Nationally [1]
A. Deaths (all age groups) since January 1999	**578**	**10.6**
Newborn/Infant (under 5 years old)	150	2.8
Children (5 to 14 years old)	61	1.3
Prime Age (15 to 49 years)	230 [2]	4.2
Elderly (50 + years)	197	3.5
B. New arrivals (all age groups) since January 1999 (excluding births in family)	**561**	**9.5**
Young Children (4-under 5 years old)	35	0.6
Children (5 to 14 years old)	138	2.4
Prime Age (15 to 49 years)	407	6.5
Elderly (50 + years)	34	0.8
C. Departure for reasons other than death (all age groups) since January 1999	**1047**	**19.3**
Newborn/Infant (under 5 years old)	19	0.3
Children (5 to 14 years old)	120	2.6
Prime Age (15 to 49 years)	910	16.4
Elderly (50 + years)	57	1.0
D. Illness (all age groups) for at least three out of past twelve months	**283**	**5.7**
Newborn/Infant (under 5 years old)	20	0.4
Children (5 to 14 years old)	19	0.4
Prime Age (15 to 49 years)	141	2.7
Elderly (50 + years)	107	2.2
E. Combination of prime age death and prime age illness in the same household	**7**	**0.1**
F. Combination of prime age death and prime age new arrival in the same household	**32**	**0.5**
G. Households with 2 prime age adults currently with prolonged illness	**2**	**0.0**

Source: TIA 2002

[1] There were 4908 households in the nationally representative sample; population estimates of percentages of households are based on the weighted sample.

[2] Deaths from illness account for 217 of the 230 prime-age deaths.

Annex Table 2. Provincial Urban and Rural HIV Prevalence Rates and TIA 2002 Rural Mortality Rates for Adults 15-49 years

Province	Adult Death Due to Illness in Rural Areas, 1999-2002 (1) [1]	Rural and Urban Adult HIV Prevalence, 2002 (2)
	---- % of adults within province ----	
Niassa	2.0	11.1
Cabo Delgado	2.1	7.5
Nampula	1.2	8.1
Zambezia	1.8	12.5
Tete	1.9	14.2
Manica	2.7	19.0
Sofala	1.8	26.5
Inhambane	1.3	8.6
Gaza	2.7	16.4
Maputo	2.0	17.4
National	1.8	13.6

Source: (1) TIA 2002 Rural Survey: TIA percentages are based on weighted estimates. They reflect the percentage of rural adults (15-49) who died during the January 1999-August 2002 period, compared to the total number of rural adults; (2) Ministry of Health, National Institute of Statistics, Ministry of Planning and Finance, and Center for Population studies (2003). Impacto Demografica do HIV/SIDA em Mocambique (based on observations from 36 urban and rural health posts across the country; figures are for age group 15-49 inclusive).

[1] Percentages are based on within category weighted estimates. "% of total" refers to percentage of those within the given category distributed across the provinces.

Annex Table 3. Income and Land Holding Characteristics of Non-Affected Rural Households and Those With Deceased Male and Female Members: Mozambique, 2002

Characteristics of Households (average values)			Non-Affected Households	HH with Male Who Died From illness [1]	HH with Female Who Died From illness [1]
Total Land Area		hectares (ha)	1.7	1.4	1.4
Cultivated Land Area		hectares (ha)	1.3	1.1	1.2
% of Total Land Area cultivated			81%	78%	82%
Adult Equivalents		(AE)	3.5	3.2	3.8
Total Land Area/AE		ha/AE	0.6	0.6	0.5
Cultivated Land Area/AE		ha/AE	0.4	0.4	0.4
Total Income		1000 met	6,811	5,383	6,013
Total Income/AE		1000 met/AE	2,084	1,762	1,812
% of HHs in lowest two quartiles of income/pc			50%	61%	53%
% of HHs in lowest two quartiles of total land/pc			50%	54%	60%
		quartile means (1000 met/capita)	---- % of HH in each quartile ----		
Quartiles of 2002	Lowest	133	24.9	31.1	24.3
HH per Capita	Mid-low	558	24.9	29.7	29.0
Income (%)	Mid-high	1,151	24.9	23.8	24.6
	Highest	4,350	25.3	15.5	22.0
			100.0	100.0	100.0
		(ha/capita)			
Quartiles of 2002	Lowest	0.09	24.2	24.3	33.4
HH per Capita	Mid-low	0.22	25.4	30.1	26.3
Total Land Area (%)	Mid-high	0.37	25.2	23.4	22.0
	Highest	0.95	25.2	22.2	18.4
			100.0	100.0	100.0
Number of Households in analysis			4572	104	106

Source: TIA 2002 Rural survey

[1] over period from 1999-2002

Annex Table 4. Mobility of Members of Households With and Without Prime-Age Death From Illness, 1999-2002

Household Member Movement	Non-Affected Households (% HH)	HH with PA Male Death From Illness (% HH)	HH with PA Female Death From Illness (% HH)
Arrival of PA male(s)	2.3	2.0	3.4
Arrival of PA female(s)	4.2	4.6	11.5
Arrival of one or more children age 0-14	0.6	0.0	1.5
Departure of PA male(s)	9.0	3.6	10.3
Departure of PA female(s)	9.0	10.6	5.7
Departure of one or more children age 0-14	2.8	3.9	10.1
Cases	4572	104	106

Source: TIA 2002

Annex Table 5. Characteristics of Households With and Without Prime-Age Death From Illness, 1999-2002

Household Characteristic	Non-Affected Households (% HH)	HH with PA Male Death From Illness (% HH)	HH with PA Female Death From Illness (% HH)
HH size 1999	4.62	5.40	6.30
HH size 2002	4.96	4.57	5.11
Change in HH size	0.34	- 0.84	- 1.19
HH size 1999 in AE[1]	3.23	3.97	4.39
HH size 2002 in AE	3.42	3.07	3.59
Change in HH size in AE (1999 - 2002)	0.19	- 0.90	- 0.80
Dependency Ratio 1999	1.23	0.99	1.41
Dependency Ratio 2002	1.41	1.60	1.74
Change in Dependency Ratio (1999 - 2002)	0.17	0.70	0.41
Cases	4572	104	106

[1] AE = Adult Consumption Equivalents by age groups (0-4; 5-14; 15-24; 25-49; 50+) and by gender

Source: TIA 2002

Annex Table 6. Household Adjustment Strategies Identified in Response to Prime-Age Death From Illness By Gender Of Member Deceased

Strategy	Cases of Prime-Age Death Due to Illness [1]		
	All	Males	Females
1. Labor replacement strategies	---- % of cases ----		
Contracted labor to cultivate land	7.4	8.4	6.6
Increased labor use of other family members	3.7	4.9	2.7
Increased use of self-help (mutual help) with neighbors	6.8	9.1	4.9
Obtained more labor by bringing back a family member who had left the HH	0.4	0.0	0.7
Adopted or brought in children from other households	0.6	1.1	0.1
Increased use of children for income activities	4.0	6.0	2.3
Removed one or more children from school	2.7	2.0	3.3
2. Reduce Area Culivated or Reduce Labor Inputs			
Cultivate less land	44.3	52.2	37.8
Reduced the labor time for weeding	22.3	25.0	20.1
Adopted or increased crops that demand less labor	3.1	3.1	3.2
3. Asset-based strategies			
Lent land to others	4.3	4.3	4.4
Rented or sold land to others	0.7	0.4	1.0
Sought loan or donation	1.7	1.1	2.1
Force to spend most of household savings	11.9	8.1	15.0
Sold large animals, such as oxen, sheep, goats, pigs, to meet urgent needs	5.3	8.3	2.9
Sold some other household asset to meet urgent needs	12.1	14.7	10.0
4. Consumption-based strategies			
Significantly reduced the quality of the diet (eat less meat, fish, vegetables)	14.1	18.4	10.5
Sent children away to live with relatives	7.8	3.9	11.0
5. Child-related strategies			
Increased use of children for income activities	4.0	6.0	2.3
Removed one or more children from school	2.7	2.0	3.3
Sent children away to live with relatives	7.8	3.9	11.0
Adopted or brought in children from other households	0.6	1.1	0.1
No strategy stated	33.8	27.0	39.4
Cases	217	105	112

[1] Columns do not sum to 100% because households were asked for up to 3 strategies.

Source: TIA 2002

Annex Table 7. Adjustment Strategies Indicated by Households Experiencing a Prime-age Death from Illness over 1999-2002 by Selected Characteristics

Adjustment Strategy in Response to Prime-Age Death Shock	Characteristics of Households That Did and Did Not Use A Given Adjustment Strategy											
	Strategy Use (Number of Cases)		HH Income per Capita (1000 mt / Capita)			HH Total Land per AE (Hectares / Capita)			HH Adult Equivalents (Number of AE's)			Change in AE per HH 1999 - 2002 (# AE)		
			Strategy Use		Diff. Test	Strategy Use		Diff. Test	Strategy Use		Diff. Test	Strategy Use		Diff. Test
	Yes	No	Yes	No		Yes	No		Yes	No		Yes	No	
1. Hire Labor or Increase Use of Mutual Help	n=24	n=193	1,635	1,221		0.66	0.48		4.1	3.4		-1.10	- 0.83	
2. Increase Use of Child Labor	n=12	n=205	935	1,300		0.56	0.50		3.3	3.5		- 1.12	-0.84	
3. Reduce Area Cultivated	n=82	n=135	1,190	1,346		0.51	0.51		3.0	4.0	***	- 0.87	-0.86	
4. Reduce Labor Spent on Weeding	n=33	n=184	998	1,358		0.57	0.49		2.5	3.8	***	- 0.92	-0.85	
5. Reduction of Cash, Livestock/Other Assets	n=36	n=181	1,470	1,227		0.51	0.51		3.6	3.5		- 0.78	-0.89	
6. Send Children Away	n=12	n=205	1,401	1,267		0.36	0.52		3.2	3.6	*	-0.78	-0.88	

Total Cases of PA death (n=217); Mean Values of HH Characteristics: HH Income = 1,285 /capita; HH Total Land per AE = 0.53 ha/capita; HH/AE = 3.53 AE; Change in AE per HH = -0.86 AE's

* indicates significant difference between mean values at the *** 0.01 level; ** at the 0.05 level; * at the 0.10 level

Source: TIA 2002

Annex Table 8. Adjustment Strategies Indicated by Households Who Experienced a Prime-age Death From Illness over 1999-2002 By Gender and Household Headship Status of the Deceased

Adjustment Strategy in Response to Prime-Age Death Shock	Number of Cases [1]	Within Each Household Category, Percentage of Households Using A Given Adjustment Strategy								
		HH With Male Death	HH With Female Death	Diff. Test	HH With Death of Head/ Spouse	HH With Death of Other Member	Diff. Test	HH With Death of Male Head/ Spouse	HH With Death of Female Head/ Spouse	Diff. Test
1. Hire Labor or Increase use of Mutual Help	n=24	20 %	7 %	**	17 %	13 %		17 %	17 %	
2. Increase use of Child Labor	n=12	7 %	5 %		12 %	4 %	*	13 %	10 %	
3. Reduce Area Cultivated	n=82	50 %	38 %		52 %	48 %		60 %	32 %	**
4. Reduce Labor Spent on Weeding	n=33	25 %	20 %		21 %	26 %		30 %	0 %	*
5. Reduction of Cash, Livestock or Other Assets	n=36	4 %	12 %	*	32 %	17 %	*	33 %	30 %	
6. Send Children Away	n=12	4 %	12 %	*	15 %	6 %	**	11 %	26 %	
7. No Strategy	n=89	27 %	41 %	*	20 %	38 %	**	11 %	41 %	***
% of Total Cases [2]	n=217	48 %	52 %		27 %	73 %		19 %	7 %	

* Indicates significant difference between mean values *** at the 0.01 level; ** at the 0.05 level; * at the 0.10 level.

[1] Case numbers only apply to the first two columns (male vs. female death). Household headship status could not be identified for 10% of the cases, thus these cases are not included in the columns with household headship status categories.

[2] Columns do not sum to 100% because households were asked for up to 3 strategies.

Source: TIA 2002