Table 1

Total Livestock Mortality Model Estimates

	(1)		(2)	
Variable	Estimate	Std Error	Estimate	Std Error
Intercept	−0.17 **	(0.064)	0.026	(0.075)
m_{jt}	0.55**	(0.071)		
High Rain {0,1}			−0.25**	(0.059)
Medium Rain {0,1}			−0.20**	(0.062)
H_{jt}			−0.00004	(0.001)
H_{jt-1}			−0.001	(0.0004)
$H_{jt} \times$ High Rain			−0.00004	(0.001)
$H_{jt} \times$ Med Rain			−0.00016	(0.001)
H_{jt}	0.0032**	(0.0004)	0.0027**	(0.0005)
$H_{jt}^2 (\div 1000)$	−0.0040**	(0.0007)	−0.0032**	(0.0008)
$H_{jt} \times$ High Rain	−0.0017**	(0.0004)	0.0006	(0.001)
$H_{jt} \times$ Med Rain	−0.0012**	(0.0004)	0.0004	(0.001)
$H_{jt}^2 \times$ High Rain $(\div 1000)$	0.0010	(0.0011)	−0.0031**	(0.0014)
$H_{jt}^2 \times$ Med Rain $(\div 1000)$	0.0008	(0.0010)	−0.0016	(0.0012)
Yabello {0,1}	0.045	(0.078)	0.073	(0.081)
Mega {0,1}	−0.18*	(0.090)	−0.14	(0.093)
Arero {0,1}	−0.075	(0.084)	−0.093	(0.086)
Number of observations	834		834	
Noncensored Values	494		494	
Right Censored Values	2		2	
Left Censored Values	338		338	
Log Likelihood	−183.11		−185.30	

*(**)indicates statistical significance at the 10% (1%) level.

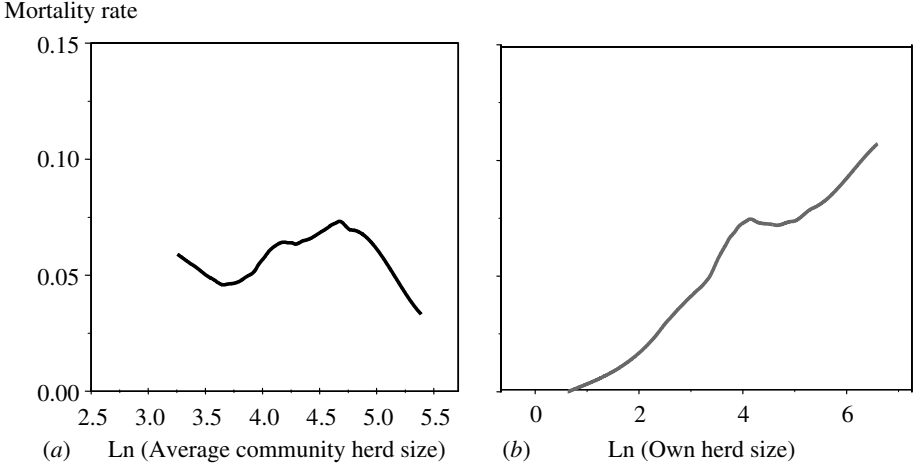


Fig. 3. *LOESS Estimates of Mortality Rates, Conditioned by (a) Average Community Herd Size and (b) Own Herd Size*

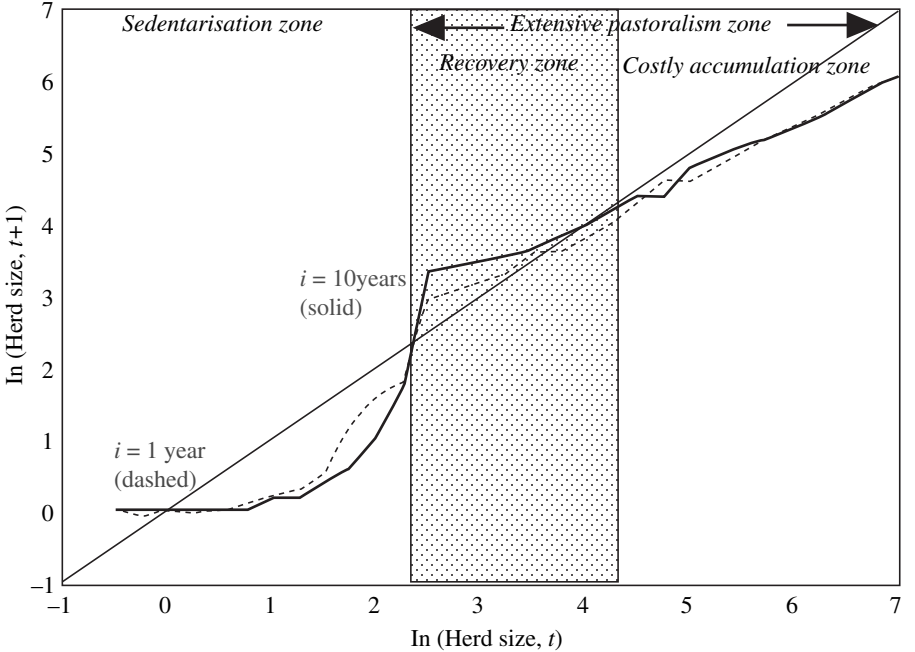
Table 4

Cattle Herd Size Transition Matrices (count of household-year pairs)

	Period $t+1$ Quantile			
	1	2	3	4
Period t Quantile				
1	150	21	0	0
2	28	137	25	0
3	5	23	136	19
4	1	4	13	162

	Period $t+5$ Quantile			
	1	2	3	4
Period t Quantile				
1	70	11	4	0
2	48	65	24	2
3	22	37	63	21
4	2	4	30	104

	Period $t+10$ Quantile			
	1	2	3	4
Period t Quantile				
1	36	3	0	0
2	25	28	12	1
3	22	17	29	9
4	5	1	14	50



Nadaraya-Watson estimates using Epanechnikov kernel with bandwidth ($h = 1.5$)

Fig. 4. *Nonparametric Estimates of Expected Herd Size Transition Functions*

Table 5

Herd Recovery Rates in the Wake of Adverse Shocks(%)

Herd Size:	<15 *ex post*	>15 *ex post*		<15 *ex post*	>15 *ex post*		<15 *ex post*	>15 *ex post*	
		<75 *ex ante*	>75 *ex ante*		<75 *ex ante*	>75 *ex ante*		<75 *ex ante*	>75 *ex ante*
					Shock Intensity				
Years until 95% recovery		>25% loss			15–25% loss			5–15% loss	
1	5.9	17.4	8.3	23.1	46.6	15.4	47.1	58.3	31.5
2	5.9	17.4	8.3	11.5	13.8	11.5	14.7	13.5	16.7
3	23.5	13.0	8.3	19.2	6.9	15.4	5.9	8.3	7.4
4	5.9	13.0	0.0	7.7	6.9	7.7	5.9	4.2	3.7
5	0.0	4.3	16.7	0.0	5.2	3.8	5.9	5.2	3.7
6	0.0	0.0	0.0	3.8	1.7	0.0	2.9	3.1	0.0
7	0.0	4.3	8.3	0.0	0.0	0.0	0.0	0.0	1.9
8	17.6	4.3	0.0	0.0	3.4	0.0	0.0	0.0	0.0
9	0.0	4.3	0.0	0.0	1.7	0.0	0.0	0.0	0.0
10	0.0	0.0	8.3	3.8	0.0	3.8	0.0	0.0	0.0
% right censored:	41.2	21.7	41.7	30.8	13.8	42.3	17.6	7.3	35.2
N:	17	23	12	26	58	26	34	96	54