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ANNEXES 4-10

**LAND TENURE AND CLIMATE RESILIENCE:
HOUSEHOLD LEVEL EVIDENCE FROM KENYA
ANNEXES 4-10**

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Annex 4: Predictors of household-level resilience strategies

	(1)	(2)	(3)	(4)	(5)	(6)
Private land	0.186 (0.175)					
Communal land		-0.0981 (0.213)				
Government land			-0.234 (0.252)			
Land rights index				0.915*** (0.224)		
Title deed					0.682*** (0.193)	
Fear eviction						0.157 (0.174)
Gender: female	-0.412** (0.154)	-0.418** (0.154)	-0.409** (0.154)	-0.333* (0.151)	-0.371* (0.150)	-0.420** (0.149)
Weather worse	0.651* (0.271)	0.660* (0.271)	0.663* (0.271)	0.562* (0.259)	0.534* (0.257)	0.586* (0.257)
Pastoralist livelihood	0.672* (0.307)	0.664* (0.306)	0.664* (0.306)	0.623* (0.303)	0.632* (0.303)	0.728* (0.301)
Education level	0.180** (0.0666)	0.180** (0.0666)	0.184** (0.0667)	0.167* (0.0656)	0.166* (0.0653)	0.195** (0.0648)
All other controls	√	√	√	√	√	√

Constant	-2.542*** (0.594)	-2.401*** (0.581)	-2.377*** (0.584)	-2.495*** (0.566)	-2.352*** (0.564)	-2.596*** (0.561)
Observations	856	857	857	923	923	920
Groups	11	11	11	11	11	11

Standard errors in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Annex 5: Predictors of community restoration efforts

	(1)	(2)	(3)	(4)	(5)	(6)
Private land	-0.468** (0.174)					
Communal land		0.0876 (0.212)				
Government land			0.841*** (0.250)			
Land rights index				1.043*** (0.219)		
Title deed					0.464* (0.190)	
Fear eviction						0.149 (0.167)
Gender: female	-0.667*** (0.151)	-0.665*** (0.151)	-0.699*** (0.152)	-0.610*** (0.148)	-0.660*** (0.147)	-0.694*** (0.146)
Weather worse	0.356 (0.264)	0.322 (0.263)	0.347 (0.264)	0.204 (0.252)	0.207 (0.249)	0.232 (0.249)
Pastoralist livelihood	1.273*** (0.318)	1.292** (0.317)	1.287*** (0.318)	1.209*** (0.312)	1.242*** (0.311)	1.308*** (0.311)
Education level	0.0829 (0.0649)	0.0827 (0.0647)	0.0745 (0.0651)	0.0438 (0.0637)	0.0541 (0.0633)	0.0734 (0.0628)
All other	√	√	√	√	√	√

controls

Constant	-1.306*	-1.623**	-1.795**	-1.490**	-1.432**	-1.612**
	(0.576)	(0.567)	(0.572)	(0.550)	(0.548)	(0.543)
Observations	856	857	857	923	923	920
Groups	11	11	11	11	11	11

Standard errors in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Annex 6: Predictors of preference for household-level resilience strategies only

	(1)	(2)	(3)	(4)	(5)	(6)
Private land	0.522*					
	(0.256)					
Communal land		-0.105				
		(0.302)				
Government land			-0.889*			
			(0.410)			
Land rights index				-0.787*		
				(0.308)		
Title deed					0.317	
					(0.247)	
Fear eviction						-
						0.00092
						6
						(0.221)
Gender: female	0.340	0.330	0.346	0.266	0.337	0.324
	(0.199)	(0.199)	(0.199)	(0.191)	(0.191)	(0.190)
Weather worse	-0.658*	-0.606	-0.639*	-0.454	-0.493	-0.458
	(0.313)	(0.310)	(0.312)	(0.302)	(0.303)	(0.301)
Pastoralist livelihood	0.688	0.671	0.685	0.584	0.467	0.503
	(0.424)	(0.422)	(0.422)	(0.410)	(0.408)	(0.407)
Education level	-0.223**	-0.225**	-0.216*	-0.170*	-0.207*	-0.196*
	(0.0841)	(0.0836)	(0.0839)	(0.0805)	(0.0811)	(0.0802)

All other controls	✓	✓	✓	✓	✓	✓
Constant	-1.370 (0.820)	-0.956 (0.802)	-0.841 (0.806)	-1.296 (0.792)	-1.095 (0.793)	-1.176 (0.790)
Observation s	851	852	852	918	918	915
Groups	11	11	11	11	11	11

Standard errors in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Annex 7: Predictors of participation in past political protest

	(1)	(2)	(3)	(4)	(5)	(6)
Private land	0.334 (0.379)					
Communal land		-0.241 (0.472)				
Government land			-0.417 (0.565)			
Land rights index				0.937* (0.397)		
Title deed					0.263 (0.379)	
Fear eviction						0.326 (0.321)
Gender: female	-0.698* (0.321)	-0.700* (0.321)	-0.686* (0.321)	-0.615 (0.314)	-0.700* (0.311)	-0.748* (0.310)
Weather worse	0.391 (0.568)	0.387 (0.569)	0.391 (0.568)	0.563 (0.575)	0.552 (0.569)	0.577 (0.568)
Pastoralist livelihood	-1.621* (0.724)	-1.645* (0.726)	-1.625* (0.723)	-1.892* (0.738)	-1.804* (0.736)	-1.718* (0.730)
Education level	0.292* (0.137)	0.291* (0.138)	0.294* (0.137)	0.252 (0.136)	0.269* (0.136)	0.273* (0.134)
All other controls	✓	✓	✓	✓	✓	✓
Constant	-4.704*** (1.184)	-4.453*** (1.152)	-4.383*** (1.154)	-4.560*** (1.142)	-4.573*** (1.134)	-4.659*** (1.117)

Observations	849	850	850	916	916	913
Groups	125	125	125	125	125	125

Standard errors in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Annex 8: Predictors of raising an issue with others

	(1)	(2)	(3)	(4)	(5)	(6)
Private land	-0.163 (0.175)					
Communal land		0.104 (0.213)				
Government land			0.160 (0.247)			
Land rights index				0.608** (0.212)		
Title deed					0.275 (0.187)	
Fear eviction						0.332* (0.169)
Gender: female	-0.451** (0.151)	-0.443** (0.151)	-0.450** (0.151)	-0.346* (0.148)	-0.382** (0.147)	-0.413** (0.147)
Weather worse	0.404 (0.269)	0.395 (0.270)	0.392 (0.269)	0.369 (0.259)	0.365 (0.258)	0.396 (0.258)
Q5_farmer=1	0.417 (0.269)	0.401 (0.269)	0.395 (0.269)	0.400 (0.265)	0.381 (0.267)	0.456 (0.264)
Pastoralist livelihood	0.767* (0.304)	0.771* (0.304)	0.773* (0.304)	0.704* (0.299)	0.729* (0.298)	0.812** (0.299)
Education level	0.201** (0.0654)	0.201** (0.0654)	0.198** (0.0654)	0.182** (0.0643)	0.188** (0.0641)	0.194** (0.0637)

All other controls	✓	✓	✓	✓	✓	✓
Constant	-2.083*** (0.591)	-2.204*** (0.582)	-2.221*** (0.582)	-2.191*** (0.570)	-2.156*** (0.570)	-2.259*** (0.563)
Observations	854	855	855	921	921	918
Groups	11	11	11	11	11	11

Standard errors in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Annex 9: Predictors of willingness to join climate-related protest

	(1)	(2)	(3)	(4)	(5)	(6)
Private land	-0.139 (0.174)					
Communal land		0.422* (0.214)				
Government land			-0.260 (0.249)			
Land rights index				0.0682 (0.212)		
Title deed					0.213 (0.191)	
Fear eviction						0.482** (0.167)
Gender: female	-0.587*** (0.151)	-0.584*** (0.151)	-0.581*** (0.151)	-0.567*** (0.146)	-0.557*** (0.146)	-0.600*** (0.146)
Weather worse	0.602* (0.274)	0.618* (0.274)	0.586* (0.274)	0.552* (0.255)	0.531* (0.256)	0.554* (0.256)
Q5_farmer=1	0.393 (0.276)	0.426 (0.277)	0.385 (0.275)	0.419 (0.269)	0.379 (0.271)	0.454 (0.270)
Pastoralist livelihood	0.109 (0.308)	0.103 (0.309)	0.123 (0.308)	0.166 (0.301)	0.145 (0.301)	0.244 (0.303)
Education level	0.160* (0.0641)	0.166** (0.0643)	0.164* (0.0642)	0.120 (0.0620)	0.114 (0.0621)	0.120 (0.0620)
All other controls	✓	✓	✓	✓	✓	✓
Constant	-0.295 (0.580)	-0.441 (0.572)	-0.335 (0.573)	-0.279 (0.538)	-0.210 (0.543)	-0.357 (0.537)

Observations	844	845	845	911	911	908
Groups	11	11	11	11	11	11

Standard errors in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Annex 10: Predictors of agreeing with coercive redistribution statement

	(1)	(2)	(3)	(4)	(5)	(6)
Private land	-0.381 (0.194)					
Communal land		0.587* (0.229)				
Government land			-0.0910 (0.292)			
Land rights index				-0.263 (0.249)		
Title deed					-0.395 (0.218)	
Fear eviction						0.579** (0.183)
Gender: female	-0.201 (0.174)	-0.185 (0.174)	-0.185 (0.173)	-0.108 (0.169)	-0.112 (0.169)	-0.102 (0.169)
Weather worse	-0.263 (0.289)	-0.266 (0.289)	-0.279 (0.288)	-0.295 (0.276)	-0.267 (0.278)	-0.316 (0.277)
Pastoralist livelihood	0.0112 (0.346)	0.0141 (0.347)	0.0349 (0.345)	-0.0716 (0.338)	-0.0402 (0.339)	0.00027 8 (0.340)
Education level	0.0586 (0.0742)	0.0653 (0.0744)	0.0563 (0.0741)	0.0455 (0.0722)	0.0550 (0.0726)	0.0252 (0.0721)
All other controls	√	√	√	√	√	√

Constant	-1.429*	-1.765**	-1.665**	-1.611**	-1.719**	-1.597**
	(0.650)	(0.643)	(0.639)	(0.625)	(0.630)	(0.619)
Observations	833	834	834	893	893	891
Groups	11	11	11	11	11	11

Standard errors in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$



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