

Supplementary Appendix for "Does Local Ethnic
Segregation Lead to Violence?: Evidence from Kenya"

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Table A1: Descriptive Statistics

	Mean	SD	N
No. of IDPs from Location in Camps	85.29	503.49	717
Fire Brightness (K)	141.06	527.70	717
Segregation (Theil's Index)	0.08	0.07	717
Segregation (MI Index)	0.02	0.03	717
Ethnic Fractionalization	0.24	0.24	717
CDFI	0.27	0.36	717
Log. Population Density (1962)	875.93	1899.98	717
Area in 1999	128.64	200.23	717
Average Monthly Rainfall (mm)	101.62	29.75	717
Alienated Area (1934)	0.37	0.48	717
Prop. Rangeland	0.08	0.14	717
Altitude (m)	6324.97	1299.59	717
Terrain Ruggedness Index	1.30	1.42	717
Average Distance to Native Reserves	100.14	43.45	717

Table A2: Controlling for Distance to Native Reserve Areas

	(1) IDP <i>OLS</i>	(2) IDP <i>RF</i>	(3) IDP <i>IV</i>	(4) Fire <i>OLS</i>	(5) Fire <i>RF</i>	(6) Fire <i>IV</i>
Segregation (Theil's Index)	0.11*** (0.00)		1.12** (0.00)	0.07* (0.04)		0.38 (0.15)
Log. Population Density (1962)	0.12* (0.05)	0.06 (0.33)	0.12 (0.22)	-0.13 (0.06)	-0.15* (0.03)	-0.13 (0.07)
Log. Area	0.21*** (0.00)	0.18** (0.00)	-0.12 (0.40)	0.28*** (0.00)	0.28*** (0.00)	0.18 (0.10)
Log. Rainfall	0.25*** (0.00)	0.22** (0.00)	0.19 (0.09)	0.17* (0.04)	0.16 (0.05)	0.15 (0.08)
Alienated Area (1934)	0.35*** (0.00)	0.15** (0.01)	0.18* (0.02)	0.20*** (0.00)	0.14* (0.03)	0.15* (0.01)
Prop. Rangeland	-0.10** (0.01)	-0.11** (0.00)	-0.06 (0.27)	-0.01 (0.76)	-0.02 (0.72)	-0.00 (0.99)
Log. Altitude	0.14*** (0.00)	0.14*** (0.00)	0.11 (0.05)	0.05 (0.21)	0.05 (0.20)	0.04 (0.33)
Log. Terrain Ruggedness	-0.13*** (0.00)	-0.12** (0.00)	-0.11 (0.05)	-0.03 (0.42)	-0.03 (0.46)	-0.03 (0.52)
Log. Distance to Kikuyu NR	0.04 (0.35)	0.05 (0.22)	0.03 (0.66)	0.00 (0.98)	0.01 (0.90)	-0.00 (0.97)
Log. Distance to Kisii NR	0.24*** (0.00)	0.18** (0.00)	0.40*** (0.00)	0.07 (0.26)	0.05 (0.46)	0.13 (0.12)
Log. Distance to Luhya NR	0.00 (0.96)	0.02 (0.69)	0.05 (0.58)	-0.16** (0.01)	-0.16** (0.01)	-0.15* (0.01)
CDFI		0.27*** (0.00)			0.09 (0.13)	
Constant	-0.13*** (0.00)	-0.06* (0.03)	-0.07 (0.08)	-0.08** (0.00)	-0.05 (0.07)	-0.06* (0.05)
N	717	717	717	717	717	717
R ²	0.33	0.34	.	0.17	0.17	0.09
F-stat Inst.			14.75			14.75

Note: Continuous variables are standardized to have a mean of 0 and a standard deviation of 0.5. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A3: Accounting for Ethnic Diversity II - Controlling for Ethnic Diversity (IV)

<i>Second Stage:</i>	<i>Log. No. of IDPs</i>			<i>Log. Fire Brightness</i>		
	[1] OLS	[2] RF	[3] IV	[4] OLS	[5] RF	[6] IV
Segregation (Theil's Index)	0.06 (0.03)		1.04 *** (0.33)	0.05 (0.04)		0.40 (0.25)
Ethnic Fractionalization	0.21 *** (0.03)		0.66 *** (0.24)	0.10 *** (0.04)		0.40 ** (0.18)
Log. Population Density (1962)	0.14 ** (0.06)	0.04 (0.06)	0.19 ** (0.11)	-0.12 (0.07)	-0.16 ** (0.07)	-0.07 (0.08)
Log. Area	0.20*** (0.06)	0.16*** (0.06)	-0.16 (0.15)	0.24*** (0.06)	0.24*** (0.06)	0.11 (0.11)
Log. Rainfall	0.08 (0.05)	0.11 (0.06)	-0.18 (0.12)	0.19*** (0.05)	0.25 (0.07)	0.07 (0.09)
Alienated Area (1934)	0.32*** (0.04)	0.15 (0.06)	0.01 (0.13)	0.19 *** (0.04)	0.12 (0.06)	0.03 (0.10)
Prop. Rangeland	-0.10 *** (0.04)	-0.03 *** (0.04)	-0.06 (0.06)	-0.02 (0.04)	-0.03 (0.04)	-0.01 (0.05)
Log. Altitude	0.18*** (0.04)	0.15*** (0.04)	0.21*** (0.07)	0.05 (0.04)	0.04 (0.04)	0.07 (0.05)
Log. Terrain Ruggedness	-0.05 (0.03)	-0.08 (0.04)	0.04 (0.07)	0.01 (0.04)	-0.02 (0.04)	0.06 (0.05)
CFDI		0.31*** (0.05)			0.13 (0.06)	
Log. Average Distance to Native Reserves		0.02 (0.06)			0.07 (0.06)	
<i>First-Stage: Segregation</i>						
CFDI			0.23*** (0.06)			0.23*** (0.06)
Log. Average Distance to Native Reserves			-0.25*** (0.07)			-0.25*** (0.07)
<i>First-Stage: Ethnic Fractionalization</i>						
CFDI			0.11** (0.06)			0.11** (0.06)
Log. Average Distance to Native Reserves			0.42*** (0.06)			0.42*** (0.06)
N	717	717	717	717	717	717
Cragg-Donald Stat.			7.6			7.6
Stock-Yogo Critical Value (0.10)			7.0			7.0
Stock-Yogo Critical Value (0.15)			4.6			4.6

Note: Continuous variables are standardized to have a mean of 0 and a standard deviation of 0.5. Standard errors in parentheses. ** $p < 0.05$, *** $p < 0.01$. StockYogo (2005) critical values reported are for ζ Wald tests of nominal size 0.05 and actual size less than 0.10 and 0.15.

Table A4: Segregation by Group

	(1) IDP	(2) IDP	(3) IDP	(4) IDP	(5) IDP	(6) Fire	(7) Fire	(8) Fire	(9) Fire	(10) Fire
Kalenjin DI	1.48*** (0.00)					0.62* (0.04)				
Kikuyu DI		0.81*** (0.00)					0.37* (0.02)			
Kisii DI			4.54 (0.29)					2.04 (0.34)		
Luhya DI				1.39** (0.00)					0.62* (0.05)	
Maasai DI					-1.79** (0.01)					-0.81 (0.07)
N	706	716	717	714	712	706	716	717	714	712

Note: Continuous variables are standardized to have a mean of 0 and a standard deviation of 0.5. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A5: Controlling for Settlement Schemes

	(1) IDP <i>OLS</i>	(2) IDP <i>RF</i>	(3) IDP <i>IV</i>	(4) Fire <i>OLS</i>	(5) Fire <i>RF</i>	(6) Fire <i>IV</i>
Segregation (Theil's Index)	0.10** (0.00)		1.49** (0.00)	0.07 (0.05)		0.67* (0.05)
Log. Population Density (1962)	0.09 (0.13)	0.04 (0.56)	0.04 (0.73)	-0.14* (0.03)	-0.17* (0.01)	-0.17* (0.04)
Log. Area	0.19*** (0.00)	0.16** (0.00)	-0.28 (0.16)	0.24*** (0.00)	0.23*** (0.00)	0.03 (0.80)
Log. Rainfall	0.10* (0.03)	0.11* (0.03)	-0.17 (0.21)	0.21*** (0.00)	0.21*** (0.00)	0.09 (0.32)
Alienated Area (1934)	0.40*** (0.00)	0.17** (0.00)	0.22* (0.02)	0.28*** (0.00)	0.17** (0.01)	0.20** (0.00)
Prop. Rangeland	-0.09* (0.01)	-0.10** (0.01)	-0.01 (0.86)	-0.02 (0.68)	-0.02 (0.59)	0.02 (0.74)
Log. Altitude	0.15*** (0.00)	0.15*** (0.00)	0.14 (0.06)	0.03 (0.41)	0.03 (0.44)	0.03 (0.59)
Log. Terrain Ruggedness	-0.08* (0.03)	-0.08* (0.03)	-0.03 (0.69)	-0.00 (0.95)	-0.00 (0.95)	0.02 (0.67)
Settlement Scheme	-0.10 (0.12)	-0.10 (0.12)	-0.15 (0.22)	-0.29*** (0.00)	-0.29*** (0.00)	-0.31*** (0.00)
CDFI		0.31*** (0.00)			0.14* (0.02)	
Constant	-0.14*** (0.00)	-0.06* (0.03)	-0.07 (0.11)	-0.08*** (0.00)	-0.05 (0.11)	-0.05 (0.09)
N	717	717	717	717	717	717
R ²	0.31	0.33	.	0.17	0.17	.
F-stat Inst.			11.01			11.01

Note: Continuous variables are standardized to have a mean of 0 and a standard deviation of 0.5. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A6: Controlling for *NDVI*

	(1) IDP <i>OLS</i>	(2) IDP <i>RF</i>	(3) IDP <i>IV</i>	(4) Fire <i>OLS</i>	(5) Fire <i>RF</i>	(6) Fire <i>IV</i>
Segregation (Theil's Index)	0.11*** (0.00)		1.42** (0.00)	0.07 (0.07)		0.63 (0.05)
Log. Population Density (1962)	0.12 (0.05)	0.06 (0.34)	0.09 (0.42)	-0.14* (0.04)	-0.17* (0.02)	-0.15 (0.05)
Log. Area	0.15** (0.01)	0.13* (0.02)	-0.32 (0.10)	0.25*** (0.00)	0.25*** (0.00)	0.05 (0.72)
Log. Rainfall	0.20*** (0.00)	0.20*** (0.00)	0.03 (0.81)	0.17** (0.01)	0.17** (0.01)	0.10 (0.24)
Alienated Area (1934)	0.39*** (0.00)	0.16** (0.01)	0.21* (0.02)	0.22*** (0.00)	0.12 (0.06)	0.14* (0.03)
Prop. Rangeland	-0.13*** (0.00)	-0.14*** (0.00)	-0.09 (0.21)	-0.00 (0.97)	-0.00 (0.92)	0.02 (0.73)
Log. Altitude	0.22*** (0.00)	0.21*** (0.00)	0.26*** (0.00)	0.03 (0.54)	0.02 (0.62)	0.04 (0.41)
Log. Terrain Ruggedness	-0.04 (0.28)	-0.04 (0.24)	0.04 (0.59)	-0.01 (0.87)	-0.01 (0.83)	0.03 (0.59)
NDVI	-0.24*** (0.00)	-0.22*** (0.00)	-0.42*** (0.00)	0.05 (0.43)	0.07 (0.32)	-0.02 (0.79)
CDFI		0.30*** (0.00)			0.13* (0.03)	
Constant	-0.14*** (0.00)	-0.06* (0.03)	-0.08 (0.07)	-0.08*** (0.00)	-0.05 (0.10)	-0.06 (0.07)
N	716	716	716	716	716	716
R^2	0.32	0.34	.	0.15	0.15	.
F-stat Inst.			11.66			11.66

Note: Continuous variables are standardized to have a mean of 0 and a standard deviation of 0.5. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A7: Rural Locations Only

	(1) IDP <i>OLS</i>	(2) IDP <i>RF</i>	(3) IDP <i>IV</i>	(4) Fire <i>OLS</i>	(5) Fire <i>RF</i>	(6) Fire <i>IV</i>
Segregation (Theil's Index)	0.11*** (0.00)		1.21** (0.00)	0.07 (0.06)		0.45 (0.14)
Log. Population Density (1962)	0.02 (0.73)	-0.03 (0.65)	-0.04 (0.74)	-0.11 (0.13)	-0.13 (0.08)	-0.13 (0.10)
Log. Area	0.16** (0.01)	0.14* (0.02)	-0.19 (0.25)	0.26*** (0.00)	0.26*** (0.00)	0.13 (0.26)
Log. Rainfall	0.14** (0.00)	0.15** (0.00)	-0.07 (0.55)	0.20*** (0.00)	0.21*** (0.00)	0.13 (0.13)
Alienated Area (1934)	0.36*** (0.00)	0.17** (0.00)	0.20* (0.02)	0.21*** (0.00)	0.14* (0.03)	0.15* (0.02)
Prop. Rangeland	-0.04 (0.22)	-0.05 (0.15)	0.01 (0.86)	0.01 (0.87)	0.00 (0.94)	0.03 (0.58)
Log. Altitude	0.13*** (0.00)	0.13*** (0.00)	0.12* (0.04)	0.02 (0.65)	0.02 (0.68)	0.02 (0.72)
Log. Terrain Ruggedness	-0.04 (0.22)	-0.04 (0.25)	-0.00 (0.94)	0.01 (0.73)	0.01 (0.72)	0.03 (0.54)
CDFI		0.27*** (0.00)			0.10 (0.11)	
Constant	-0.17*** (0.00)	-0.09*** (0.00)	-0.10* (0.01)	-0.09*** (0.00)	-0.07* (0.02)	-0.07* (0.02)
N	626	626	626	626	626	626
R^2	0.31	0.33	.	0.14	0.14	.
F-stat Inst.			10.49			10.49

Note: Continuous variables are standardized to have a mean of 0 and a standard deviation of 0.5. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.