- 1 Tables
- 1.1 State based violence

	Geography	North Africa	Population densisty	Distance to border
(Intercept)	3.67***	3.68***	2.62^{***}	2.76***
	(0.11)	(0.11)	(0.12)	(0.13)
$\operatorname{sqrtSpAll}$	0.10***	***80.0	0.07***	***80.0
	(0.01)	(0.01)	(0.01)	(0.01)
mountains_mean	2.27***	2.43***	1.38***	1.24^{***}
	(0.19)	(0.19)	(0.18)	(0.18)
water_gc	0.03***	0.02***	0.02^{***}	0.01**
	(0.00)	(0.00)	(0.00)	(0.00)
barren_gc	-0.03***	-0.03***	-0.02***	-0.02***
	(0.00)	(0.00)	(0.00)	(0.00)
distcoast	0.00***	0.00***	0.00***	0.00***
	(0.00)	(0.00)	(0.00)	(0.00)
region3		0.59***	0.69***	0.82***
		(0.14)	(0.14)	(0.14)
logPopd			1.01^{***}	1.03***
			(0.07)	(0.07)
bdist3				-0.00***
				(0.00)
AIC	43416.47	43397.21	43137.83	43116.87
BIC	43466.57	43454.48	43202.25	43188.45
Log Likelihood	-21701.23	-21690.61	-21559.91	-21548.43
Deviance	5357.37	5358.24	5370.70	5371.83
Num. obs.	9492	9492	9492	9492
$^{***}p < 0.001; \ ^{**}p < 0.01; \ ^{*}p < 0.01; \ ^{*}p < 0.05; \ ^{*}p$.01; $^*p < 0.05$; p	< 0.1		

Table 1: Fatalities

	Geography	North Africa	Population densisty	Distance to border
Precolonial state presence (sqrt)	0.07***	0.05***	0.04***	0.04***
	(0.01)	(0.01)	(0.01)	(0.01)
Mountainous terrain	0.87	0.81***	-0.22	-0.28
	(0.16)	(0.16)	(0.15)	(0.15)
Water (%)	-0.01*	-0.01*	-0.01**	-0.01***
	(0.00)	(0.00)	(0.00)	(0.00)
Barren (%)	-0.02***	-0.02***	-0.01***	-0.01***
	(0.00)	(0.00)	(0.00)	(0.00)
Distance to coast (log)	-0.16^{***}	-0.14^{***}	-0.11^{***}	-0.08***
	(0.02)	(0.02)	(0.02)	(0.02)
Population density (log)			1.00***	0.94***
			(0.06)	(0.06)
Distance to international boundary (log)				-0.20^{***}
				(0.04)
North Africa		0.51^{***}	0.38**	0.47***
		(0.13)	(0.12)	(0.12)
AIC	20314.22	20297.34	20007.10	19979.16
BIC	20364.33	20354.61	20071.52	20050.74
Log Likelihood	-10150.11	-10140.67	-9994.55	-9979.58
Deviance	4106.74	4112.96	4158.66	4164.26
Num. obs.	9492	9492	9492	9492

Table 2: State based conflict events

 $^{***}p < 0.001; ^{**}p < 0.01; ^{*}p < 0.05; ^{*}p < 0.05$

	Geography	North Africa	Population densisty	Distance to border
(Intercept)	7.38***	7.23***	5.36***	5.26***
	(0.59)	(0.59)	(0.59)	(0.59)
$\operatorname{sqrtSpAll}$	-0.18^{*}	-0.13°	-0.39***	-0.33***
	(0.08)	(0.08)	(0.08)	(0.08)
logCapdist	-0.64^{***}	-0.62^{***}	-0.45***	-0.41***
	(0.10)	(0.10)	(0.09)	(0.09)
mountains_mean	1.96***	2.19***	1.37***	1.26***
	(0.19)	(0.19)	(0.18)	(0.18)
water_gc	0.02^{***}	0.02***	0.01***	0.01**
	(0.00)	(0.00)	(0.00)	(0.00)
barren_gc	-0.03***	-0.03***	-0.02***	-0.02***
	(0.00)	(0.00)	(0.00)	(0.00)
distcoast	0.00***	0.00	0.00***	0.00***
	(0.00)	(0.00)	(0.00)	(0.00)
sqrtSpAll:logCapdist	0.05***	0.03**	0.08***	0.07***
	(0.01)	(0.01)	(0.01)	(0.01)
region3		0.65***	0.66***	0.76***
		(0.14)	(0.14)	(0.14)
logPopd			1.05***	1.06***
			(0.07)	(0.07)
bdist3				-0.00**
				(0.00)
AIC	43336.75	43312.48	43111.91	43096.36
BIC	43401.17	43384.06	43190.65	43182.26
Log Likelihood	-21659.37	-21646.24	-21544.96	-21536.18
Deviance	5361.08	5362.21	5372.08	5372.94
Num. obs.	9492	9492	9492	9492
*** $p < 0.001$; ** $p < 0.01$; * $p < 0.01$; * $p < 0.05$; ` $p < 0.1$	p < 0.05; $p < 0.05$			

Table 3: Fatalities * Distance to capital

	Geography	North Africa	Population densisty	Distance to border
Precolonial state presence (sqrt)	-0.25***	-0.30***	-0.36***	-0.33***
	(0.07)	(0.07)	(0.06)	(0.00)
Mountainous terrain	0.88***	0.87	0.01	-0.05
	(0.15)	(0.15)	(0.15)	(0.15)
Water (%)	-0.01	-0.00	-0.01**	-0.01***
	(0.00)	(0.00)	(0.00)	(0.00)
Barren (%)	-0.02^{***}	-0.02***	-0.01***	-0.01***
	(0.00)	(0.00)	(0.00)	(0.00)
Distance to coast (log)	-0.13^{***}	-0.09***	-0.12^{***}	-0.09***
	(0.02)	(0.02)	(0.02)	(0.02)
Population density (log)			1.00***	0.95***
			(0.06)	(0.00)
Distance to international boundary (log)				-0.19^{***}
				(0.04)
North Africa		0.39**	0.36**	0.44***
		(0.13)	(0.12)	(0.12)
Distance to capital (log)	-0.45***	-0.37***	-0.30***	-0.28***
	(0.08)	(0.08)	(0.08)	(0.08)
Interaction term	0.05***	0.06***	0.06***	0.06***
	(0.01)	(0.01)	(0.01)	(0.01)
AIC	20284.02	20282.75	19982.19	19957.16
BIC	20348.44	20354.33	20060.93	20043.06
Log Likelihood	-10133.01	-10131.37	-9980.09	-9966.58
Deviance	4117.11	4118.67	4168.50	4172.13
Num. obs.	9492	9492	9492	9492

 $^{***}p < 0.001; ^{**}p < 0.01; ^{*}p < 0.05; ^{*}p < 0.1$

Table 4: Conflict events * Distance to capital

1.2 Communal violence

	Baseline	North Africa	Population density	Distance to international boundary	Pastoralism
Mountainous terrain	1.88***	1.89***	1.73***	1.74***	1.72***
	(0.24)	(0.24)	(0.23)	(0.23)	(0.23)
Water (%)	0.00	0.00	-0.00	0.00	0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Barren (%)	-0.03***	-0.03***	-0.02***	-0.02***	-0.02***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Distance to coast (log)	-0.10***	-0.10***	-0.11^{***}	-0.11^{***}	-0.11***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
North Africa		0.00	0.62***	0.59	0.59**
		(0.19)	(0.19)	(0.19)	(0.19)
Population density (log)			1.21	1.20***	1.20***
			(0.00)	(0.09)	(0.00)
Distance to border (log)				0.00	0.05
				(0.06)	(0.06)
Land not suited for pastorial herding					0.05
					(0.21)
Precolonial state presence (sqrt)	0.07***	0.07***	-0.03*	-0.03*	-0.03^{*}
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
AIC	14603.42	14605.30	14455.47	14456.71	14458.67
BIC	14653.53	14662.57	14519.90	14528.30	14537.41
Log Likelihood	-7294.71	-7294.65	-7218.74	-7218.36	-7218.33
Deviance	2412.91	2412.85	2439.51	2439.59	2439.66
Num. obs.	9492	9492	9492	9492	9492
*** $p < 0.001$; ** $p < 0.01$; * $p < 0.01$; * $p < 0.05$; $p < 0.1$					

Table 5: Non-state conflict events

	Baseline	North Africa	Population density	Distance to international boundary	Pastoralism
Mountainous terrain	2.32***	2.29***	2.05***	2.02***	2.29***
	(0.53)	(0.53)	(0.48)	(0.48)	(0.48)
Water (%)	0.02	0.02	0.04**	0.04**	0.04^{**}
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Barren (%)	-0.02***	-0.01^{*}	0.00	0.00	0.01
	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Distance to coast (log)	0.26***	0.26***	0.35***	0.36***	0.36***
	(0.06)	(0.06)	(0.06)	(0.07)	(0.07)
North Africa		-1.11^{**}	-0.35	-0.31	-0.38
		(0.42)	(0.39)	(0.39)	(0.39)
Population density (log)			1.92***	1.94^{***}	1.95***
			(0.19)	(0.19)	(0.20)
Distance to border (log)				-0.11	-0.01
				(0.12)	(0.12)
Land not suited for pastorial herding					0.09
					(0.45)
Precolonial state presence (sqrt)	0.03	0.05	-0.10^{**}	-0.09**	-0.07*
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
AIC	3256.20	3250.43	3185.22	3186.58	3191.01
BIC	3306.31	3307.69	3249.65	3258.16	3269.75
Log Likelihood	-1621.10	-1617.21	-1583.61	-1583.29	-1584.50
Deviance	482.96	484.90	504.20	504.31	504.20
Num. obs.	9492	9492	9492	9492	9492
$^{***}p < 0.001; \ ^*p < 0.01; \ ^*p < 0.05; \ ^p < 0.1$					

Table 6: Communal violence events

Cost model (bacerey) 3.184** 0.422 1.189** 0.425** 3.487** 1.189** 0.425** 0.4		Main ZINB model	Excluding Nigeria	Excluding Uganda	Excluding Kenya	Excluding Ghana	Former British colony interaction East Africa interaction West Africa interaction	East Africa interaction	West Africa interaction
truncki suppaydd (u2) (u2) (u2) (u2) (u2) (u2) (u2) (u2)	Count model: (Intercept)	-3.06***	-0.12	-3.19***	-2.57***	-3.06***	-1.56***	-2.18***	-0.09
1 model begrigshill 1,127		(0.38)	(0.42)	(0.38)	(0.43)	(0.38)	(0.35)	(0.34)	(0.31)
truncicle normaticacurum (1907) (1907	Count model: sqrtSpAll	-0.02***	-0.16***	-0.02***	0.05***	-0.02***	-0.05***	0.10***	-0.18***
The control position Control C		(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)
Lanoick bentage (1027) (1021)	Count model: mountains_mean	1.19	1.03	(0.06)	0.81	1.14°	1.90	1.53	1.30
tanched bergering (0,000)	Count model: water gc	0.00)	0.01	0.01*	(0.00)	0.01*)	0.00	0.00	0.00
to model between, expression (0.227) 0.0177-1		(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
to model begright (1997) (1997	Count model: barren_gc	0.02***	0.01***	0.02***	0.01***	0.02***	0.02***	0.01***	0.02***
truncuci seg-tated (1007) (1127) (1127) (103		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
th coldet bugliblest (1007) (1	Count model: logCDist	0.29****	0.18***	(0.29***	0.24***	0.30***	0.15***	(0.09)	0.11***
truncide bagbard (0.02)	Count model: logBDist	0.09***	-0.07***	0.12***	-0.12^{***}	0.07***	0.01	0.02	0.03
t model inglebyld (10,00) (10,		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
tr model vegical (1.25) (1.05)	Count model: logPopd	0.89***	0.19**	0.90***	1.12***	0.90***	0.48***	0.73***	0.74***
model supsignation (107) (108) <td>Count model: region3</td> <td>(0.03)</td> <td>(0.06) 0.40***</td> <td>(0.03)</td> <td>(0.04)</td> <td>(0.03)</td> <td>(0.03) -0.45***</td> <td>(0.03) -0.12</td> <td>(0.04)</td>	Count model: region3	(0.03)	(0.06) 0.40***	(0.03)	(0.04)	(0.03)	(0.03) -0.45***	(0.03) -0.12	(0.04)
model (Intercept) 6.01*** 6.14*** 6.24*** 6.50*** 6.00*** 6.71*** 7.48*** model septemblish 0.03 0.03 0.03 0.03 0.03 0.03 0.03 model septemblish 0.03 0.04 0.03		(0.07)	(0.08)	(0.07)	(0.09)	(0.07)	(0.07)	(0.08)	(0.08)
model: syrtSyM1 (0.77) (0.72) (0.77) (0.77) (0.75)	Zero model: (Intercept)	6.01***	6.14***	6.24***	6.56***	6.05***	6.71***	7.46***	6.24***
Decide Secretary Control Contr	Zono model sont Sn All	(0.73)	(0.84)	(0.74)	(0.85)	(0.75)	(0.76)	(0.78)	(0.70)
model: wigned:	zero moder, squestrari	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
model vaterage (0.23) (0.24) (0.25) (Zero model: mountains_mean	-0.94***	-1.30***	-0.90***	-0.40	-1.05***	-0.93***	-0.36	-1.38***
model: barrea_set (0.00) (0.00) (0.01) (0.02) (0.02) (0.02) (0.02) (0.02)	Tour motion and	(0.23)	(0.25)	(0.23)	(0.27)	(0.23)	(0.24)	(0.26)	(0.25)
model barrange (0.00) <th< td=""><td>Zero model: water_gc</td><td>0.00</td><td>0.00</td><td>(0.01)</td><td>0.01</td><td>0.00</td><td>0.01</td><td>(0.01)</td><td>00:00</td></th<>	Zero model: water_gc	0.00	0.00	(0.01)	0.01	0.00	0.01	(0.01)	00:00
model: bgCDiet (0.00) <th< td=""><td>Zero model: barren_gc</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>00:0-</td><td>0:00</td><td>-0.00</td><td>0.00</td></th<>	Zero model: barren_gc	0.00	0.00	0.00	0.00	00:0-	0:00	-0.00	0.00
model bgCDist -0.13** -0.14**	ı	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
model: kgRDjst (u0s) (u10s)	Zero model: logCDist	-0.15**	-0.21***	-0.15**	-0.17**	-0.14**	-0.16**	-0.19***	-0.17***
model: log-pod (0,07) <th< td=""><td>Zero model: logBDist</td><td>(0.0s) 0.0s</td><td>(0.06) 0.21**</td><td>(0.0s) 0.06</td><td>0.00</td><td>(0.0s) 0.07</td><td>(0.05) 0.10</td><td>(0.0s) 0.06</td><td>(0.05) 0.07</td></th<>	Zero model: logBDist	(0.0s) 0.0s	(0.06) 0.21**	(0.0s) 0.06	0.00	(0.0s) 0.07	(0.05) 0.10	(0.0s) 0.06	(0.05) 0.07
model: bgPoptd -0.00**** -0.05**** -0.05**** -0.05**** -0.05**** -0.05**** -0.05**** -0.05**** -0.05**** -0.05**** -0.05**** -0.05**** -0.05*** -0.05*** -0.05*** -0.05*** -0.05*** -0.00**		(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
model: region3 (0.09) (0.26) (0.27) (0.27) (0.28) (0.09) (0.09) st model: grrf (0.26) (0.27) (0.28) (0.29) (0.29) (0.29) st model: grrf (0.26) (0.27) (0.28) (0.29) (0.29) (0.29) nodel: grrfSpAll:gbr nodel: grrfSpAll:region1 1.12*** (0.01) (0.01) (0.08) nt model: grrfSpAll:region1 nodel: grrfSpAll:region2 1.33*** (0.08) 1.33*** nt model: grrfSpAll:region2 nodel: grrfSpAll:region3 1.35*** (0.03) 1.55*** nt model: grrfSpAll:region3 nt model: grrfSpAll:region3 1.755*** (0.03) 1.55*** nt model: grrfSpAll:region5 nt model: grrfSpAll:region5 1.755*** 1.000** 0.00** nt model: grrfSpAll:region5 1.100** 1.100** 1.100** 0.00** 0.00** nt model: grrfSpAll:region5 1.100** 1.100** 1.100** 0.00** 0.00** 0.00** nt model: grrfSpAll:region5 1.100** 1.100** <	Zero model: logPopd	-0.60***	-0.30*	-0.64***	-0.57***	-0.62***	-0.57***	-0.63***	-0.45***
tr model: gptr total sgrtSpAll;gbtr anodel: sgrtSpAll;region1 tr model: sgrtSpAll;region5 tr model: region5 tr model: region6 tr model: region6 tr model: region6 tr model: region6 tr model: region9 tr m	Zero model: region3	(0.09) 0.59*	(0.12) 0.15	(0.09) 0.60*	(0.10) 0.38	(0.09) 0.53*	(0.09) 0.90***	(0.09) 0.49	(0.10) 0.19
tt model: gbr model: sgrtSpAll:gbr model: sgrtSpAll:rgion1 tt model: sgrtSpAll:rgion2 tt model: sgrtSpAll:rgion3 tt model: sgrtSpAll:rgion5 tt model: sgrtSpAll:rgion9 tt model: sgrtSpAll:rgion9		(0.26)	(0.27)	(0.26)	(0.27)	(0.26)	(0.26)	(0.29)	(0.29)
th model: sqrtSpAll:gbr model: sqrtSpAll:gbr model: sqrtSpAll:region1 th model: sqrtSpAll:region2 th model: sqrtSpAll:region5 th model: sqrtSpAll:region6 th model: sqrtSpAll:region7 th model: sqrtSpAll:region7 th model: sqrtSpAll:region7 th model: sqrtSpAll:region9 th	Count model: gbr						1.12***		
model: sqrtSpAlligbr model: sqrtSpAlliregion1 model: sqrtSpAlliregion5 model: sqrtSpAlliregion	Count model: sqrtSpAll:gbr						0.10***		
1.25							(0.01)		
1.35*** (0.03) (0.03) (0.00)	Zero model: gbr						-1.12**** (0.25)		
tr model: region1 tr model: region1 model: region1 model: region5 tr model: region5 tr model: region5 tr model: region5 tr model: region5 model: regio	Zero model: sqrtSpAll:gbr						0.00		
th model: eqrtSpAll:region1 model: region5 model: region5 model: region5 to model: region5 to model: region5 model: regi	Count model: region1						(0.03)	1.35***	
1,001 -1,05*** -	Count model: sartSpAll:region1							(0.08)	
model: region1 —1.65*** model: sqrtSpAll:region5 (0.24) nt model: region5 (0.03) model: region6 (0.03) model: region5 (0.03) model: region6 (0.03) model: region7 (0.03) model: region8 (0.03)	•							(0.01)	
model: sqrtSpAll:region1 0.024 J. 0	Zero model: region1							-1.65^{***}	
tt model: region5 nt model: sqrtSpAll:region5 model: region5 model: sqrtSpAll:region5 model:	Zero model: sqrtSpAll:region1							0.08*	
nodel: sqrtSpAll:region5 model: sqrtSpAll:region5 model: sqrtSpAll:region5 model: sqrtSpAll:region5 model: 4729.80 7634.24 4950.45 7635.25 6689.10 6917.96 -3436.98 -3492 -3492 9419 9305 9410 9419 9305 9410 9419 9305 9410 9419 9305	Count model: region5							(0.03)	-1.48***
model: region5 model: sqrtSpAll:region5 model: sqrtSpAll:region5 T795.41 4729.80 7634.24 4950.45 7635.25 6689.10 6917.96 Likelihood -3879.71 -2346.90 -3799.12 -2457.23 -3799.62 -3322.55 -3436.98 -3879.71 -9184 9419 9305 9410 9492 9492	Count model: sortSnAll:region5								(0.11)
model: region5 model: sqrtSpAll:region5 model: sqrtSpAll:region5 7795.41 4729.80 7634.24 4950.45 7635.25 6689.10 6917.96 Likelihood -3879.71 -2346.90 -3799.12 -2457.23 -3799.62 -3322.55 -3436.98 -3879.71 -246.90 9419 9305 9410 9492 9492	one de la company de la compan								(0.01)
model: sqrtSpAll:region5 7795.41 4729.80 7634.24 4950.45 7635.25 6689.10 6917.96 Likelihood -3879.71 -2346.90 -3799.12 -2457.23 -3799.62 -3322.55 -3436.98 Obbs. 9492 9419 9305 9410 9492 9492	Zero model: region5								0.57
Likelihood — 3879,71 — 2346,90 — 7634,24 — 4950,45 — 7635,25 — 6689,10 — 6917,96 — 3879,71 — 2346,90 — 3479,12 — 2457,23 — 3799,62 — 5322,55 — 5436,98 — 5492 — 9492 — 9492	Zero model: sqrtSpAll:region5								-0.16***
Likelihood —3879.71 —2246.90 7634.24 4950.45 7635.25 6689.10 6917.96 (1.206)									(0.04)
9492 9184 9419 9305 9410 9492 9492	AIC Log Likelihood	7795.41 -3879.71	4729.80 -2346.90	7634.24 -3799.12	4950.45 -2457.23	7635.25 -3799.62	6689.10 -3322.55	6917.96 -3436.98	6804.82 -3380.41
	Num. obs.		9184	9419	9305	9410	9492	9492	9492

Table 7: Non-state conflict events

	Main ZINB model	Excluding Nigeria	Excluding Uganda	Excluding Kenya	Excluding Ghana	Excluding Nigeria Excluding Uganda Excluding Kenya Excluding Ghana Former British colony interaction East Africa interaction West Africa interaction	East Africa interaction	West Africa interaction
Count model: (Intercept)	4.08***	4.94***	4.09***	3.99***	4.09***	3.92***	3.89***	4.44***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Count model: sqrtSpAll	-0.02***	-0.08***	-0.03***	-0.03***	-0.02***	-0.11***	0.00**	-0.07***
Count model mountains moon	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
County model: modification and a	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.02)
Count model: water_gc	-0.01***	-0.01***	-0.01***	-0.01***	-0.01***	-0.01***	-0.01***	-0.01***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: barren_gc	-0.02***	-0.02***	-0.02***	-0.03***	-0.02***	-0.01***	-0.01***	(0.00)
Count model: logCDist	(0.00) -0.19***	(0.00) -0.21***	-0.19***	(0.00) -0.19***	(0.00) -0.19***	-0.18***	(0.00) -0.19***	(0.20) -0.20***
Correct conditions	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: 10gbDist	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Count model: logPopd	0.15***	0.08***	0.16***	0.16***	0.15***	0.07***	0.05***	0.24***
Count model: region3	(0.00) -0.45***	(0.01) -0.13^{***}	(0.00) -0.46^{***}	(0.00) -0.42***	(0.00) -0.46^{***}	(0.00) -0.45***	(0.00) -0.95***	(0.01)
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Zero model: (Intercept)	(0.21)	(0.22)	(0.21)	(0.22)	(0.21)	(0.21)	(0.22)	(0.22)
Zero model: sqrtSpAll	0.01	0.02*	0.01	-0.01	0.01	0.03***	0.02*	0.03***
Zero model: mountains mean	(0.01)	(0.01)	(0.01)	(0.01) -0.22	(0.01)	(0.01) -0.62***	(0.01) -0.13	(0.01)
	(0.11)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	(0.13)	(0.12)
Zero model: water_gc	0.00	0.00	0.00	0.01	0.00	0.00	0.01.	0.00
Zero model: barren_gc	0.01***	0.01***	0.01	0.01***	0.01***	0.01	0.01	0.01***
Zero model: logCDist	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Zero model: logBDist	0.12***	0.19***	0.11***	0.14***	0.13***	0.15***	0.15***	0.10**
Zero model: logPopd	-0.67***	(6.09)	-0.67***	-0.65***	(60.03) -0.68***	(60.0) -0.61***	(60.0)	-0.56***
Zero model: region3	(0.04)	(0.05)	(0.04) $-0.30**$	(0.04) $-0.37***$	(0.04) $-0.99**$	(0.04) $-0.98**$	(0.04) $-0.51***$	(0.04) $-0.69***$
onogor more of the	(0.10)	(0.11)	(0.10)	(0.11)	(0.10)	(0.10)	(0.11)	(0.12)
Count model: gbr						0.53***		
Count model: sqrtSpAll:gbr						0.14**		
Zero model: gbr						(0.00) $0.24*$		
Zone meddel somt Sv Allecha						(0.12)		
zero mouer, sqrtsparigor						(0.02)		
Count model: region1							-0.82***	
Count model: sqrtSpAll:region1							-0.16***	
Zero model: region1							(0.00) -0.10	
Zero model: sqrtSpAll:region1							$(0.11) \\ -0.06^{***}$	
7							(0.02)	
Count model: region5								-1.84^{***} (0.03)
Count model: sqrtSpAll:region5								0.21***
Zero model: region5								(0.00)
Zero model: sqrtSpAll:region5								(0.15) -0.05**
AIC	123045.16	94951.29	122361.22	117843.37	122810.24	107899.82	108719.66	117864.88
Log Likelihood Num. obs.	-61504.58 9492	-47457.65 9184	-61162.61 9419	-58903.69 9305	-61387.12 9410	-53927.91 9492	-54337.83 9492	-58910.44 9492

Ms	Main ZINB model E	Excluding Nigeria	Excluding Uganda	Excluding Kenya	Excluding Ghana	Former British colony interaction	East Africa interaction	West Africa interaction
Count model: (Intercept)	2.08***	2.68***	1.95***	2.15***	2.10***	2.32***	1.61***	2.38***
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Count model: sqrtSpAll	-0.02***	-0.06***	-0.01***	-0.01***	-0.01***	-0.06***	0.02***	-0.07***
Count model: mountains mean	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
County income income income	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Count model: water_gc	-0.01***	-0.01***	-0.01***	-0.01***	-0.01***	-0.01^{***}	-0.01***	-0.01***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: barren_gc	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: logCDist	-0.03***	-0.01**	-0.03***	-0.03***	-0.03***	-0.03***	-0.02***	-0.03***
Count model loom Dist	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0:00)	(0.00)
Count model, jugatust	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Count model: logPopd	0.22***	0.01	0.24***	0.22***	0.22***	0.21***	0.24***	0.21***
Count model: region3	(0.01) 0.54^{***}	(0.01) 0.92^{***}	(0.01) 0.52***	(0.01) $0.56***$	(0.01) $0.51***$	(0.01) 0.47***	(0.01)	(0.01) 0.80***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)
Zero model: (Intercept)	2.28***	2.07***	2.27***	2.29***	2.25***	2.04***	2.54***	2.25***
Zero model: sartSpAll	0.01	(0.19)	0.00	(0.19)	0.01	(0.10)	(0.19)	(0.19) 0.04***
4	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Zero model: mountains_mean	0.18	0.03	0.23*	0.39***	0.16	-0.02	0.55***	-0.19
Zero model: water ec	0.00	0.00	0.00	0.00	0.00	(0.11)	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Zero model: barren_gc	0.01***	0.01***	0.01***	0.02***	0.01***	0.01***	0.01***	0.02***
Zero model: looCDist	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Zero model: logBDist	0.15***	0.18***	0.13***	0.16***	0.15***	0.17***	0.16***	0.13***
Zero model: logPopd	(0.03) -0.99***	(0.03) -0.86***	(0.03)	(0.03) -0.97***	(0.03) $-1.00***$	(0.03) -0.95***	(0.03) -1.05***	(0.03)
•	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Zero model: region3	-0.39*** (0.09)	-0.59*** (0.09)	-0.39*** (0.09)	-0.45^{***} (0.09)	-0.41^{***} (0.09)	-0.24** (0.09)	-0.59*** (0.09)	-0.79*** (0.10)
Count model: gbr		(1)				-0.17***	(22.2)	(1)
Count model: sqrtSpAll:gbr						(0.03) 0.08***		
Zero model: ohr						(0.00)		
zero mouet. goi						(0.10)		
Zero model: sqrtSpAll:gbr						-0.11***		
Count model: region1						(0.01)	***08'0	
Count model: sqrtSpAll:region1							(0.03) -0.07^{***}	
Zero model: region1							$(0.00) -0.53^{***}$	
)							(0.09)	
Zero model: sqrtSpAll:region1							-0.03*	
Count model: region5							(10:0)	-0.77***
Count model: sqrtSpAll:region5								0.13***
Zero model· region5								(0.00)
zero model. regiona								(0.13)
Zero model: sqrtSpAll:region5								-0.10^{***} (0.02)
AIC Log Likelihood	41368.21 -20666.10	33435.45 -16699.73	39999.08 -19981.54	39295.53 -19629.76	40856.68 -20410.34	40577.65 20266.82	40511.83 - 20233.92	40389.93
Num. obs. "** $p < 0.001$; "* $p < 0.01$; " $p < 0.05$; " $p < 0.1$	9492	9184	9419	9305	9410	9492	9492	9492

	Main ZINB model	Excluding Nigeria	Excluding Nigeria Excluding Uganda	Excluding Kenya	Excluding Ghana Fo	Excluding Ghana Former British colony interaction East Africa interaction	East Africa interaction	West Africa interaction
Count model: (Intercent)	2.75***	3.00***	2.56***	2.78***	2.79***	2.88***	2.75***	3.00***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Count model: sqrtSpAll	0.04***	0.00	0.04***	0.04***	0.05***	0.01***	0.05***	-0.00*
	(0:00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: mountains_mean	-0.02	0.36***	-0.13***	-0.07***	-0.07***	0.12***	0.05***	0.17***
Count model: water_gc	0.00***	0.01***	0.00***	0.00*	0.00***	(U.O.) 0.00***	0.00***	(0.01)
)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: barren_gc	-0.02***	-0.01***	-0.02***	-0.02***	-0.02***	-0.01***	-0.02***	-0.01***
2000 July 2000 J	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: logCDist	(0.00)	(0.12***	0.09	0.04****	0.04	(0.00)	(0.00)	(0.004
Count model: logBDist	-0.01**	-0.20***	0.01***	-0.01**	-0.02***	-0.04***	-0.01	(0.00) -0.01**
, ,	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: logPopd	0.22***	-0.22***	0.24***	0.23***	0.22***	0.18***	0.21***	0.18***
Count model: region3	(0.00)	(0.01) $1.39***$	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
count model. 12810119	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(10 0)	(0.01)	(0.01)
Zero model: (Intercept)	3.11***	2.84***	3.15***	3.17***	3.08***	2.80***	3.38**	3.02***
	(0.20)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)
Zero model: sqrtSpAll	0.01	0.03***	0.01	-0.01	0.01	0.04***	0.01	0.05***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Zero model: mountains_mean	0.15	-0.04	0.20	0.39**	0.14	-0.08	0.54***	-0.21
Zone model meters as	(0.11)	(0.11)	(0.11)	(0.12)	(0.11)	(0.11)	(0.12)	(0.12)
zero model: water_gc	0000	0.00	00.0	0.00	0.00	00.0	0.00	00.00
Zero model: barren_gc	0.02***	0.02***	0.02***	0.02***	0.02***	0.01	0.02***	0.02***
0	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Zero model: logCDist	-0.09***	-0.10***	-0.09***	-0.09***	-0.09***	-0.08***	-0.10***	-0.08***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Zero model: logbDist	0.10****	0.15*** (0.03)	0.09**	0.12**** (0.03)	0.10***	0.13	0.12****	0.08***
Zero model: logPopd	-0.95***	-0.77***	-0.95***	-0.94***	(60.6) -0.96***	-0.91***	-1.01^{***}	-0.83***
•	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Zero model: region3	-0.54***	-0.83***	-0.53***	-0.62***	-0.55***	-0.39***	-0.77***	-0.96***
Count model: gbr	(0.09)	(0.10)	(0.09)	(0.09)	(60.09)	0.16^{***}	(0.10)	(0.11)
0						(0.01)		
Count model: sqrtSpAll:gbr						0.05***		
Zero model: gbr						(0.00) 0.04		
1						(0.10)		
Zero model: sqrtSpAll:gbr						-0.11***		
Count model: region1						(10:01)	0.01	
Count model: sortSnAll:region1							(0.01) $-0.01***$	
b							(0.00)	
Zero model: region1							-0.57***	
Zero model: sqrtSpAll:region1							(0.10) -0.03	
							(0.01)	
Count model: region5								-0.55***
Count model: sqrtSpAll:region5								0.10***
Zero model: region5								(0.00)
zero moden regiona								(0.14)
Zero model: sqrtSpAll:region5								$-0.11^{***} $ (0.02)
AIC Log Likelihood	248285.49 -124124.75	170871.39 -85417.69	241049.80 -120506.90	240876.11 -120420.06	244695.73 -122329.86	243855.08 121905.54	248110.67 -124033.34	244685.14 -122320.57
Num. obs. "" p < 0.001; "" p < 0.01; "p < 0.05; "p < 0.1	9492	9184	9419	9305	9410	9492	9492	9492