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)
sqrtSpAll	0.10***	0.08***	0.07***	0.08***
	(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

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

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	$-0.28^{\cdot}$
	(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

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

Table 2: State based conflict events

	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)
sqrtSpAll	-0.18^{*}	$-0.13^{\cdot}$	-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

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

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)	(0.06)
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)	(0.06)
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

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

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		0.06	0.62***	0.59**	0.59**
		(0.19)	(0.19)	(0.19)	(0.19)
Population density (log)			1.21***	1.20***	1.20***
			(0.09)	(0.09)	(0.09)
Distance to border (log)				0.06	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

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

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

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

Table 6: Communal violence events

	Main ZINB model	Excluding Nigeria	Excluding Uganda	Excluding Kenya	Excluding Ghana	Former British colony interaction	East Africa interaction	West Africa interaction
Count model: (Intercept)	−3.06***	−0.12	−3.19***	−2.57***	−3.06***	−1.56***	−2.18***	−0.09
	(0.38)	(0.42)	(0.38)	(0.43)	(0.38)	(0.35)	(0.34)	(0.31)
Count model: sqrtSpAll	−0.02***	−0.16***	−0.02***	0.05***	−0.02***	−0.05***	0.10***	−0.18***
	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)
Count model: mountains_mean	1.19***	1.63***	1.13***	0.81***	1.14***	1.56***	1.33***	1.36***
	(0.06)	(0.08)	(0.06)	(0.09)	(0.06)	(0.07)	(0.07)	(0.07)
Count model: water_gc	0.01*	0.01	0.01*	−0.00	0.01*	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: barren_gc	0.02***	0.01***	0.02***	0.01***	0.02***	0.02***	0.01***	0.02***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: logCDist	0.29***	0.18***	0.29***	0.24***	0.30***	0.15***	0.18***	0.11***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.02)	(0.02)
Count model: logBDist	0.09***	−0.07***	0.12***	−0.12***	0.07***	0.01	0.02	0.03˙
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Count model: logPopd	0.89***	0.19**	0.90***	1.12***	0.90***	0.48***	0.73***	0.74***
	(0.03)	(0.06)	(0.03)	(0.04)	(0.03)	(0.03)	(0.03)	(0.04)
Count model: region3	−0.43***	0.40***	−0.45***	0.40***	−0.44***	−0.45***	−0.12	0.31***
	(0.07)	(0.08)	(0.07)	(0.09)	(0.07)	(0.07)	(0.08)	(0.08)
Zero model: (Intercept)	6.01***	6.14***	6.24***	6.56***	6.05***	6.71***	7.46***	6.24***
	(0.73)	(0.84)	(0.74)	(0.85)	(0.75)	(0.76)	(0.78)	(0.70)
Zero model: sqrtSpAll	−0.00	0.01	−0.00	−0.06**	0.01	−0.02	−0.06**	0.04*
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Zero model: mountains_mean	−0.94***	−1.30***	−0.90***	−0.40	−1.05***	−0.93***	−0.36	−1.38***
	(0.23)	(0.25)	(0.23)	(0.27)	(0.23)	(0.24)	(0.26)	(0.25)
Zero model: water_gc	0.00	−0.00	−0.00	0.01	0.00	0.01	0.01	0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Zero model: barren_gc	0.00	0.00	0.00	0.00	−0.00	−0.00	−0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Zero model: logCDist	−0.15**	−0.21***	−0.15**	−0.17**	−0.14**	−0.16**	−0.19***	−0.17***
	(0.05)	(0.06)	(0.05)	(0.06)	(0.05)	(0.05)	(0.05)	(0.05)
Zero model: logBDist	0.08	0.21**	0.06	0.11	0.07	0.10	0.06	0.07
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Zero model: logPopd	−0.60***	−0.30*	−0.64***	−0.57***	−0.62***	−0.57***	−0.63***	−0.45***
	(0.09)	(0.12)	(0.09)	(0.10)	(0.09)	(0.09)	(0.09)	(0.10)
Zero model: region3	0.59*	0.15	0.60*	0.38	0.53*	0.90***	0.49˙	0.19
	(0.26)	(0.27)	(0.26)	(0.27)	(0.26)	(0.26)	(0.29)	(0.29)
Count model: gbr						1.12***		
						(0.10)		
Count model: sqrtSpAll:gbr						0.10***		
						(0.01)		
Zero model: gbr						−1.12***		
						(0.25)		
Zero model: sqrtSpAll:gbr						0.00		
						(0.03)		
Count model: region1							1.35***	
							(0.08)	
Count model: sqrtSpAll:region1							−0.26***	
							(0.01)	
Zero model: region1							−1.65***	
							(0.24)	
Zero model: sqrtSpAll:region1							0.08*	
							(0.03)	
Count model: region5								−1.48***
								(0.11)
Count model: sqrtSpAll:region5								0.30***
								(0.01)
Zero model: region5								0.57
								(0.36)
Zero model: sqrtSpAll:region5								−0.16***
								(0.04)
AIC	7795.41	4729.80	7634.24	4950.45	7635.25	6689.10	6917.96	6804.82
Log Likelihood	−3879.71	−2346.90	−3799.12	−2457.23	−3799.62	−3322.55	−3436.98	−3380.41
Num. obs.	9492	9184	9419	9305	9410	9492	9492	9492

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

Table 7: Non-state conflict events

	Main ZINB model	Excluding Nigeria	Excluding Uganda	Excluding Kenya	Excluding Ghana	Former British colony 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***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: mountains_mean	1.39***	1.53***	1.39***	1.39***	1.38***	1.60***	1.72***	1.35***
	(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***	−0.02***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: logCDist	−0.19***	−0.21***	−0.19***	−0.19***	−0.19***	−0.18***	−0.19***	−0.20***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: logBDist	0.31***	0.19***	0.31***	0.36***	0.31***	0.24***	0.43***	0.29***
	(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***
	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)
Count model: region3	−0.45***	−0.13***	−0.46***	−0.42***	−0.46***	−0.45***	−0.95***	−0.38***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Zero model: (Intercept)	2.59***	2.35***	2.65***	2.58***	2.56***	2.31***	2.55***	2.66***
	(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***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Zero model: mountains_mean	−0.39***	−0.64***	−0.36**	−0.22.	−0.37**	−0.62***	−0.13	−0.70***
	(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
	(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***	0.01***	0.01***	0.01***	0.01***	0.01***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Zero model: logCDist	−0.04**	−0.05***	−0.04**	−0.04**	−0.04**	−0.03.	−0.04**	−0.04**
	(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**
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Zero model: logPopd	−0.67***	−0.41***	−0.67***	−0.65***	−0.68***	−0.61***	−0.70***	−0.56***
	(0.04)	(0.05)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Zero model: region3	−0.32**	−0.66***	−0.30**	−0.37***	−0.29**	−0.28**	−0.51***	−0.62***
	(0.10)	(0.11)	(0.10)	(0.11)	(0.10)	(0.10)	(0.11)	(0.12)
Count model: gbr						0.53***		
						(0.02)		
Count model: sqrtSpAll:gbr						0.14***		
						(0.00)		
Zero model: gbr						0.24*		
						(0.12)		
Zero model: sqrtSpAll:gbr						−0.11***		
						(0.02)		
Count model: region1							−0.82***	
							(0.02)	
Count model: sqrtSpAll:region1							−0.16***	
							(0.00)	
Zero model: region1							−0.10	
							(0.11)	
Zero model: sqrtSpAll:region1							−0.06***	
							(0.02)	
Count model: region5								−1.84***
								(0.03)
Count model: sqrtSpAll:region5								0.21***
								(0.00)
Zero model: region5								−0.36*
								(0.15)
Zero model: sqrtSpAll:region5								−0.05**
								(0.02)
AIC	123045.16	94951.29	122361.22	117843.37	122810.24	107899.82	108719.66	117864.88
Log Likelihood	−61504.58	−47457.65	−61162.61	−58903.69	−61387.12	−53927.91	−54337.83	−58910.44
Num. obs.	9492	9184	9419	9305	9410	9492	9492	9492

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

Table 8: Communal violence events

	Main ZINB model	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***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: mountains_mean	−0.06.	0.12***	−0.16***	−0.19***	−0.09**	0.09**	−0.18***	0.01
	(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	−0.01***	−0.01***	−0.01***	−0.01***	−0.01***	−0.00***	−0.01***	−0.01***
	(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***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: logBDist	0.02**	−0.11***	0.05***	0.01.	0.02*	−0.01	0.02*	0.02*
	(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***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Count model: region3	0.54***	0.92***	0.52***	0.56***	0.51***	0.47***	0.69***	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***
	(0.18)	(0.19)	(0.18)	(0.19)	(0.18)	(0.18)	(0.19)	(0.18)
Zero model: sqrtSpAll	0.01	0.02**	0.00	−0.01	0.01	0.03***	0.01	0.04***
	(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.
	(0.10)	(0.11)	(0.11)	(0.11)	(0.10)	(0.11)	(0.11)	(0.11)
Zero model: water_gc	0.00	0.00	0.00	0.00	0.00	0.00	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***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Zero model: logCDist	−0.06***	−0.07***	−0.06***	−0.06***	−0.06***	−0.05***	−0.07***	−0.06***
	(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***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Zero model: logPopd	−0.99***	−0.86***	−0.97***	−0.97***	−1.00***	−0.95***	−1.05***	−0.86***
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Zero model: region3	−0.39***	−0.59***	−0.39***	−0.45***	−0.41***	−0.24**	−0.59***	−0.79***
	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.10)
Count model: gbr						−0.17***		
						(0.03)		
Count model: sqrtSpAll:gbr						0.08***		
						(0.00)		
Zero model: gbr						0.09		
						(0.10)		
Zero model: sqrtSpAll:gbr						−0.11***		
						(0.01)		
Count model: region1							0.80***	
							(0.03)	
Count model: sqrtSpAll:region1							−0.07***	
							(0.00)	
Zero model: region1							−0.53***	
							(0.09)	
Zero model: sqrtSpAll:region1							−0.03*	
							(0.01)	
Count model: region5								−0.77***
								(0.04)
Count model: sqrtSpAll:region5								0.13***
								(0.00)
Zero model: region5								−0.05
								(0.13)
Zero model: sqrtSpAll:region5								−0.10***
								(0.02)
AIC	41368.21	33435.45	39999.08	39295.53	40856.68	40577.65	40511.83	40389.93
Log Likelihood	−20666.10	−16699.73	−19981.54	−19629.76	−20410.34	−20266.82	−20233.92	−20172.96
Num. obs.	9492	9184	9419	9305	9410	9492	9492	9492

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

Table 9: NA

	Main ZINB model	Excluding Nigeria	Excluding Uganda	Excluding Kenya	Excluding Ghana	Former British colony interaction	East Africa interaction	West Africa interaction
Count model: (Intercept)	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***
	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Count model: water_gc	0.00***	0.01***	0.00***	0.00*	0.00***	0.00***	0.00***	0.00***
	(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***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: logCDist	0.04***	0.12***	0.05***	0.04***	0.04***	0.04***	0.04***	0.04***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: logBDist	−0.01**	−0.20***	0.01***	−0.01**	−0.02***	−0.04***	−0.01.	−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***
	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Count model: region3	0.86***	1.32***	0.84***	0.89***	0.83***	0.69***	0.84***	1.09***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(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.
	(0.11)	(0.11)	(0.11)	(0.12)	(0.11)	(0.11)	(0.12)	(0.12)
Zero model: water_gc	−0.00	−0.00	−0.00	0.00	0.00	0.00	0.00	−0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Zero model: barren_gc	0.02***	0.02***	0.02***	0.02***	0.02***	0.01***	0.02***	0.02***
	(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***	0.09**	0.12***	0.10***	0.13***	0.12***	0.08**
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Zero model: logPopd	−0.95***	−0.77***	−0.95***	−0.94***	−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***
	(0.09)	(0.10)	(0.09)	(0.09)	(0.09)	(0.10)	(0.10)	(0.11)
Count model: gbr						0.16***		
						(0.01)		
Count model: sqrtSpAll:gbr						0.05***		
						(0.00)		
Zero model: gbr						0.04		
						(0.10)		
Zero model: sqrtSpAll:gbr						−0.11***		
						(0.01)		
Count model: region1							0.01	
							(0.01)	
Count model: sqrtSpAll:region1							−0.01***	
							(0.00)	
Zero model: region1							−0.57***	
							(0.10)	
Zero model: sqrtSpAll:region1							−0.03.	
							(0.01)	
Count model: region5								−0.55***
								(0.02)
Count model: sqrtSpAll:region5								0.10***
								(0.00)
Zero model: region5								0.06
								(0.14)
Zero model: sqrtSpAll:region5								−0.11***
								(0.02)
AIC	248285.49	170871.39	241049.80	240876.11	244695.73	243855.08	248110.67	244685.14
Log Likelihood	−124124.75	−85417.69	−120506.90	−120420.06	−122329.86	−121905.54	−124033.34	−122320.57
Num. obs.	9492	9184	9419	9305	9410	9492	9492	9492

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

Table 10: NA