

**Table S1.** Univariate analyses of the association between risk factors and flock-level seropositivity of *T. gondii* and *C. abortus* infections on small ruminant farms in the northern regions of Cameroon (Adamawa, North and Far North).

Variables		N	<i>T. gondii</i>			<i>C. abortus</i>		
			Prevalence n (%)	OR (95 % CI)	Pvalue	Prevalence n (%)	95 % CI	Pvalue
Regions	Adamawa	50	23 (46)	1.0 (Ref.)	0,08	1 (2)	1.0 (Ref.)	0.40
	North	81	23 (28.4)	0.42 (18.6 - 38.2)	0.03*	4 (4.9)	2.5 (0.22 - 9.7)	0,001**
	Far North	69	28 (40.6)	0.69 (29 - 52.2)	0.35	1 (1.5)	0,72 (0.00 - 4.3)	0,81
Breeding objectives	Financial	139	72 (51.8)	1.0 (Ref.)	0.00**	5 (3.6)	1.0 (Ref.)	0.45
	Consumption	51	16 (31.4)	0.79 (18.6 - 44.1)	0.51	2 (3.9)	1.4 (0.00 - 9.2)	0,65
	Pleasure	10	1 (10)	0.17 (0.00 - 28.6)	0.06	1 (10)	4.1 (0.00 - 28.6)	0.00**
Number of small ruminants in farms	< 10	45	15 (33.3)	1.0 (Ref.)	0.52	1 (2.2)	1.0 (Ref.)	0.56
	10-30	131	53 (40.5)	0.83 (40.5 - 32.0)	0.61	5 (3.8)	1.7 (0.53 - 7.1)	0.61
	> 30	24	6 (25)	0.69 (7.7 - 42.3)	0,52	0 (0)	-	0.46
Power supply mode	Grazing	180	66 (36.7)	1.0 (Ref.)		5 (2.8)	1.0 (Ref.)	
	Zero grazing	20	8 (40)	1.33 (18.5 - 61.5)	0.57	1 (5)	1.84 (0.00 - 14.6)	0,58
Watering	Water court	182	68 (37. 4)	1.0 (Ref.)		5 (2.8)	1.0 (Ref.)	
	Well water	18	6 (33.3)	0.97 (11.6 - 55.1)	0.49	1 (5.6)	2.1 (0.00 - 16.1)	0.50
Hygiene level	Clean	48	12 (25)	1.0 (Ref.)	0.04*	2 (4.2)	1.0 (Ref.)	0.85
	Very clean	8	2 (25)	1.4 (0.00 – 55)	0.73	0 (0)	-	0.51
	Dirty	134	54 (40.3)	2.2 (32 - 48.6)	0.03*	4 (3)	0,71 (0.10 - 5.9)	0.69
	Very dirty	10	6 (60)	4.1 (29.6 - 90.4)	0.04*	0 (0)	-	0.57
Presence abortions	Yes	193	71 (36.8)	1.0 (Ref.)		4 (2.1)	1.0 (Ref.)	
	No	7	3 (42.9)	1.3 (6.2 - 79.5)	0.53	2 (28.6)	19 (0.00 - 62.0)	0.00**

Values in a column with "\*" differ significantly at  $P < 0.05$ ; "\*\*\*" differ significantly at  $P < 0.001$ ; CI= Confidence interval, N= total number of animals; n= number of positive animals; Ref: Reference category

**Table S2.** Univariate analysis of the association between risk factors and individual seropositivity to *T. gondii* and *C. abortus* infections on small ruminant farms in the northern regions of Cameroon (Adamawa, North and Far North)

Variables		N	<i>T. gondii</i>			<i>C. abortus</i>		
			Prevalence n (%)	OR(95 % CI)	Pvalue	Prevalence n (%)	OR(95 % CI)	Pvalue
Région	Adamawa	202	93 (46.1)	1.0 (Ref.)	0.0001**	5 (2.5)	1.0 (Ref.)	0.14
	North	476	146 (30)	0,51 (26.5-34.8)	0.0001**	18 (3.8)	1,5 (2.06-5.5)	0.39
	Far North	202	90 (23.5)	0,36 (19.3-27.7)	0.0001**	22 (5.7)	2.4 (3.4-8.1)	0.04*
Species	Sheep	540	194 (35.9)	1.0 (Ref.)		25 (4.6)	1.0 (Ref.)	
	Goats	521	135 (25.9)	1.6 (22.1-29.7)	0.0001**	20 (3.8)	1.2 (2.2-5.5)	0.71
Sex	Female	775	263 (33.9)	1.0 (Ref.)		30 (3.9)	1.0 (Ref.)	
	Male	286	66 (23.1)	0.58 (18.2–28)	0.0002**	15 (5.2)	1.4 (2.7-7.8)	0.32
Age	< 5 month	46	14 (30.4)	1.0 (Ref.)	0.0002**	3 (6.5)	1.0 (Ref.)	0.60
	[6-12 month[	229	53 (23.1)	0.72 (17.7-28.6)	0.34	7 (3.1)	0.45 (0.82-5.3)	0.25
	[1-3 years [	502	143 (28.5)	0,96 (24.7-32.6)	0.91	24 (4.8)	0.72 (2.9-6.7)	0.60
	[3-5 years]	284	119 (41.9)	1.6 (36.2-47.6)	0.04*	11 (3.9)	0.58 (1.6-6.1)	0.41
Physiological status	Pregnant	291	111 (38.1)	1.0 (Ref.)		11 (3.8)	1.0 (Ref.)	
	Non-Pregnant	484	152 (31.4)	0.73 (27.3-35.5)	0.04*	19 (3.9)	1.1 (2.2-5.7)	0.91
Breed	Sahelian goat	3	0 (0.00)	1.0 (Ref.)	0.01*	1 (33.3)	1.0 (Ref.)	0.0001**
	Djallonke goat	409	103 (25.2)	0.10 (21-29.4)	0.30	16 (3.9)	0.08 (2.0-5.8)	0.01*
	Djallonké	322	114 (35.4)	0.16 (30.2-40.6)	0.19	4 (1.2)	0.03 (0.03-2.5)	0.0001**
	Sheep	104	32 (30.8)	0,13 (21.9-39.6)	0.24	3 (2.9)	0.06 (0.00-6.1)	0.006**
	Kirdi	11	1 (9.1)	0.03 (0.00-26.1)	0.59	0 (0.00)	-	0.04*
	Fat tail sheep	206	79 (38.4)	0.18 (31.7-45)	0.16	21 (10.2)	0.23 (6.1-14.3)	0.19
	Oudah	6	0 (0.00)	-	-	0 (0.00)	-	-

Values in a column with "\*" differ significantly at  $P < 0.05$ ; "\*\*\*" differ significantly at  $P < 0.001$ ; CI= Confidence interval, N= total number of animal, n= number of positive animals; Ref: Reference category