**S2 Table: Univariable results for cattle seropositivity from mixed-effects logistic regression analysis.** \* Indicates variables that were statistically significant (*p* < 0.05). \*\* Variable was centred and scaled prior to analysis.

|  |  |  |  |
| --- | --- | --- | --- |
| **Covariate** | **Category** | **Regression coefficient** | ***P* -value** |
| Number of human inhabitants | <66 – 10>10 | ref0.290.53 | 0.410.20 |
| Number of cattle | <66 – 10>10 | ref0.210.57 | 0.540.17 |
| Sheep | NoYes | ref0.07 | 0.84 |
| Goats | NoYes | ref-0.03 | 0.92 |
| History of abortion in herd | YesNo | ref0.08 | 0.81 |
| Cattle herded with sheep and goats | YesNo | ref-0.3 | 0.33 |
| Herding practice (dry season) | Single herdMultiple herdsTetheredOther | ref0.29-0.250.95 | 0.60.60.25 |
| Herding practice (wet season) | Single herdMultiple herdsTetheredOther | ref0.47-0.151.43 | 0.420.750.13 |
| Breed | ZebuShorthorn-ZebuShorthornOther | ref-0.2-0.21-0.47 | 0.50.60.4 |
| Origin of animal | Bred in homestead Purchased | ref0.91 | 0.0002\* |
| Gender | FemaleMale | ref-0.27 | 0.29 |
| Previously calved | YesNoNA (male)Unknown | ref -0.83-0.67-0.25 | 0.004\*0.02\*0.83 |
| Provides milk for household | YesNoUnknownNA (male) | ref-0.53-0.18-0.62 | 0.070.880.05\* |
| History of abortion |  | Too few observations  |  |
| At least one seropositive human in household | NoYes | ref0.32 | 0.39 |
| Distance to water\*\* |  | -0.41 | 0.007\* |
| Inverse distance to water\*\* |  | 0.35 | 0.003\* |
| Distance to flooding land\*\* |  | -0.33 | 0.044\* |
| % land agricultural and grassland |  | 0.34 | 0.83 |
| % land flooding |  | 1.11 | 0.05\* |
| % land flooding agricultural and grassland |  | 1.60 | 0.08 |
| % land swamp |  | 0.69 | 0.74 |
| % land woodland and shrubs |  | -0.0009 | 1 |
| % land vegetated |  | 6.85 | 0.03\* |
| % land water body |  | 13.0 | 0.23 |
| Mean temperature\*\* |  | 0.39 | 0.01\* |
| Precipitation\*\* |  | -0.44 | 0.002\* |
| Elevation\*\* |  | -0.38 | 0.02\* |
| Population density (persons per hectare) |  | 0.007 | 0.67 |