

Additional file 4 - Details of Mixed Logistic Regression Models analyzes

Description: Mixed Logistic Regression Models for the outcome "self report of malaria in the household in the last 12 months".

The table shows the goodness-of-fit of the models with no fixed effects (Null) and models with the development gradients extracted from the MCA. Dim 1 = urban-rural gradient, Dim 2 = Rural-riverine gradient, Dim 3 = housing structure gradient. Zone refers to the model with a 4-level covariate (one for each study zone).

Model	Description	AIC	df
A	Null	698.423	2
B	Dim1 + Dim2 + Dim3	693.083	5
C	Dim1+ Dim2	692.368	4
D	Dim1	692.790	3
E	Zone	695.721	5

The figure below shows the marginal probability of malaria in households along the three development gradients. Each graph shows the effect of a given gradient setting the other two dimensions to 0.



