

Annex 1: state variables description and their corresponding values

S/N	State variable	Value (/1000 population)
1	S_h : Number of susceptible humans population in a compartment at a time	13,741
2	I_h : Number of infected humans population in a compartment at a time	110
3	T_h : Number of treated humans population in a compartment at a time	55
4	R_h : Number of recovered humans population in a compartment at a time	0
5	S_v : Number of susceptible vector population in a compartment at a time	160,131
6	I_v : Number of infected vector population in a compartment at a time	75,356
7	N_h : Total number of humans population at a time	13,852
8	N_v : Total mosquito population = 235,488	235,488