

S1 Table

Table of Notations.

Table 1. Table of Notations.

<i>Village characteristics</i>	
$V$	set of villages $v$
$N_v$	population size of village $v$
$p_{vn}$	participation fraction in the $n^{th}$ screening round for village $v$
$S_{vn}$	time at which the $n^{th}$ screening round in village $v$ is performed
$S_{vn}^+$	moment immediately after the $n^{th}$ screening round in village $v$
$S_{vn}^-$	moment just before the $n^{th}$ screening round in village $v$
$s_{vn}$	time between the $n - 1^{th}$ and the $n^{th}$ screening round in village $v$
$\delta_v^-(t)$	time since the last screening round in village $v$ before time $t$
$\tilde{\mu}_v$	average screening frequency in village $v$ during 5 consecutive years
$\bar{\mu}_v(S_{vn})$	average screening frequency in the 3 years prior to the $n^{th}$ screening round in village $v$
<i>Prevalence level notations</i>	
$x_v(t)$	prevalence level (fraction) in village $v$ observed at time $t$
$f_v(t)$	expected prevalence level (fraction) in village $v$ at time $t$
$\varepsilon_v$	random disturbance for the prevalence level (fraction) in village $v$
$\tilde{x}_v$	average observed prevalence level (fraction) in village $v$ during 5 consecutive years
$\bar{x}_v(S_{vn})$	average observed prevalence level (fraction) in the 3 years prior to the $n^{th}$ screening round in village $v$
<i>Prediction model notations</i>	
$\alpha_v$	fixed effect for village $v$
$K_v$	carrying capacity of village $v$
$\kappa$	growth rate parameter
$A_{vn}$	initial value parameter for screening round $n$ in village $v$
$e_{vn}$	prediction error/ fitting deviation for screening round $n$ in village $v$
$w_{vn}$	weight of observation $n$ for village $v$
<i>Disease characteristics</i>	
$r$	yearly removal rate for HAT
$R_0$	basic reproduction number for HAT
$s$	sensitivity of the diagnostic test
<i>Screening policy analysis notations</i>	
$\tau$	fixed time interval for screening rounds
$\bar{f}_{n,n+1}$	expected average prevalence level between the $n^{th}$ and the $(n + 1)^{th}$ screening round