Target equation for each country k (which includes a set of pixels  $\Pi_k$ ):

$$\sum_{i \in \Pi_k} x_i \sigma_i^C \le T_k \tag{1}$$

where

$$\sigma_i^C = \sigma_i + \Delta \sigma_i^{1P} f_C \tag{2}$$

$$T_k = \Delta S_k + \Delta S_k^{1P} f_C - \Delta S_k^{1F} f_\delta \tag{3}$$

- $x_i$ : variation of the fraction of pixel i that will be restored (positive) or deforested (negative). **Decision variable from optimizer**
- $f_C$ : fraction of gap that is proposed to be closed. Chosen by user
- $\delta_C$ : fraction of gap that it is assumed to be closed on the future (it can be taken as 0).
- $\sigma_i, \Delta \sigma_i^{1P}$ : maps that include suitability and yield ratio. **Output**
- $\Delta S_k, \Delta S_k^{1P}, \Delta S_k^{1F}$ : targets magnitudes for each country. **Output**

 $f_C^{eq}$  is also given and it represents the minimum  $f_C$  necessary to avoid deforestation in case  $f_\delta=0$ . If  $f_C^{eq}\leq 0$ , the country does not need to close any gap.