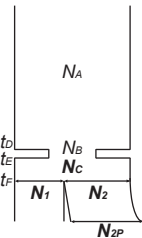


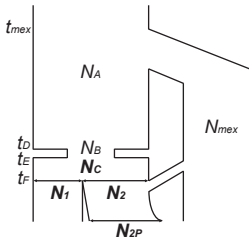
Model IA



Lowland Highland

$$\begin{aligned}
 N_C &= \alpha N_A \\
 N_1 &= \beta N_C \\
 N_2 &= (1-\beta)N_C \\
 N_{2P} &= \gamma N_2
 \end{aligned}$$

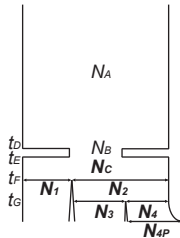
Model IB



Mexico mexicana
Lowland Highland

$$\begin{aligned}
 N_C &= \alpha N_A \\
 N_1 &= \beta N_C \\
 N_2 &= (1-\beta)N_C \\
 N_{2P} &= \gamma N_2
 \end{aligned}$$

Model II



Mexico South America
Lowland Lowland Highland

$$\begin{aligned}
 N_C &= \alpha N_A \\
 N_1 &= \beta_1 N_C \\
 N_2 &= (1-\beta_1)N_C \\
 N_3 &= \beta_2 N_2 \\
 N_4 &= (1-\beta_2)N_2 \\
 N_{4P} &= \gamma N_4
 \end{aligned}$$