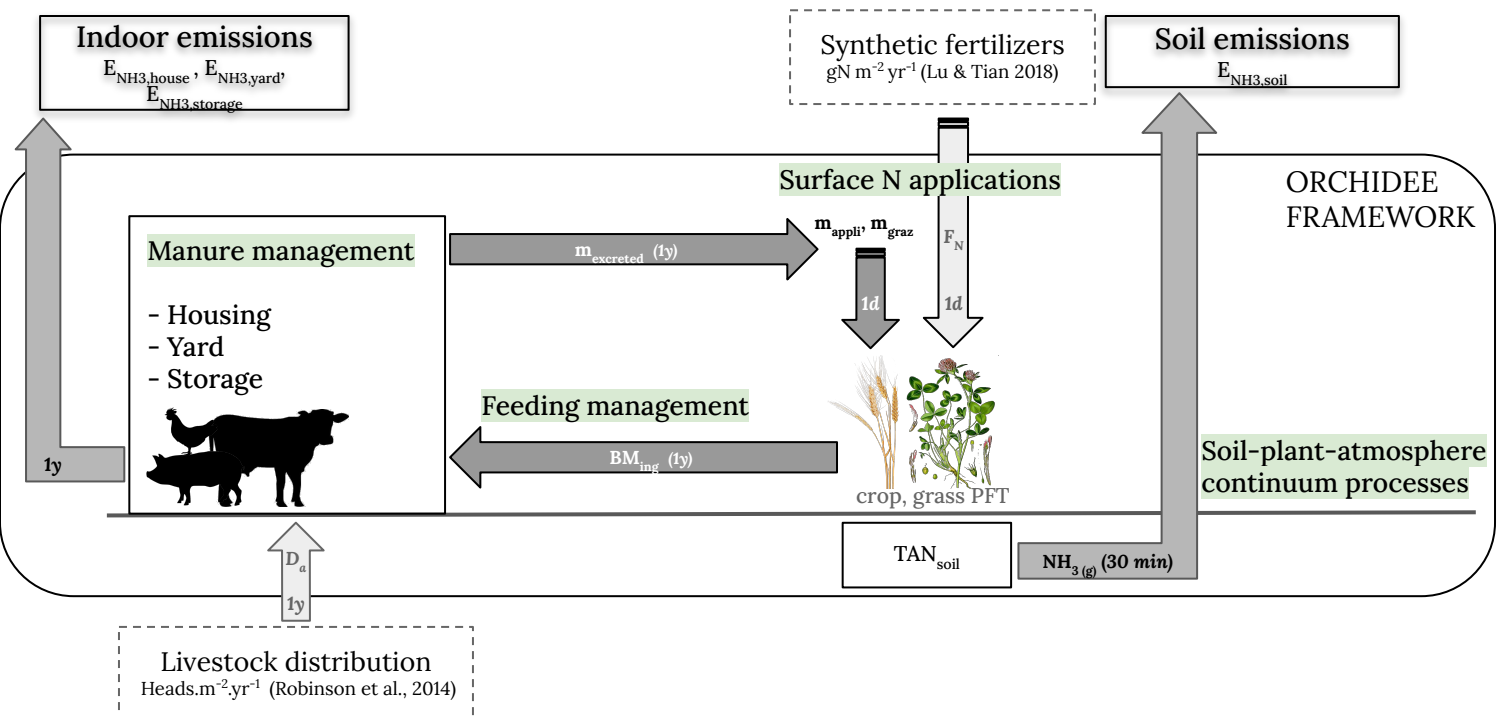
Indoor emissions
$E_{NH3,house}$, $E_{NH3,yard}$, $E_{NH3,storage}$
Synthetic fertilizers
gN m^{-2} yr^{-1} (Lu & Tian 2018)
Soil emissions
$E_{NH3,soil}$
Surface N applications
ORCHIDEE FRAMEWORK
Manure management
- Housing
- Yard
- Storage
$m_{excreted}$ (1y)
m_{appli}, m_{graz}
F_N
1d
1d
1y
Feeding management
BM_{ing} (1y)
crop, grass PFT
Soil-plant-atmosphere continuum processes
D_a
1y
TAN_{soil}
$NH_{3\,(g)}$ (30 min)
Livestock distribution
Heads.m^{-2}.yr^{-1} (Robinson et al., 2014)