

| Parameter | Definition |
|----------------------|--|
| n_i | Number of wild birds of species i present in aviaries areas |
| $p.infect_i$ | Daily probability of a bird of species i to be infectious |
| $p.perch_i$ | Daily probability of a bird of species i to be perched on an aviary |
| $p.int_i$ | Daily probability of a bird of species i to get inside an aviary |
| $p.fecalexcretion$ | Probability of an infectious bird of species i to shed virus through faecal route |
| $p.featherexcretion$ | Probability of an infectious bird of species i to shed virus in its feathers |
| $p.organexcretion$ | Probability of an infectious bird of species i to shed virus in its organs |
| $p.respiexcretion$ | Probability of an infectious bird of species i to shed virus through respiratory route |
| $p.defecate.perch$ | Probability of an infectious bird of species i to defecate when perched on an aviary |
| $p.defecate.int$ | Probability of an infectious bird of species i to defecate when inside an aviary |
| $p.drop.perch$ | Probability of an infectious bird of species i to drop feathers on the ground when perched on an aviary |
| $p.drop.int$ | Probability of an infectious bird of species i to drop feathers on the ground when inside an aviary |
| $p.death$ | Probability of an infectious bird of species i to die and of its carcass to rest on the ground when inside an aviary |
| $p.expectorate$ | Probability of an infectious bird of species i to expectorate |
| $p.waterfeces.perch$ | Probability of faeces from an infectious bird of species i to contaminate water when perched on an aviary |
| $p.foodfeces.perch$ | Probability of faeces from an infectious bird of species i to contaminate food when perched on an aviary |

| | |
|---------------------|--|
| p.fecesground.perch | Probability of faeces from an infectious bird of species i to fall on the ground when perched on an aviary |
| p.waterfeces.int | Probability of faeces from an infectious bird of species i to contaminate water when inside an aviary |
| p.foodfeces.int | Probability of faeces from an infectious bird of species i to contaminate food when inside an aviary |
| p.fecesground.int | Probability of faeces from an infectious bird of species i to fall on the ground when inside an aviary |
| p.wateraerosols | Probability of aerosols from an infectious bird of species i to contaminate water when inside an aviary |
| p.foodaerosols | Probability of aerosols from an infectious bird of species i to contaminate food when inside an aviary |
| p.direct | Probability of a least one bustard to be exposed through direct contact with an infectious bird of species i when inside an aviary |
| p.feather | Probability of a least one bustard to consume feathers on the ground |
| p.carcassfeed | Probability of a least one bustard to consume a carcass on the ground |
| p.water | Probability of a least one bustard to consume water |
| p.food | Probability of a least one bustard to consume food |
| p.feces | Probability of a least one bustard to consume faeces on the ground |

Table 1. Parameters associated with the events of the scenario trees.