**S3 Table. Fixed parameters used in the productivity model: breeding milk production performances and nutritional parameters.**

|  |  |  |
| --- | --- | --- |
| Sector | Beef | Dairy |
| Culling rate of the breeding herd | 21% | 27% |
| Parturition rate | 92% | 83% |
| Proportion birth of twins | 4% | 4% |
| Proportion females survive at 1 day | 96.8% | 94% |
| Proportion males survive at 1 day | 95.3% | 92.1% |
| Sex ratio of the breeding herd (male/female) | 4.1% | 4.1% |
| Weight loss at the beginning of lactation period | 0 | 35kg |
| Known quantity of milk offtake per lactation (kg) | 0\* | 9215\*\* |
| Milk protein concentration (g/kg) | 32.1 | 32.1 |
| Milk fat concentration (g/kg) | 39.7 | 39.7 |
| Metabolizability of milk (%) | 90 | 90 |
| Metabolizability of forage (%) | 55 | 55 |

\*all the milk is considered to be suckled by farm calves

\*\*all the milk is considered to be sold

**References**

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