**Individual Cattle Farming System Baseline Data (2022 Parameters)**:

* Age at first calving: 27.2 months
* Live weight at slaughter: 380 kg (male), 450 kg (female)
* Milk production: 3025 liters/cow/year
* Feed basket: 25% maize silage, 20% grains, 13% fresh grass, 20% by-products, others

**Reformed Scenario Main Assumptions**:

* Age at first calving: 26.1 months
* Mortality reduction: +10% for cattle, +5% for small ruminants (compared to Business as Usual (BAU))
* Live weight increase: +20% for cattle, +15% for small ruminants (compared to BAU)
* Milk production increase: +30% for cattle (compared to BAU)
* Feed:
  + +10% maize silage, +10% grains for household systems,
  + +5% grain, 5% mais silage and grains for family farm,
  + reduced use of crop residues, hay, and fresh grass (compared to BAU)
* Herd reduction: -13% (compared to BAU)

**Climate Resilient Scenario main assumptions**:

* **Cattle**:
  + Mortality reduction: -20% (compared with BAU)
  + Live weight increase: +40% (compared to BAU)
  + Herd reduction: -20% (compared to BAU)
* **Small Ruminants**:
  + Mortality reduction: -20% (compared to BAU)
  + Live weight increase: +25% (compared to BAU)
* **Feed**:
  + +15% maize silage, +16% grains for household systems
  + +5% grain, 5% mais silage and grains for family farm
  + reduced use of crop residues, hay, and fresh grass (compared to BAU)
* Herd reduction: -20% (compared to BAU)

**Table**: Overview of the main assumptions for herd characteristics in the reformed growth and climate adaptation scenarios (differences between Business as Usual and the scenario for 2050).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Cattle | | | | Small ruminants | |
|  | reformed growth | | climate resilience | | reformed growth | climate resilience |
|  | house | fam | house | fam |  |  |
| Age at the first parturition | -2.0 | | -2.0 | |  |  |
| Death rate (both adult and young | 10% | 5% | 20% | | 10% | 20% |
| Fertility rate (adult female) | 5.0 | 6.0 |  |  |  |  |
| Live weight | 20% | 30% | 40% | | 15% | 25% |
| Milk Yield | 20% | 30% | Diego's model | |  |  |
| Number of animals (Adult Females) | -13% | | -20% | |  |  |
| Number of animals (Adult Males) |  |  |