ICARE4FARMS PRESENTS

CALF FARMS IN FRANCE

PRESENTATION OF THE SECTOR

Distribution:

- ***Share of Total Production:***
  - Brittany & Loire Atlantique = *38% of the total production*
- ***Livestock:***
  - *2200 farms in total with at least 50 calves/year*
  - *512 workshops in Brittany*
  + *478 farms in Loire Atlantique*

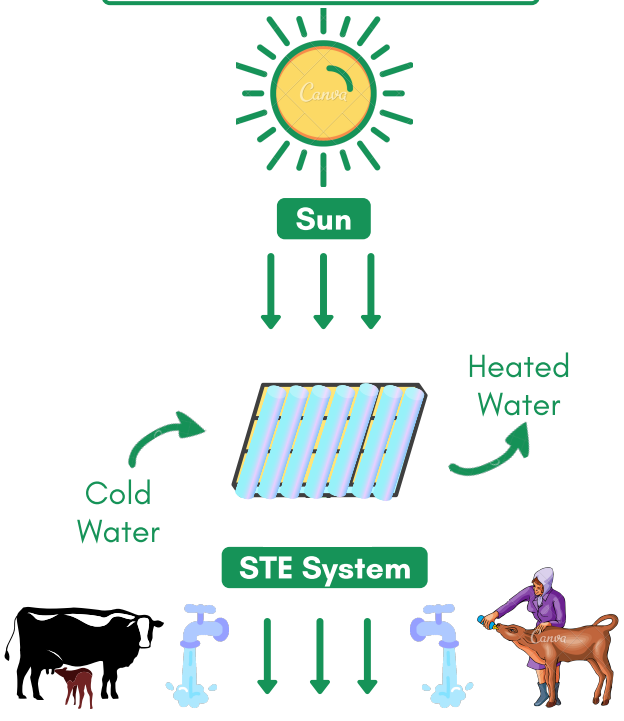
  => In average, 250 cows/farm

Total Herd (in 2018): *1.27 Millions*

Crisis of chronic overproduction due to:

- *Seasonality of production*
- *Drop in consumption*

MODELISATION OF FUNCTIONING



Heated Water is used for preparing milk-based feedstuff for calves

ENERGY NEEDS

Average Energy Consumption:

- ***Total needs:*** 152kWh/year/place (15% operating costs)
- ***Feeding:*** 108 kWh/year/place (71% of total consumption)
- ***Water Supply:*** 7L with 4L heated/day/calf
- ***Energy:*** propane (81%-11kg/calf)

Potential for Solar Thermal Energy (STE)

Hot Water in Calf farms:

- Regular without depending on seasonality & Daily needs
- Decline of propane (66% vs RE 37%) & savings with STE up to 66% cf. 5kg propane (STE) vs 11kg (Prior)

Relevant Cases:

- ***Farm rearing at least (average):***
  - 185 calves during 6 months cf. 2 lots/year
  - 164 calves over 8 months cf. 1.5 lots/year-lot= 123 calves
- ***Energy needs:*** ⩾ 20000 kWh/year

Example: Typical French Calf Farm

- 185 calves needing 4L (hot)/day => 740 L/day for all (heated drink)
- 270000 L* at 70-80° / year (2 lots) * 250000 L if 1 month of sanitary vacuum / only 11 months of activity
- 108 kWh/place/y => 19 980 kWh/y

Sources: Market Analysis I4F: www.nweurope.eu/icare4farms