



Integration of Farm Oriented Research Projects in Breeding Evaluation

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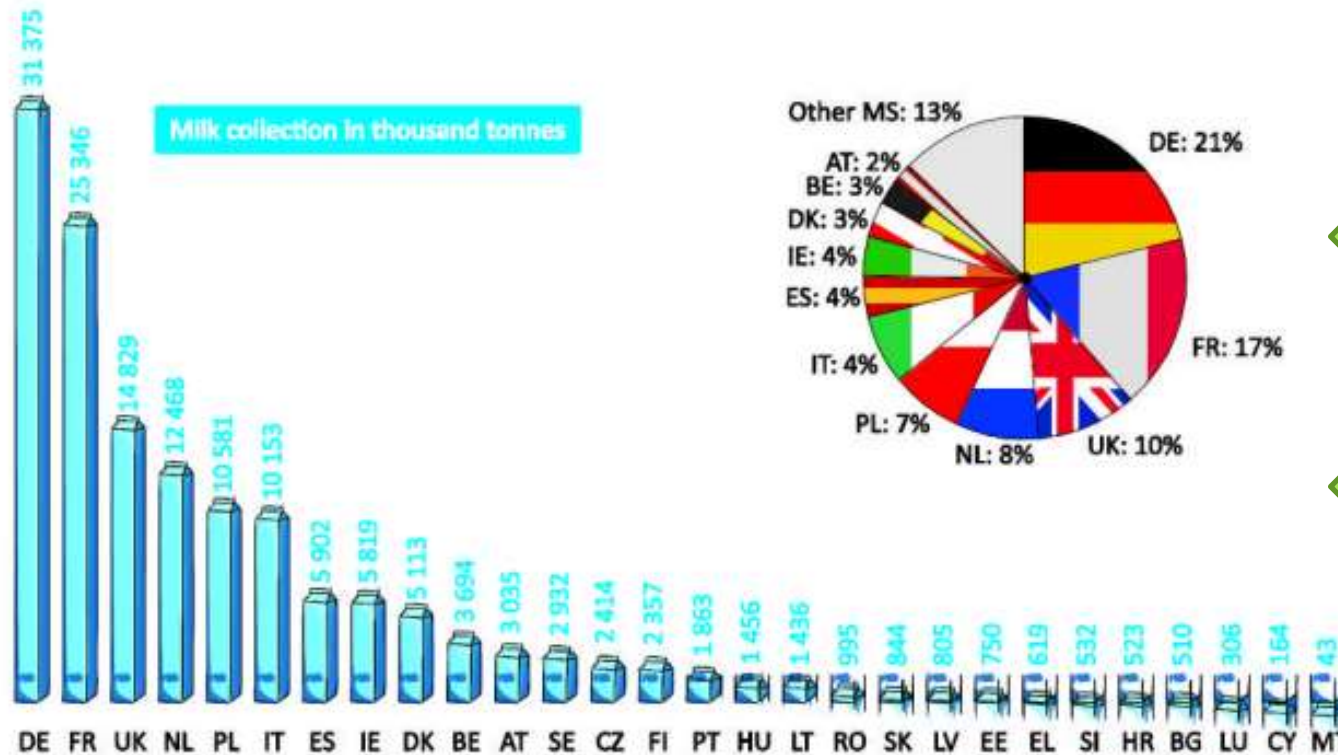
Cattle Production in Germany

Animal husbandry is the main source of income



- in Germany half of the farms are specialised in livestock
- main group (> 25 %) are dairy farmer
- through the sale of products from livestock enterprises, 60 % of revenues in German agriculture are generated

What do we produce in 2015?



**32.6m t
milk production**

**31.5m t
delivered to
creamery**

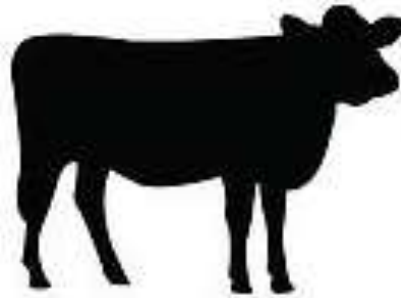
**0,29 EUR per kg
milk**

Source: EPRS calculation from Eurostat data.
Quelle: EPRS (2015).³

Cattle production in Germany



12.6m cattle



4.3m dairy cows



70.000 dairy farms





Research and Innovation

Structure of associations



Umbrella association



Breeding and AI organisation
Milk recording organisation



farmer

From farmer to research



The future of agriculture in Germany



Dr. Jürgen Oldeweme
Senior Vice President Global
Product Safety and
Regulatory Affairs, BASF
Crop Protection



Carl-Albrecht Bartmer
Präsident, DLG e.V.
(Deutsche Landwirtschafts-
Gesellschaft)

„We can only
improve
measurable
things!“

Farmers: „Brown Swiss calves have suckling weakness“



Farmers' observation

- no suckling
- weak suckling
- suckling
- strong suckling

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**Need help to solve
the problem**

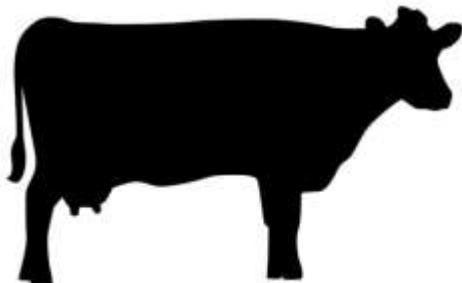
Is there a genetic influence?



Research project initiated by farmers



250 Brown Swiss farms

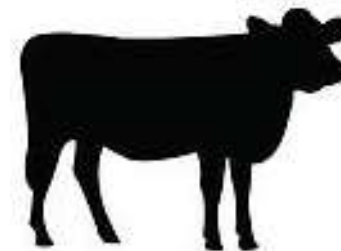


18.000 dairy cows

Start with the calf



- Observation by the farmer of
 - suckling weakness after birth
 - calving weight
 - calving ease
 - diseases
 - feeding
- Genotyping of all calves in the farm by staff of breeding organisation



Suckling weakness has an incidence of 8 %



2016

- Results of 9.700 Brown Swiss calves
- 8 % of all calves have suckling weakness
- The evaluation is going on to provide a genical influence



For all Brown Swiss farmers

- ✓ Breeding for new traits
- ✓ Prevention of genetic defects



For AI and breeding organisations

- ✓ Be a player in international competition (bovine semen, breeding cattle, bovine embryo)
- ✓ Better quality of products
- ✓ Close customer relationship
- ✓ Elimination of AI bulls with weakness in some traits (e. g. claw disorders)
- ✓ Improvement of animal welfare

For farms integrated in the project

- ✓ Improved selection for calves, heifers and dairy cows in the herd
- ✓ Prevention of genetic defects
- ✓ Genomic information for female calves

Ask the farmers what they are looking for!



- In the area of milk recording the MRO staff collects data
- In the area of new traits the farmer has to collect data or he has to provide his data
- It is important to motivate the farmer to participate
 - collecting data
 - using data for management
 - using data for mating selection



Our way is the common research!



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