

# Factors contributing to efficiency in Spanish suckler cow systems

*Farmer engagement with breeding schemes needs to be promoted.*

## Problem

Breeding schemes can help farmers develop more resilient and efficient farming systems. However, extensive cattle farmers show a relatively low engagement with the programmes implemented by their breeding societies. In order to align these breeding goals with farmers' objectives, a better understanding is needed of the traits they consider important and actually measure.

## Solution

A survey of suckler cattle farming systems in Mediterranean mountain areas was conducted in the Central Spanish Pyrenees (53 farms). Farmers were presented with a set of traits and asked to score their relative importance including age at first calving, calving ease, fertility, calf weight at birth and weaning, and functional traits. Farmers were also asked if they recorded these traits, and provided the data to their breeder associations. The results were compared between different farm types and contrasted with the current programmes for their breeds.

## Outcome

Our results indicate that despite 85% of the farmers belonged to breeder associations only 21% of them provided data for their breeding programs (Figure 1). In fact, data were registered by relatively few farmers (e.g. age at first calving by 51%, fertility and calf birth weight by 32%, calving ease by 30%, calf weaning weight by only 9%), mainly in large farms (> 65 cows) but irrespectively of breed or product (weanlings or fattened calves).

Despite the low recording rates, most traits were regarded as important or very important to determine cow efficiency. Discordances were found among the traits rated by the farmers as important, those they recorded and the ones included in the current breeding schemes. This was mostly associated to the difficult recording of certain traits and the lack of immediate economic value attached to others.

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## Publication

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## Keywords

Resilient and efficient suckler cattle production  
Mediterranean beef production  
Farmers' objectives  
Breeding schemes

## Illustrations



Photo 1: Spanish suckler cow production

### Practical recommendations

The results of this survey show a gap between the farmers' perceptions of relevant breeding traits for resilience and efficiency and their activity to record them within their associations' breeding schemes. Farmers need encouragement to actively join and participate in breeding programmes, for which can be promoted by:

- designing breeding programmes with a participative approach
- developing easy phenotype recording protocols for the different traits
- facilitating official database mining and on-farm data delivery

	Registered (yes/no)	Importance (1-5)
Calving ease	30%	4.9
Fertility	32%	4.6
Udder Conformation	4%	4.3
Docility	2%	4.3
No. calves weaned in the cow's life	21%	4.3
Feet and leg morphology	2%	4.2
Carcass conformation	4%	4.0
Calf weight at birth	28%	4.0
Age at first calving	51%	3.9
Calf weight at weaning	9%	3.6
Efficient use of low quality resources	0%	3.4
Calf weight at 90 days	2%	3.1
Cow Size	2%	2.9

Figure 1: Recording rates and importance assigned by farmers to different traits.

*"GENomic management Tools to Optimize Resilience and Efficiency - GenTORE"* is an H2020 project which aims to develop innovative genome-enabled selection and management tools to empower farmers to optimize cattle resilience and efficiency in different and changing environments.

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