

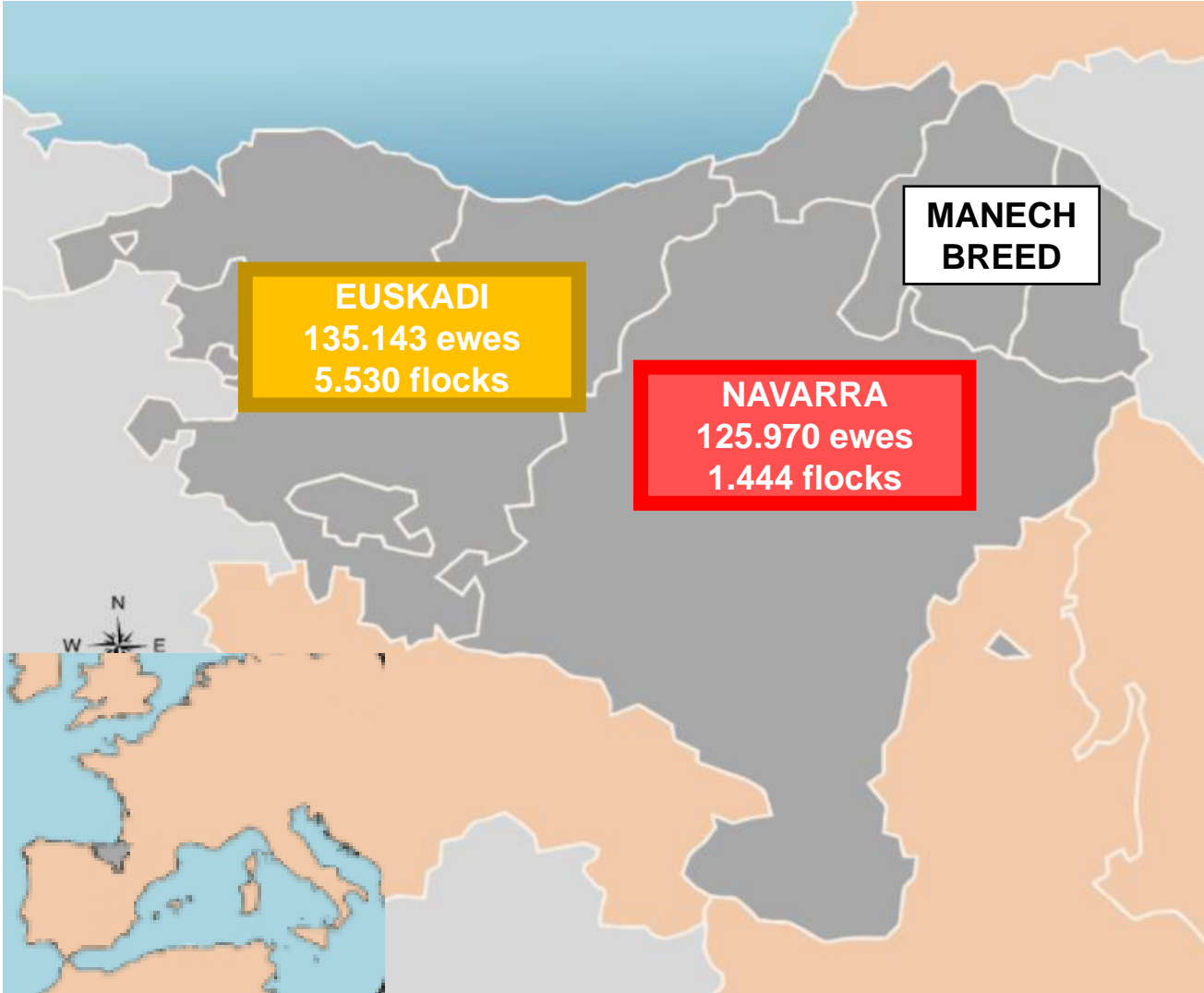
Challenges on Milk Recording and Sampling in the Latxa dairy sheep Breeding Program

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*ASLANA, Latxa Dairy Sheep Breeders Association of Navarra

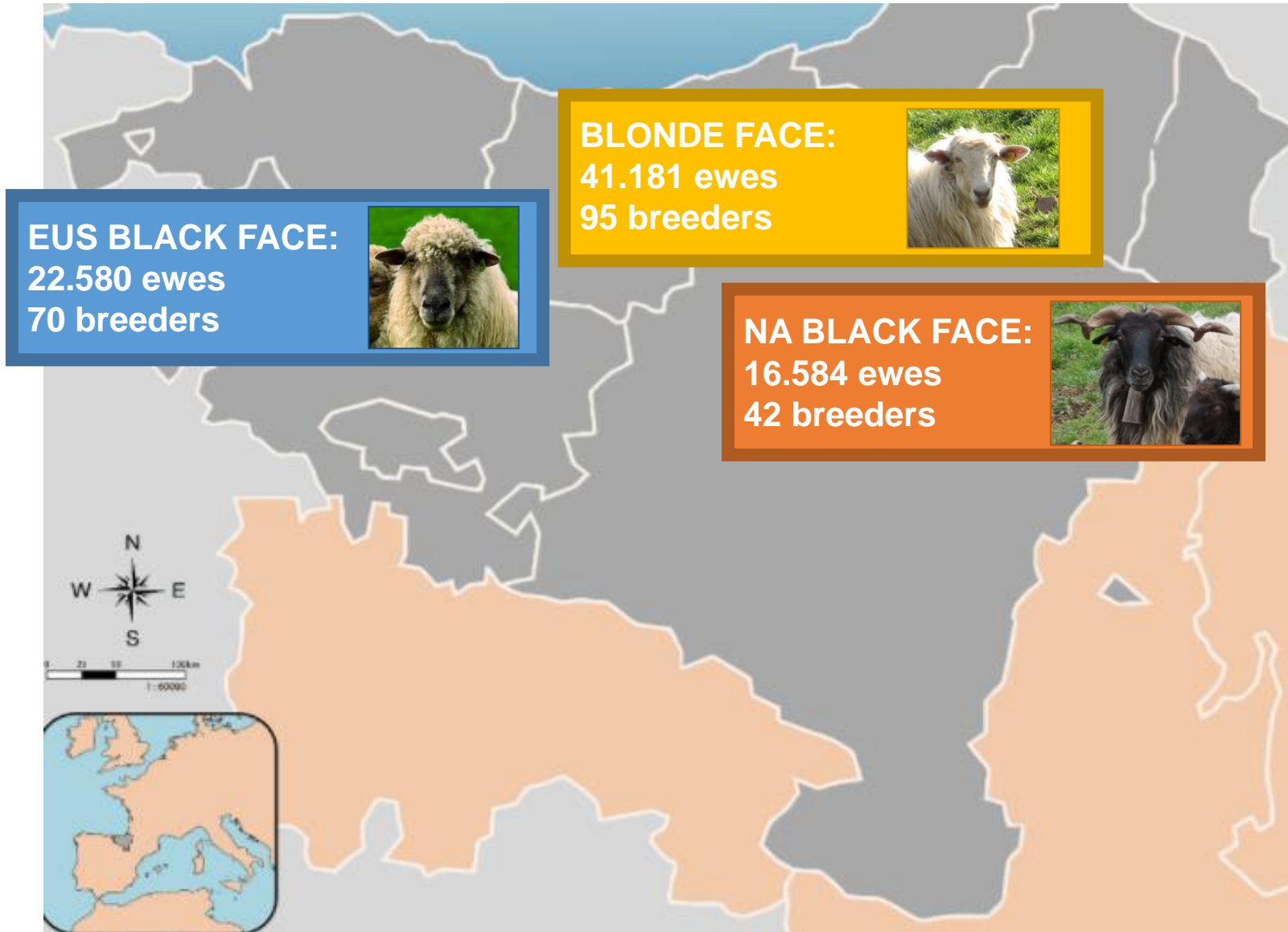


LATXA BREED



TOTAL	2005	2010	2015	2021
Flocks	6.934	7.747	7.149	6.974
Ewes	409.730	364.169	301.038	261.113

- Clear decrease in the number of sheep.
- Most of the farmers have Latxa as a complement to another activity, mainly the industry.
- Around 400 milking flocks.
- Breeding program focused in this milking flocks.




ORGANIZATION OF THE BREEDING PROGRAM

BREEDERS



**Birth book
Performance
recording
AI**

**BREEDERS
ASSOCIATIONS**



**Herdbook
Performance
recording
AI**

AI CENTERS



**Males
Semen**

**RESEARCH
CENTER**



**Genetic
evaluation
Studies**

GOVERNMENTS:

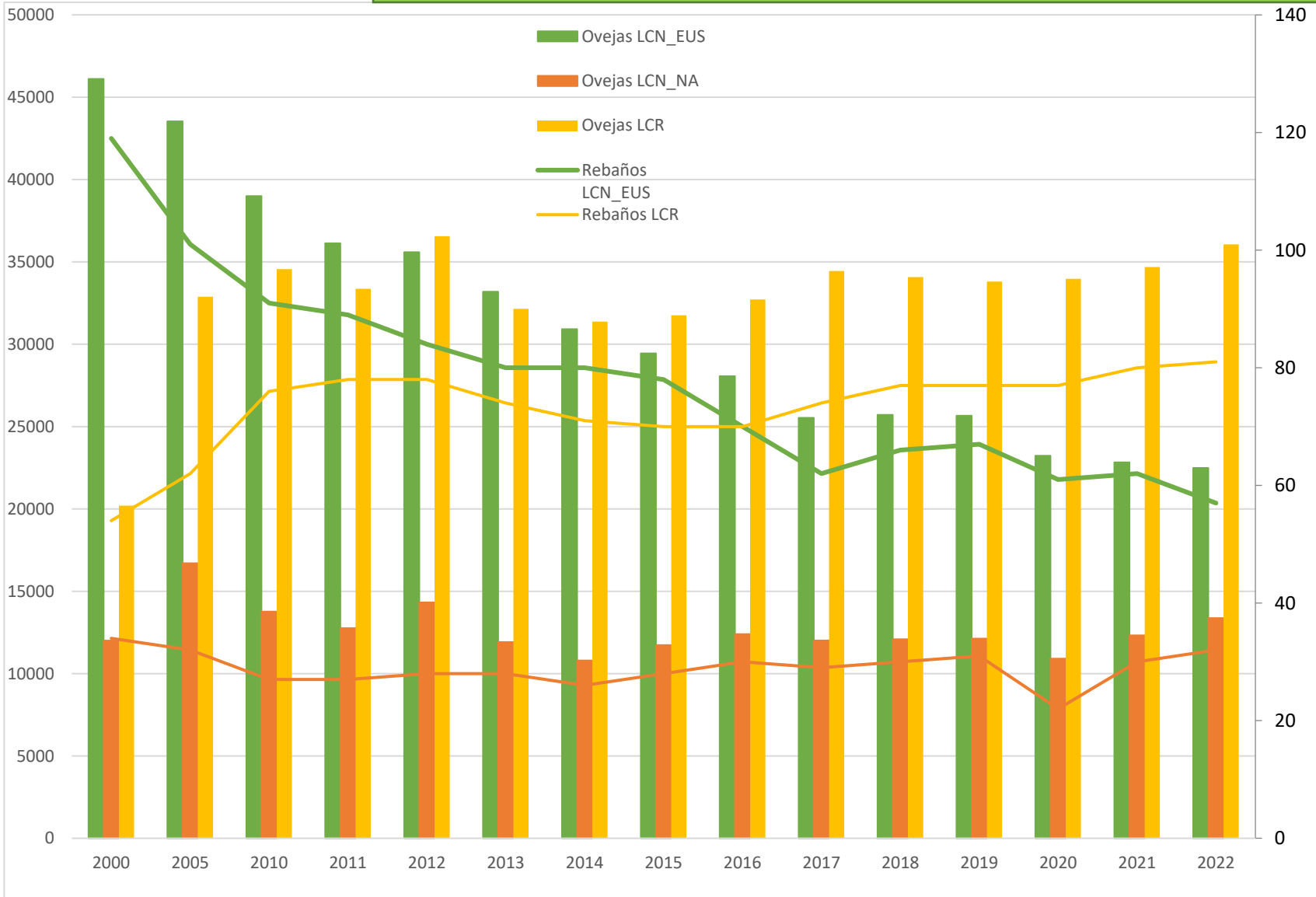


Evaluation **Regular financial support**

CHRONOLOGY

- 1982: Milk recording
- 1984: Selection program
- 1985: Artificial Insemination
- 1990: Official recognition of Herdbook
- 1997: First studies milk composition, udder morphology
- 1999: Sampling in milk recording
- 2001: Udder morphology recording
- 2005: Genetic evaluation for composition and udder
- 2008: Combined Index
- 2010-2012: “GENOMIA” project with Manech and research in Genomic
- 2018-2021: “ARDI” project with Manech:
 - Test-Day for milk composition
 - Genomic evaluation
 - A.E.I.E. ARTALDEAN
- 2021: ICAR certification

MILK RECORDING

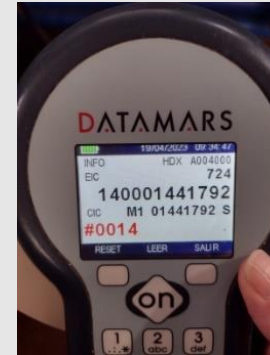


- 169 flocks
- 63.288 ewes
- Calc. Lact: 39.692
- Stability in Blonde Face
- Stable but small population in Navarra Black Face
- Decrease in Euskadi Black Face

MILK RECORDING AND SAMPLING

MILK RECORDING 2022:

- AT4: 40%, AC4: 60%
- Meters:
 - Volumetric MIBO
 - Electronic: 8 flock, 5 using for Milk Recording
- Electronic identification with ruminal bolus
- Microchip reader Device: Gesreader Datamars



SAMPLING 2022:

- 58.134 samples
- 111 flocks, 65% of the flocks:
 - First lactation in 32 flocks
 - First and second lactation in 32 flocks
 - All lactations in 47 flocks



DIFFICULTIES IN MILK RECORDING AND SAMPLING

- Meters for Low line but 30% of the milking machines are High line, most new machines.
- 2 flocks with individual identification of animals in the milking machine, ewes must be identified with electronic eartag and our readers can't read several animals first and then enter the milk yield.
- Several problems with electronic meters: hasn't ICAR homologation, some of them don't measure with good accuracy, difficult sampling...



EartTag and high line.mp4

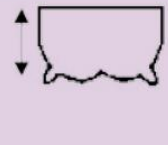
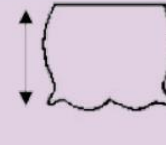
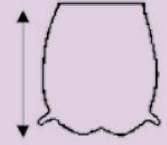


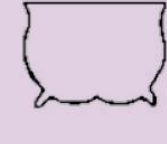








Electronic meter low line sampling.mp4



UDDER MORPHOLOGY

- 4 calificators
- 4.713 califications in 45 breeders
- First and second lactation
- De la Fuente methodology

Puntos	1 p	5 p	9 p
Carácter			
Depth			
Insertion			
Verticality			
Teat Size			

DATA FLOW

BREEDERS

Birth books

25% use readers

Unidad ganadera	Andarén día	Nº ovej	Artículo	Sexo y estado reproductivo de las corderas (**)	CHARPENAK OBSERVACIONES
10-12	18199	A	248		
12-12	62881	A	249	U 250	
12-12	04629	U	251	U 252	
19-12	26503	U	253		
20-12	94954	U	254		
20-12	18197	U	255		
21-12	93338	A	256		
24-12	93888	U	257		
26-12	26556	A	258		
26-12	26499	U	259		
26-12	26489				#SORTO
26-12	26502	A	260		
27-12	18193	A	261	U 262	
29-12	26470	A	263	A 264	#265
29-12	62864	U	266		
27-12	18192	A	267	U 268	
28-12	18097	A	269	U 270	
28-12	18233	A	271	U 272	
24-12	26464	U	273		
29-12	18208	A	274		
30-12	26498				bat hilda
30-12	62432	A	275		
30-12	93353	A	276	U 277	
30-12	18242	A	278		
30-12	62836	A	279	280	

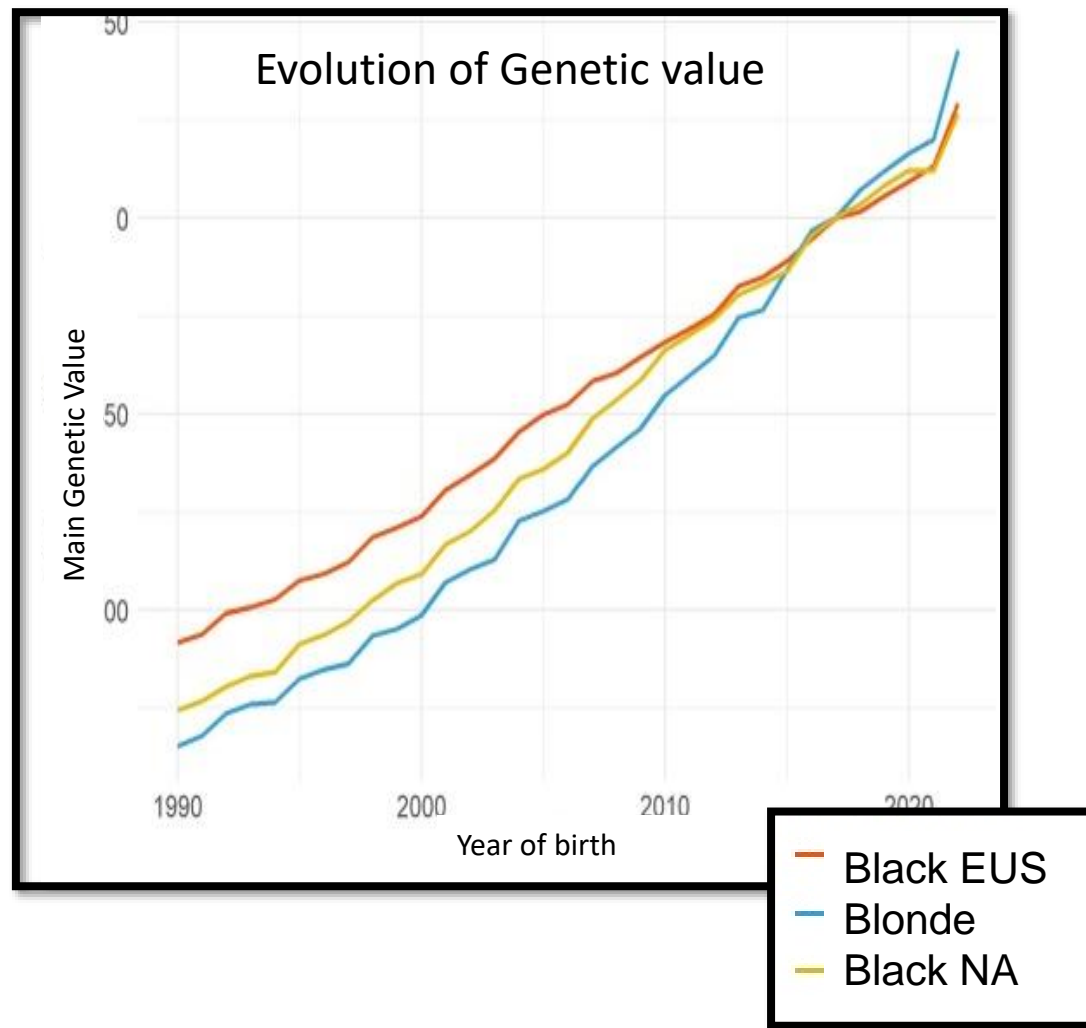
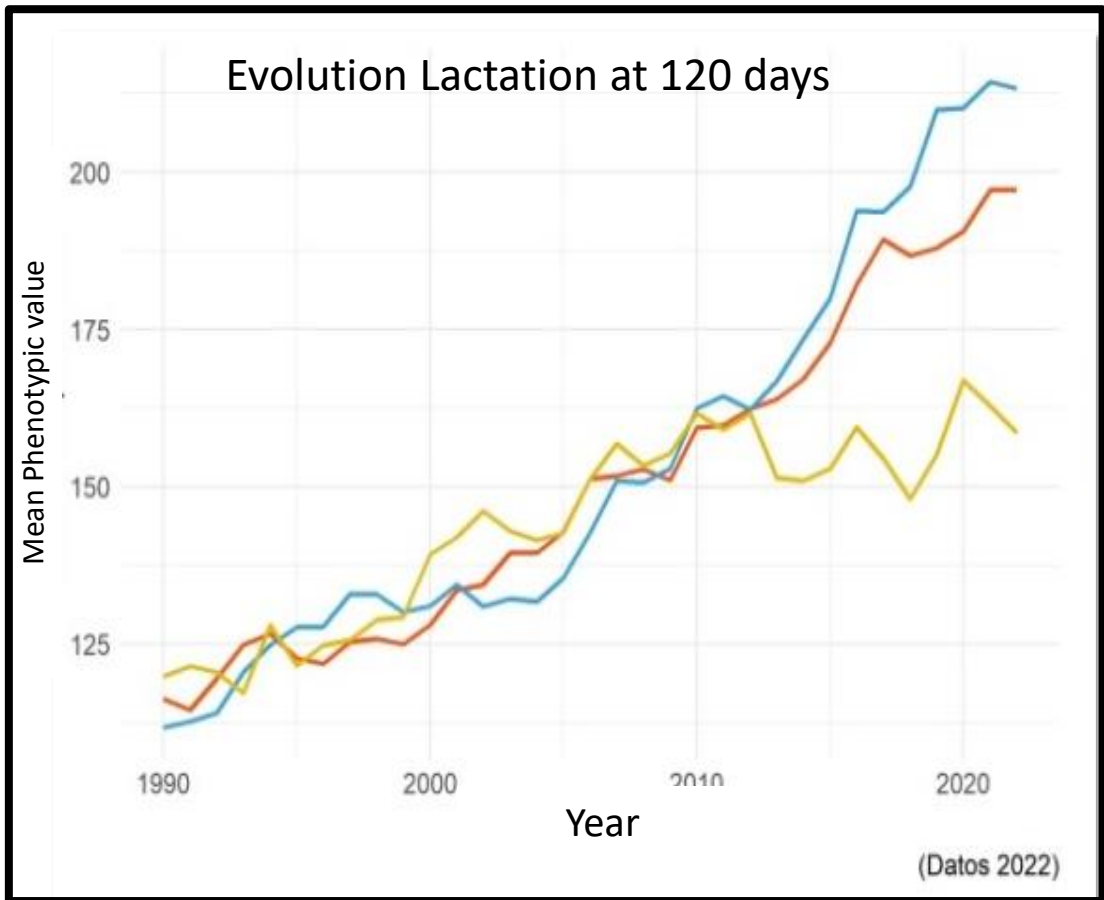
BREEDERS ASSOCIATIONS

Milk recording technicians

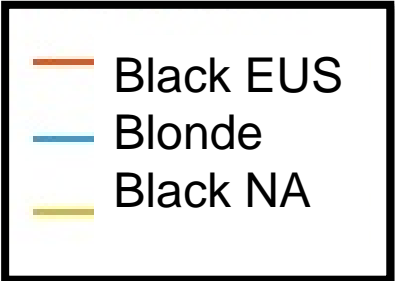
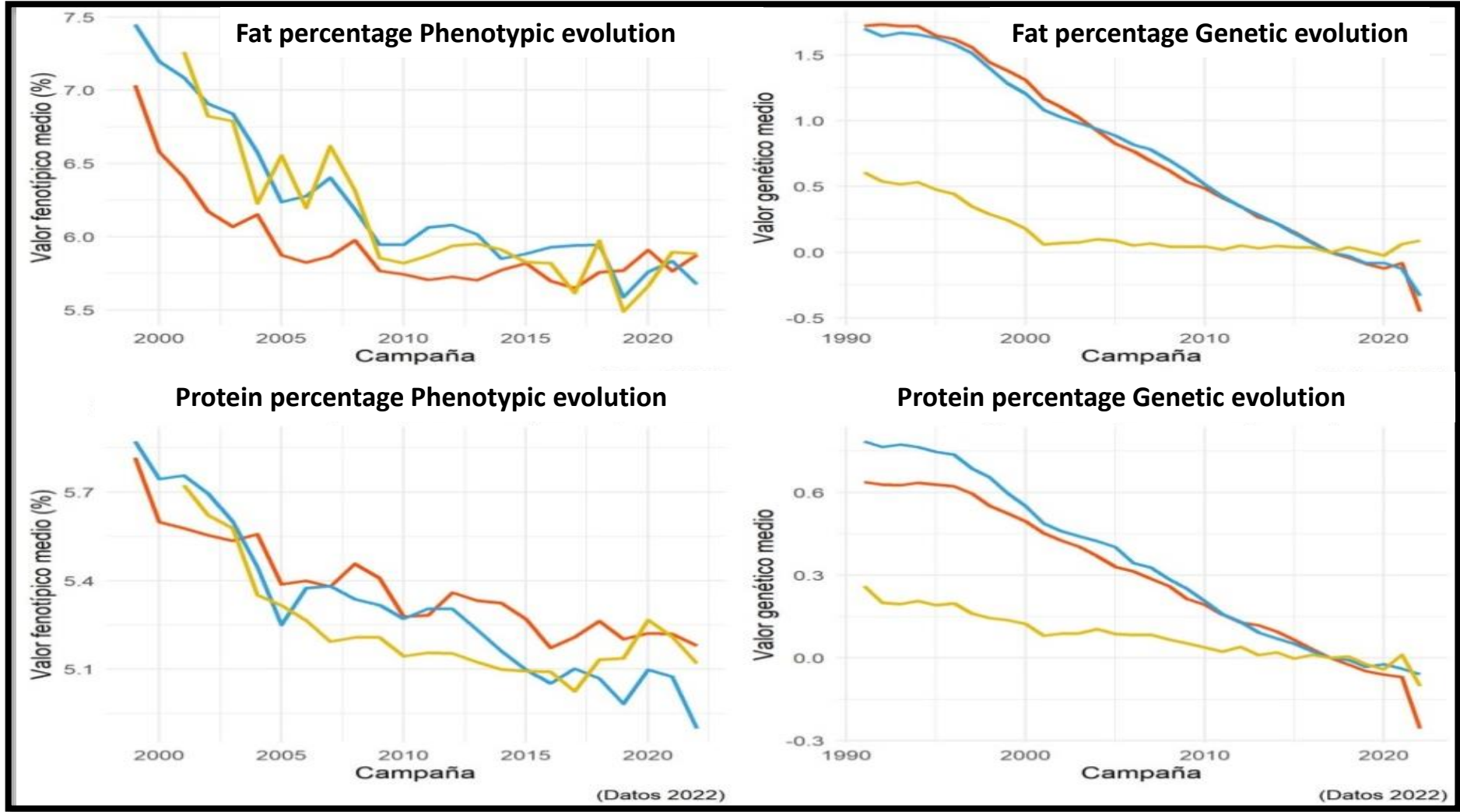
BREEDERS ASSOCIATIONS

2 Central Database

MILK YIELD EVOLUTION

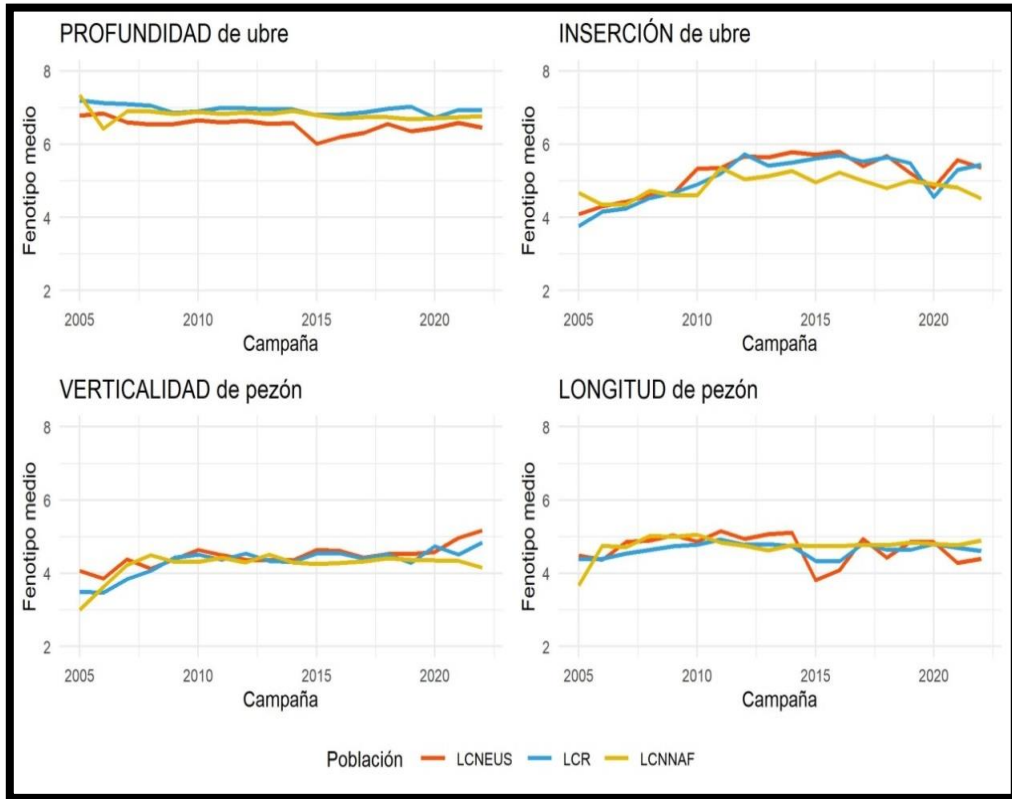


MILK COMPOSITION EVOLUTION

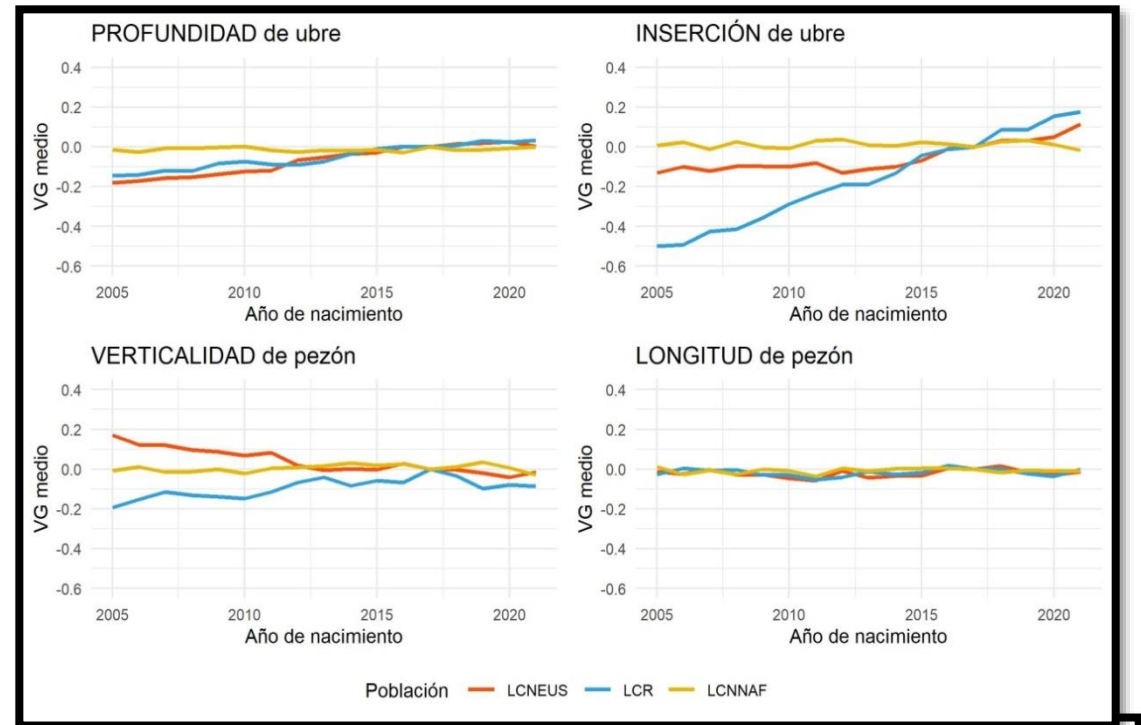


UDDER MORPHOLOGY EVOLUTION

Phenotypic evolution






Evolution of Genetic value



- Black EUS
- Blonde
- Black NA

OTHER SPANISH DAIRY SHEEP BREEDS

	 Asociación Nacional de Criadores de Ganado ovino Selecto de Raza Manchega	 ANCHE ASOCIACIÓN NACIONAL DE CRIADORES DE GANADO OVINO SELECTO DE RAZA CHURRA	 ASSAF.ESPAÑA www.assafe.es
Ewes	900.000 (600.000 milking)	300.000 (100.000 milking)	800.000
Flocks	1.000	400	1.100
Ewes in HerdBook	171.028	93.000 / 21.980 Milk recording	140.000
Breeders in HerdBook	130	131 / 38 Mil recording	125
Calculated lactations	119.546		74.101
Samples	51.311 in 18 breeders	51.064 all breeders	53.000 all breeders 1 lact.
Breeders with Electronic meters	51	2 but not using	36
Udder morphology	58.046 in 123 breeders	5.202 in 15 breeders	

- Improve information flow: electronic readers for farmers and single web database.

«PRECISION FARMING» project. GN 2023

- Improve milk recording and sampling in high line milking machines.
- New combined index with higher weight for milk composition.
- Research in new traits: longevity, reduction of methane emissions and thermotolerance.
- Improve genetic connections Latxa-Manech: ARTALDEAN, unification of the udder morphology calibration system and International genomic evaluation Latxa-Manech.

«ARDI 2» project. POCTEFA 2023

- Animal identification in samples.
- Readers for milk recording with electronic EarTags.

GLOBAL CHALLENGES

- Milking machines and electronic meters adapted and approved for milk recording and sampling.
- Improve work organization: More flexible milk recording regulations?
- Improve economical support for local breeds breeding programs: Recognise different levels of risk.

Muchas gracias!

Eskerrik asko!

Thank you!

