

**Sunday, June 2<sup>nd</sup>.**

15:00 h - Reception of the passengers at the airport of Oporto and transport to the Hotel in Lugo.

*Brios hostel* [www.hostalbrios.com](http://www.hostalbrios.com)

---

**Monday, June 3<sup>th</sup>.**

10:00 h - Visit to the University of Santiago de Compostela-Campus of Lugo, Vice-rector of coordination of the Terra Campus [www.usc.es/gl/gobierno/vrlugo/index.html](http://www.usc.es/gl/gobierno/vrlugo/index.html)

11:00 h – Visit to EPSE of engineering [www.usc.es/es/centros/eps/](http://www.usc.es/es/centros/eps/),

12:00 h - visit to the technology transfer Center/ center library  
[www.usc.es/gl/servizos/biblioteca/busc/centros/intcentroslugo/](http://www.usc.es/gl/servizos/biblioteca/busc/centros/intcentroslugo/)

13:30- Food

16: 00 h -Visit Rof Codina and CEBIOVET [www.rofcodina.org/index.php/es/](http://www.rofcodina.org/index.php/es/),  
[www.cebioviet.com/index.php/es/](http://www.cebioviet.com/index.php/es/)

17: 00 h- Visit likid milk plant CAPSA FOOD [www.capsafood.com](http://www.capsafood.com)

18:00 h - return to Lugo

18:30 h - Evolution of the dairy sector in Galicia (Spain) [proepla.com/en/equipo/manuel-marey-perez-3/](http://proepla.com/en/equipo/manuel-marey-perez-3/)

*Manuel Marey Pérez*

---

**Tuesday, June 4<sup>th</sup>.**

9:00 h - Visit to dairy products and food Technologies (APLTA) [www.aplta.es/index.php/ES/](http://www.aplta.es/index.php/ES/)

11:00 h - Café

11:30 h - Quality Management and design of products and processes  
[http://www.usc.es/export9/sites/webinstitucional/gl/centros/eps/caixa\\_profesorado/CVA/ARBONES\\_MACINEIRA\\_ENRIQUE.pdf](http://www.usc.es/export9/sites/webinstitucional/gl/centros/eps/caixa_profesorado/CVA/ARBONES_MACINEIRA_ENRIQUE.pdf)

*Enrique Arbones*

13:30 h - Food

---

### **Wednesday, June 5<sup>th</sup>.**

9:00 h - Departure

10:15 h - Arrival to LIGAL (milk analysis laboratory) [www.ligal.es/es-es/Paginas/default.aspx](http://www.ligal.es/es-es/Paginas/default.aspx)

*Roberto Lorenzana Fernández*

12:00 h - visit to CIAM - Mabegondo (agricultural Research Center)

[www.ciam.gal/sp/index/?r=portada.index](http://www.ciam.gal/sp/index/?r=portada.index)

*Cesar Resch Zafra*

14:00 h - Food

16:30 h - visit to UGASMA (farm and in-touch Alltech System) -

[www.youtube.com/watch?v=SuVbW2R7a7U](http://www.youtube.com/watch?v=SuVbW2R7a7U), [www.youtube.com/watch?v=FNmbmCuX2ew](http://www.youtube.com/watch?v=FNmbmCuX2ew)

*Laura Seoane Novo / Lourdes Celeiro Paez*

19:30 h - return to Lugo

---

### **Thursday, June 6<sup>th</sup>.**

9:00 h - Departure

9:30 h - visit to Innolact (Cheese factory) [www.quescrem.es/en/noticias/](http://www.quescrem.es/en/noticias/)

12:00 h - visit to experimental farm (Granja Gayoso Castro) and raising livestock

[www.deputacionlugo.gal/es/temas/medioambiente/recria](http://www.deputacionlugo.gal/es/temas/medioambiente/recria)

14:00 h – Food

---

### **Friday, June 7<sup>th</sup>.**

9:00 h - Departure

10:00 h - visit to Arquega (Cheese factory) - [www.arquega.com/](http://www.arquega.com/)

12:30 h - visit to Monastery of Santa Maria de Sobrado dos Monxes (dulce de leche factory “sweet milk”)

[www.monasteriodesobrado.org/index.php/dulce-de-leche/](http://www.monasteriodesobrado.org/index.php/dulce-de-leche/)

14:00 h – Return to Lugo and-closing of the visit

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### **Saturday, June 8<sup>th</sup>.**

Free day

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### **Sunday, June 9<sup>th</sup>**

11:00 h - Departure for the airport of Porto



# **MONGOLIAN RESEARCH TEAM**




## VISITORS AND COORDINATOR

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**OCHIRKHUYAG  
Baldorj**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**PUREVJAV  
Mejeenov**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**KHULAN  
Janchiv**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016


**DULGUUN  
Dorjgotov**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016


**TUMENJARGAL  
Davaasuren**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016


**TUMENJARGAL  
Davaasuren**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016


**TUYATSETSEG  
Jambal**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**GOMBOJAV  
Altangerel**


Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**MAREY  
Manuel**


Lugo 2-7de June 2019

Monday, 3 June

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**VALCARCEL**  
**Montserrat**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**CUESTA**  
**Tomás**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**BARRASA**  
**Martín**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016


**VILA**  
**Pablo**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**CANTALAPIEDRA**  
**Julia**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016


**DE LA CRUZ**  
**Luis Felipe**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**CORDERO**  
**Francisco**


Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**ALVAREZ**  
**José**

Lugo 2-7de June 2019


Tuesday, 4 June

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**ARBONES**  
**Enrique**

Lugo 2-7de June 2019

Wednesday, 5 June

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016


**LORENZANA**  
**Roberto**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**RESCH**  
**César**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**SEOANE**  
**Laura**


Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**CELEIRO**  
**Lourdes**

Lugo 2-7de June 2019

Thursday, 6 June

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**INNOLACT**


Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**SERAGRO**


Lugo 2-7de June 2019

Friday, 7 June

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**ARQUEGA**

Lugo 2-7de June 2019

 KA2-Cooperation for innovation  
Erasmus+ and exchange of  
good Practices-EAC/A03/2016

**SOBRADO DOS  
MONXES**

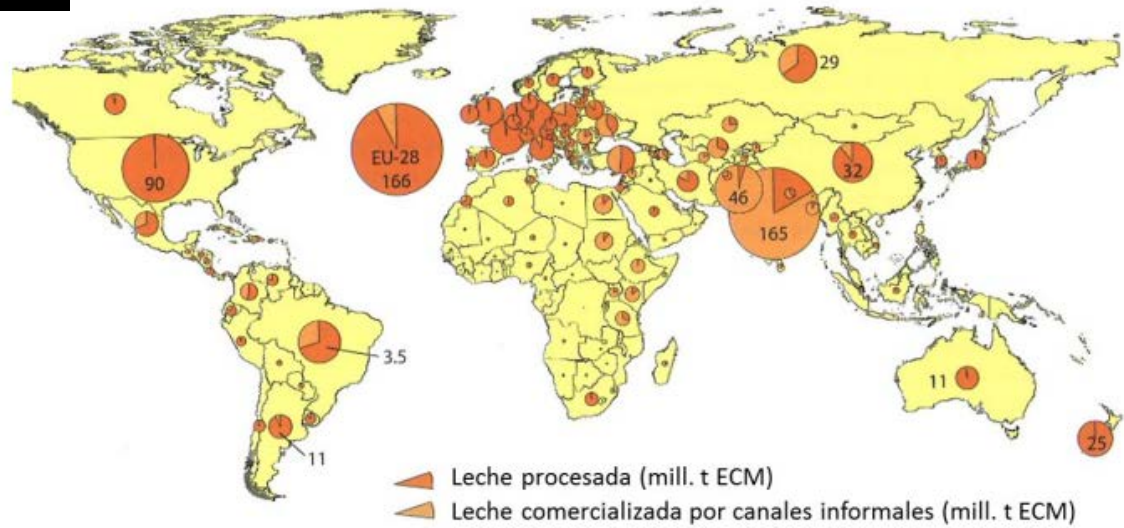
Lugo 2-7de June 2019

# DAIRY SECTOR OF GALICIA



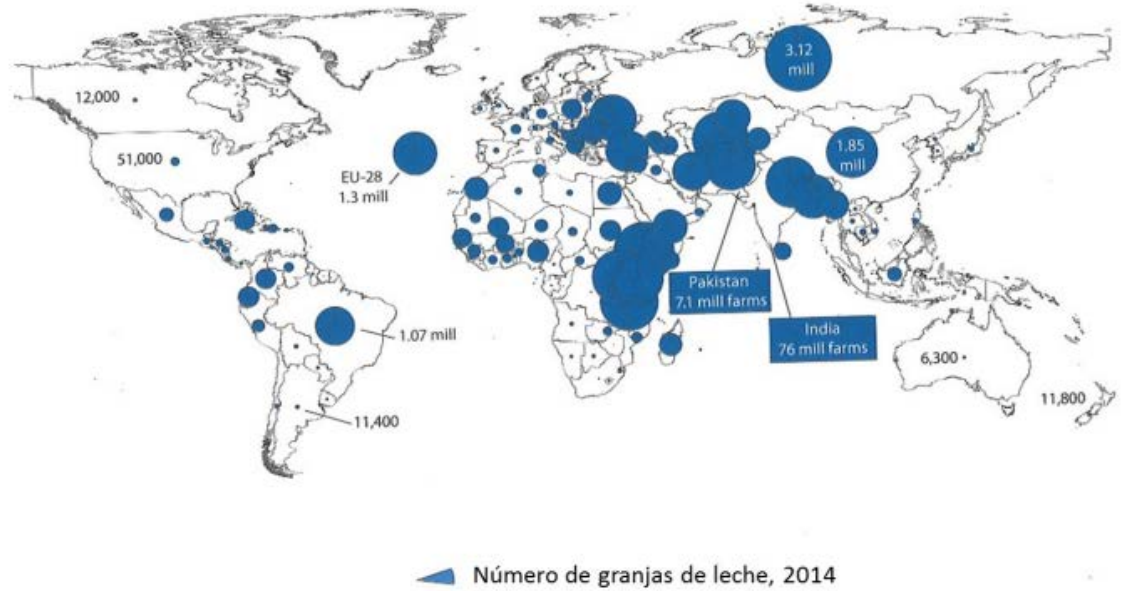
# MILK PRODUCTION

Figura 2.1.1. Producción y comercialización mundial de leche de vacuno y búfalo (millones de toneladas ECM), 2015.



Fuente: IFCN Dairy Report 2016. International Farm Comparison Network, IFCN dairy Research Center, Kiel.

Figura 2.1.2. Distribución mundial de explotaciones de vacuno de leche y búfalas, 2014.

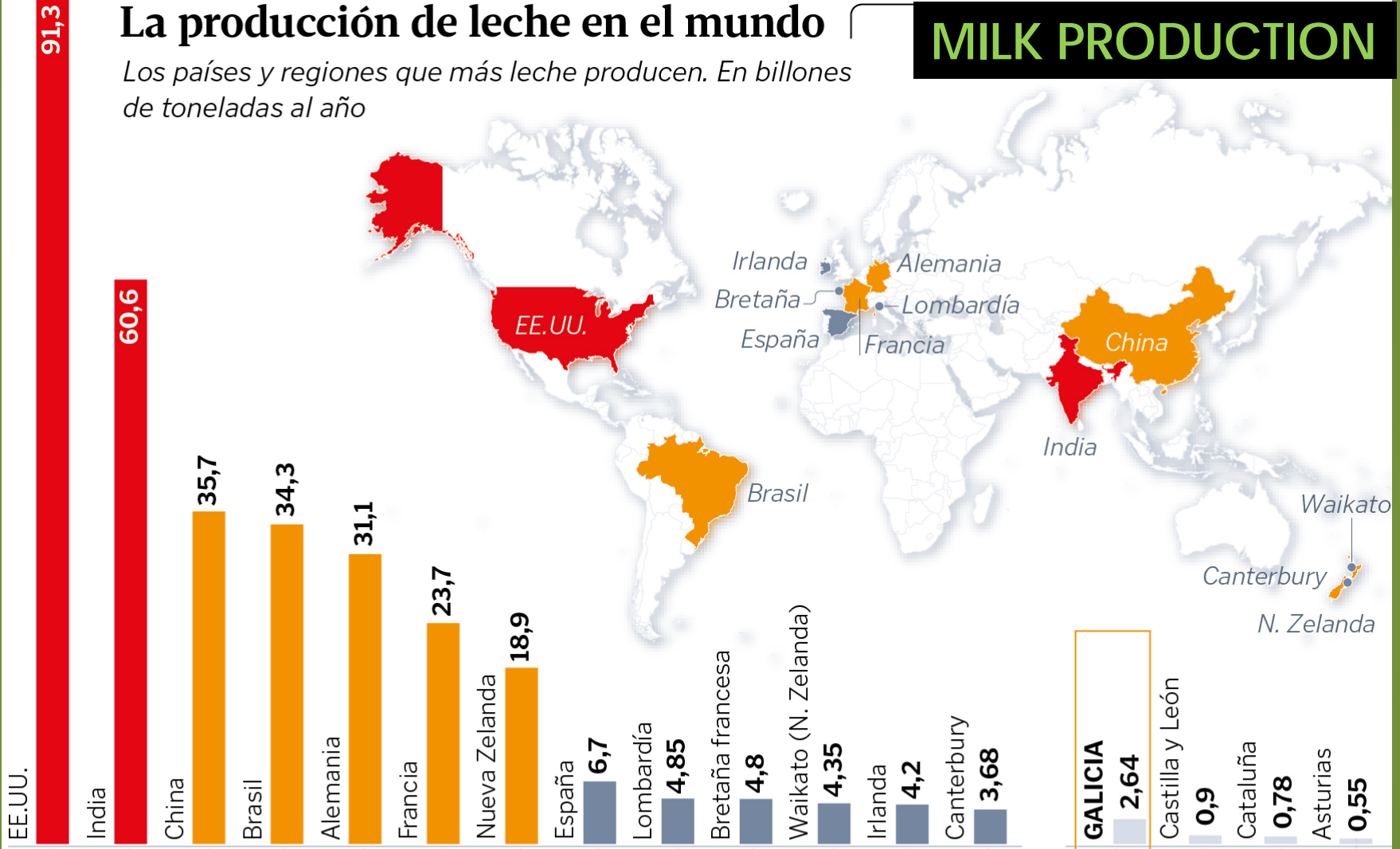


Fuente: IFCN Dairy Report 2015. International Farm Comparison Network, IFCN dairy Research Center, Kiel.

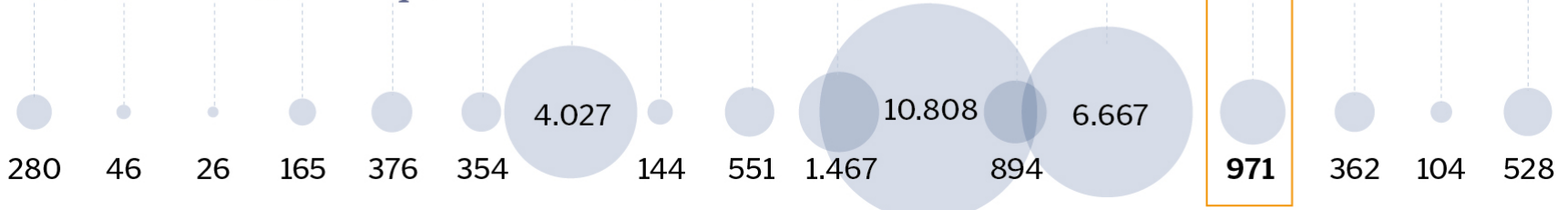
# MILK PRODUCTION

## La producción de leche en el mundo

Los países y regiones que más leche producen. En billones de toneladas al año



Millones de toneladas por cada 1.000 habitantes



En España

667.333

(toneladas)

en 2017

### DOWNLOAD OUR LATEST AGRICULTURE DATA BRIEF

Download our one-page PDF full of live links to agriculture-related data, statistics, and dashboards from leading industry sources. From food security and prices to agricultural production and supply, gain direct access to key decision-making data.

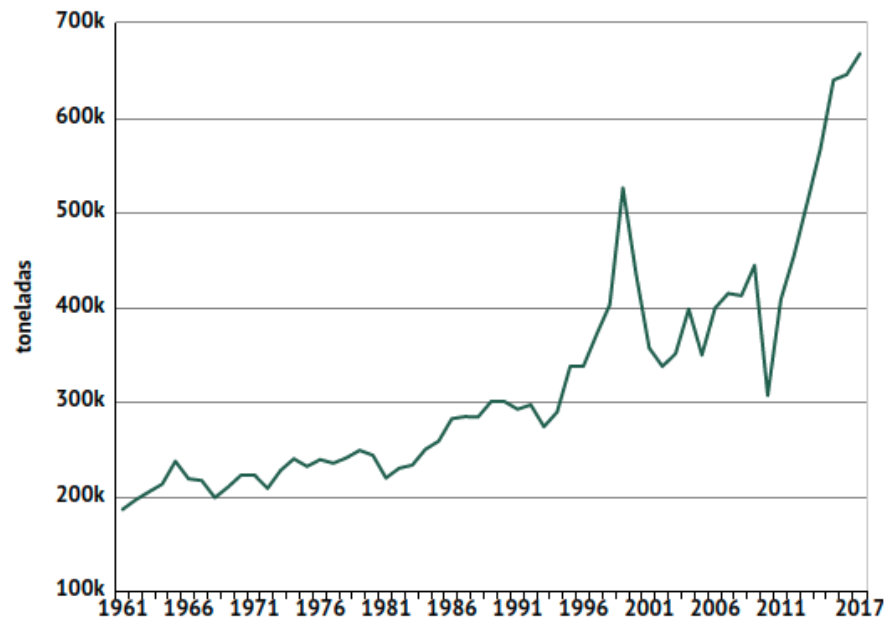
[APRENDER MÁS](#)
[EXPORTAR](#)
[EXPLORAR DATOS](#)

[Comparar](#)

[Ver la clasificación](#)

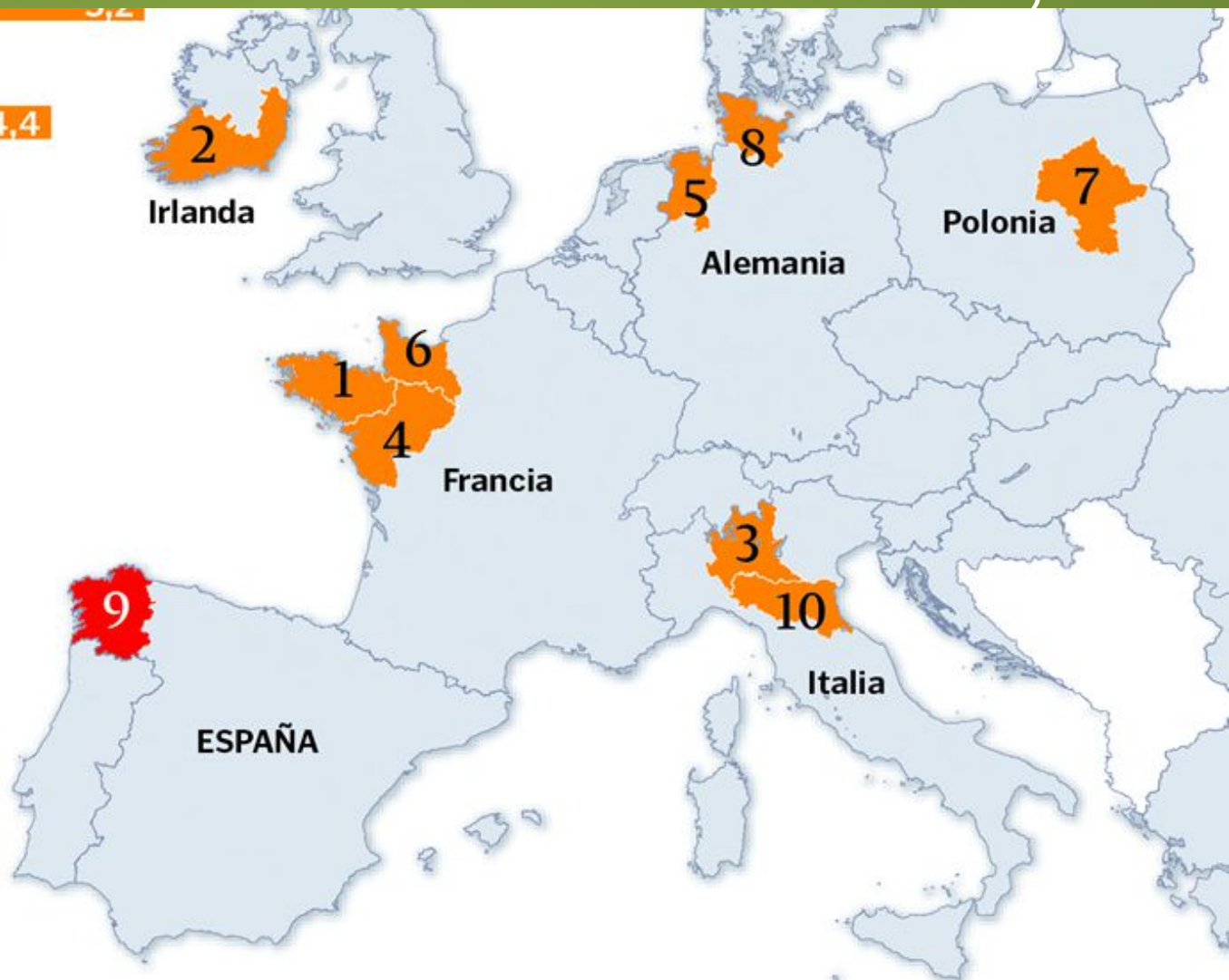
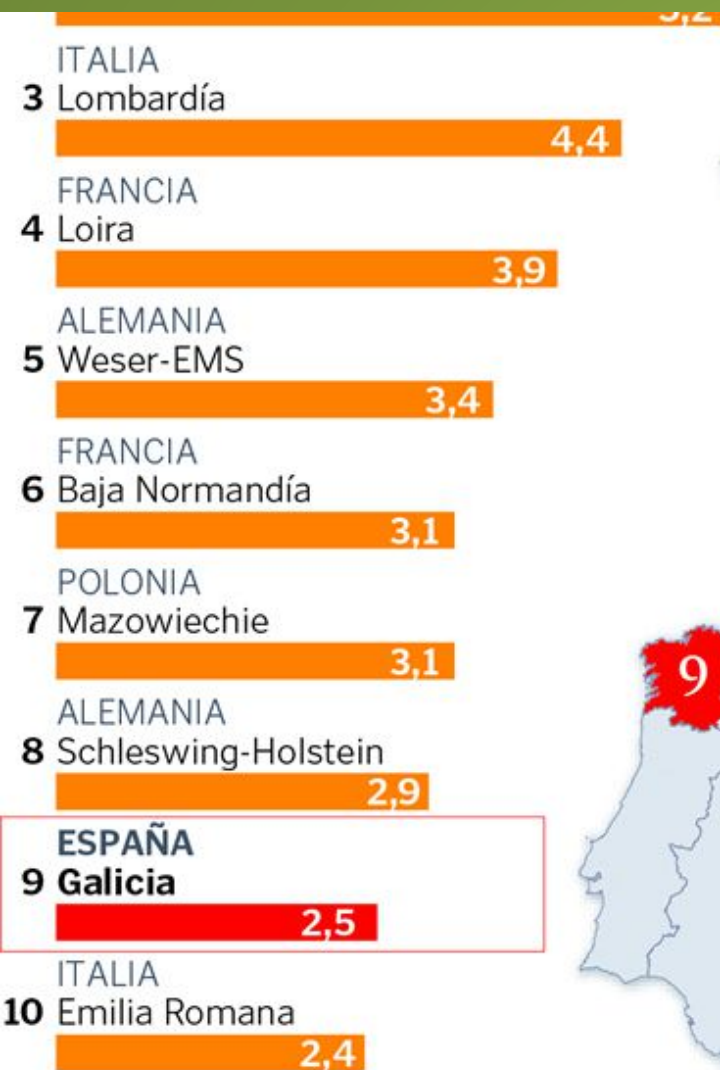
[Ver mapa](#)

[Insertar](#)

[Marcador](#)

[Sign up free to view source](#)

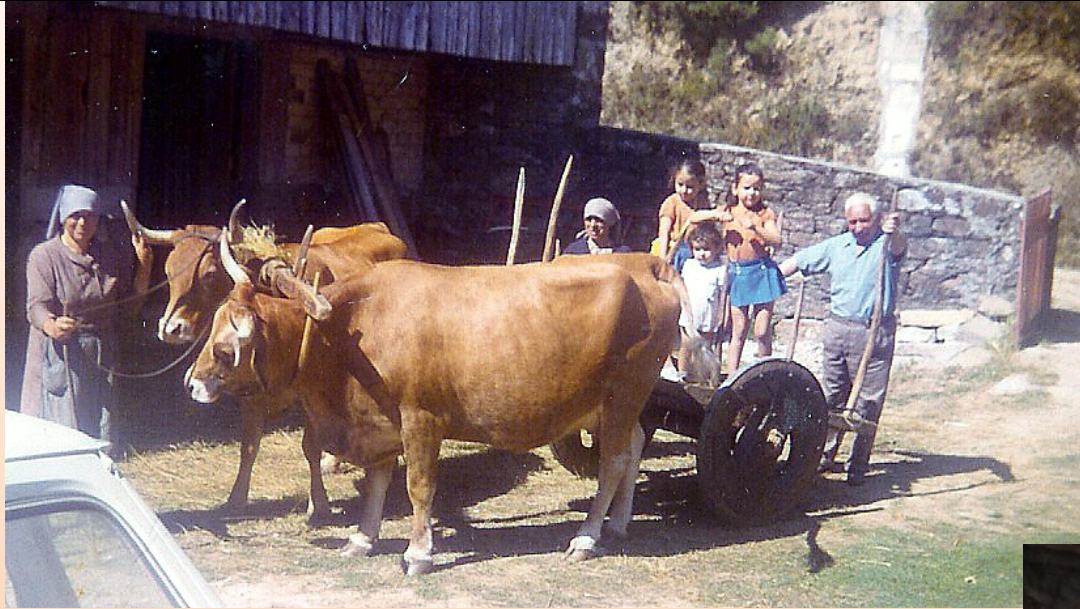
FECHA	VALOR	CAMBIAR, %
2017	667.333	3,41 %
2016	645.331	0,89 %
2015	639.619	12,89 %
2014	566.584	11,15 %
2013	509.746	12,22 %
2012	454.246	11,42 %
2011	407.694	33,06 %
2010	306.390	-30,94 %
2009	443.658	7,76 %
2008	411.700	-0,58 %
2007	414.100	3,89 %

# MILK PRODUCTION



Líder destacado en España en producción (39%)

# EVOLUTION OVER THE LAST FEW YEARS

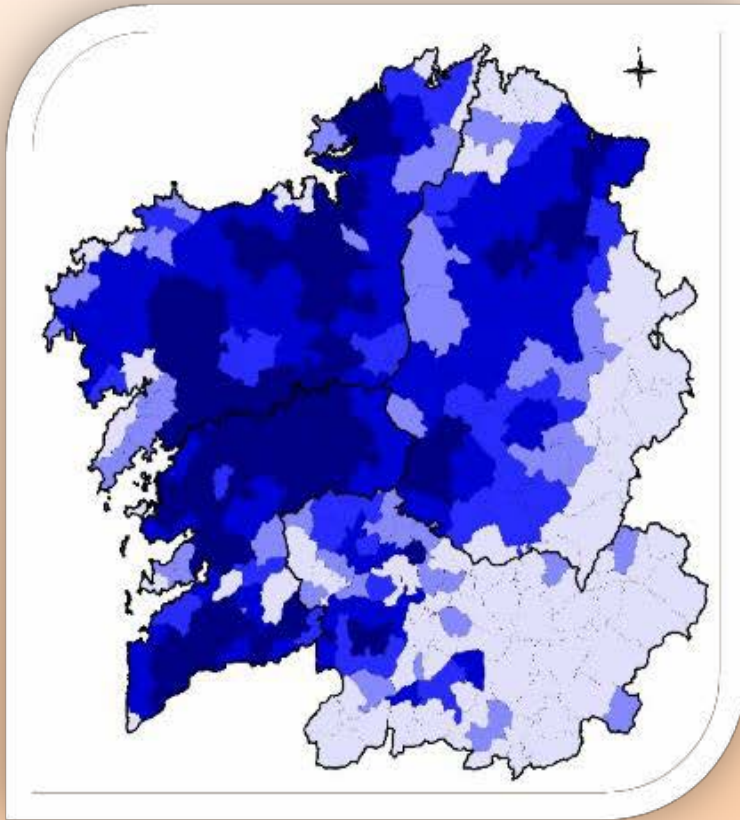


# EVOLUTION OVER THE LAST FEW YEARS

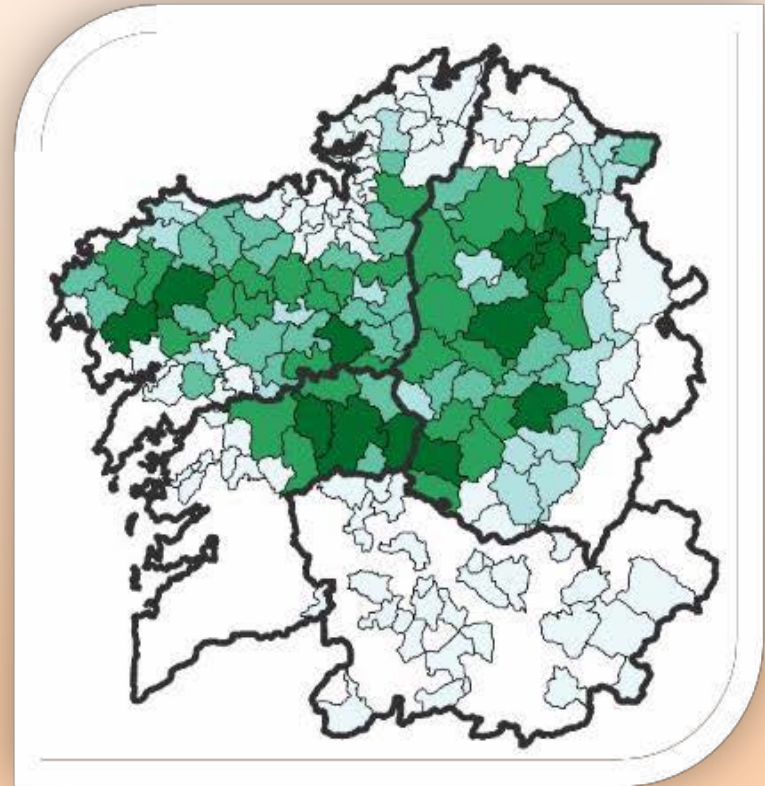


# EVOLUTION OVER THE LAST FEW YEARS

1989

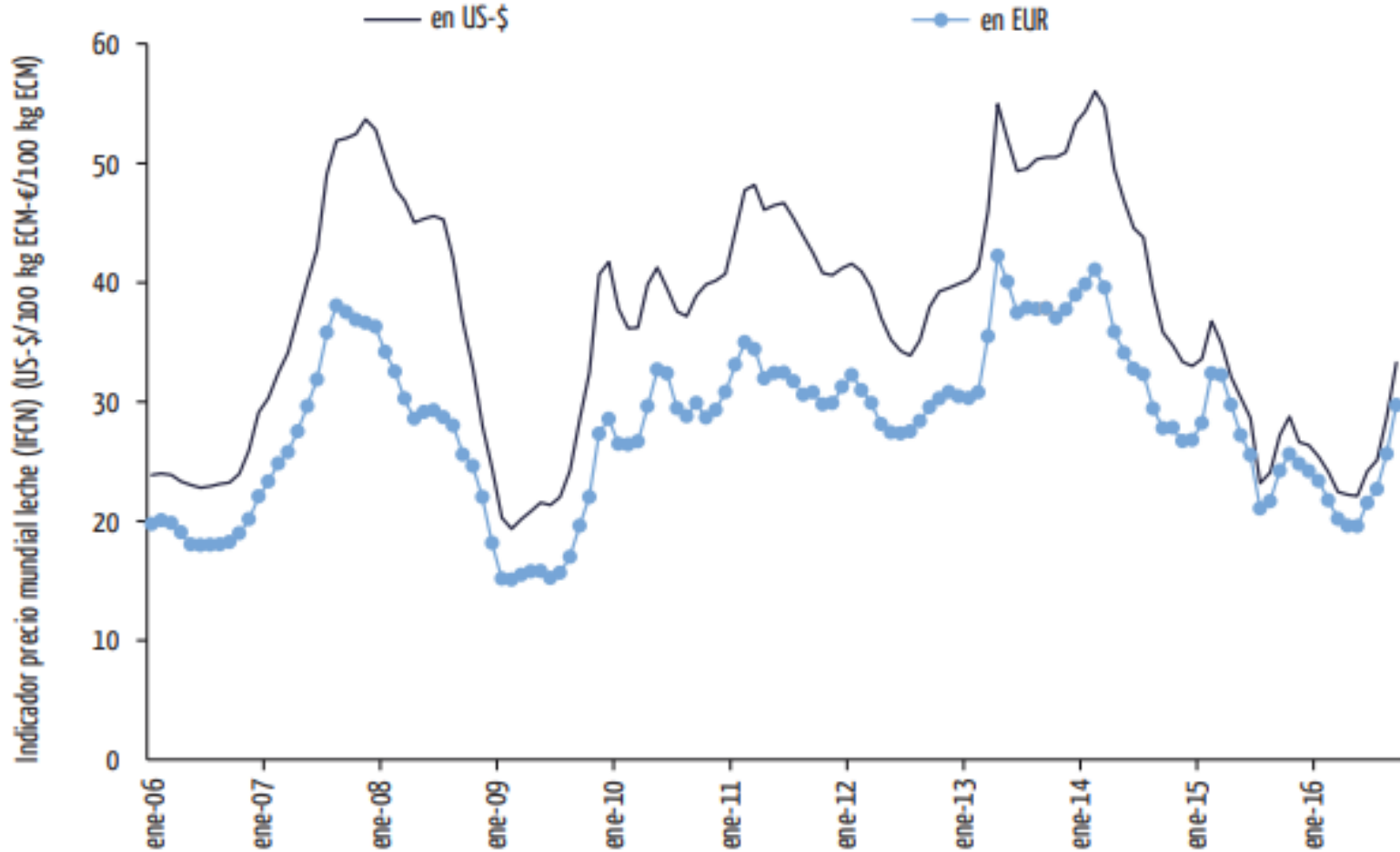


2013



# PRICE

Figura 2.5.1. Precio mundial de la leche.

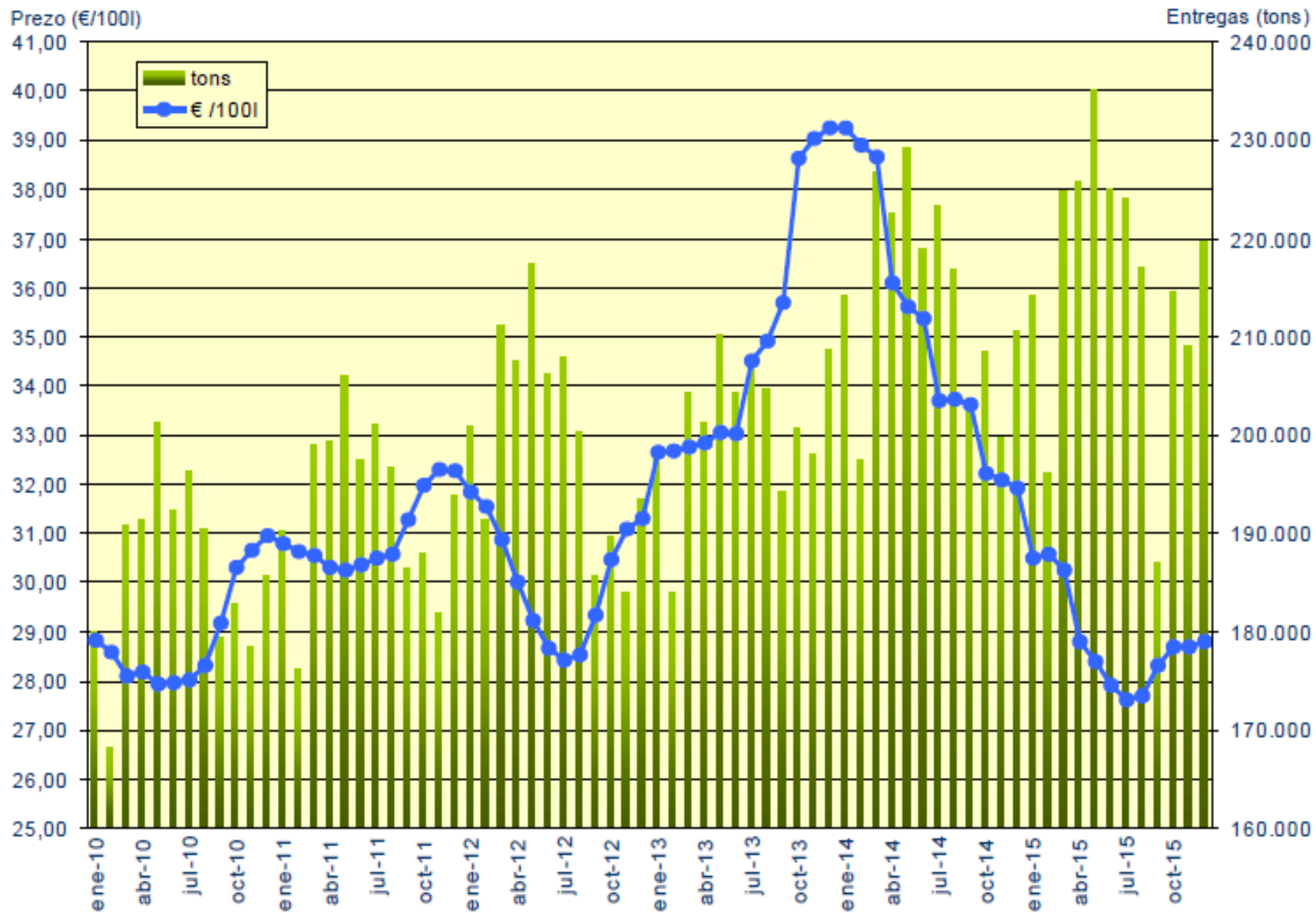


Fuente: IFCN Dairy Report 2016, International Farm Comparison Network, IFCN dairy Research Center, Kiel.

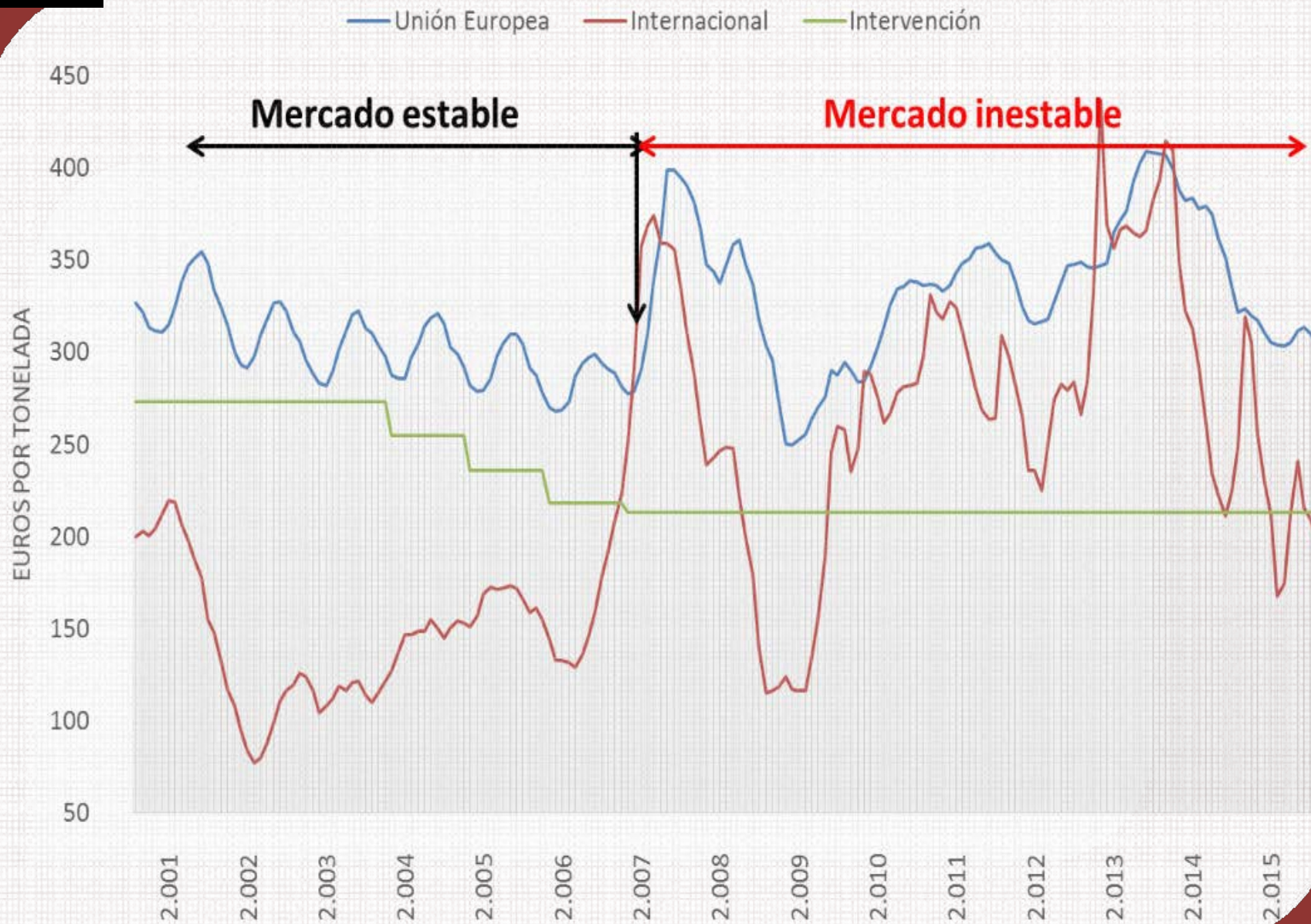


# PRICE

## EVOLUCIÓN DAS ENTREGAS (tons) E PREZO DO LEITE (€/100l) EN GALICIA

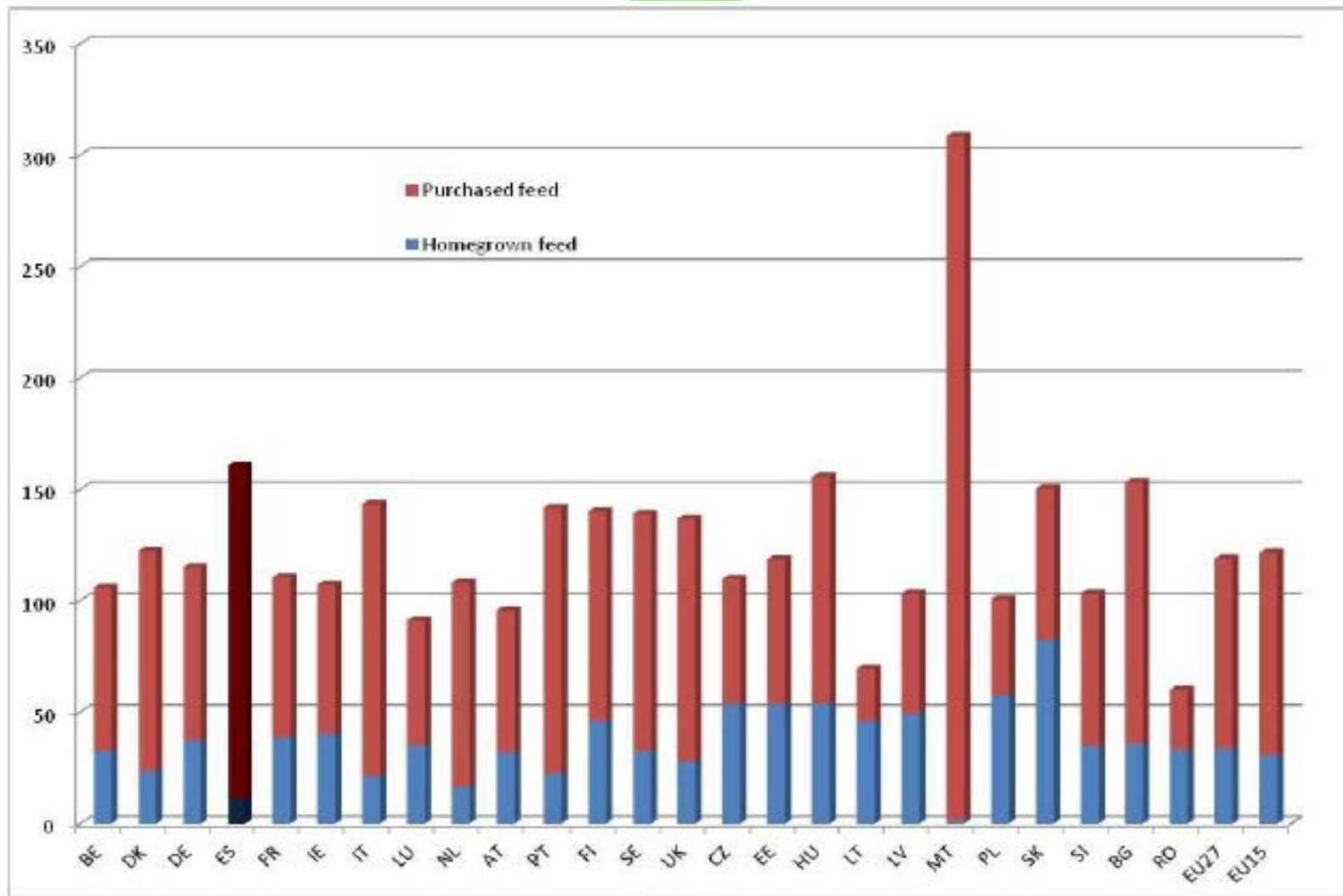


# PRICE

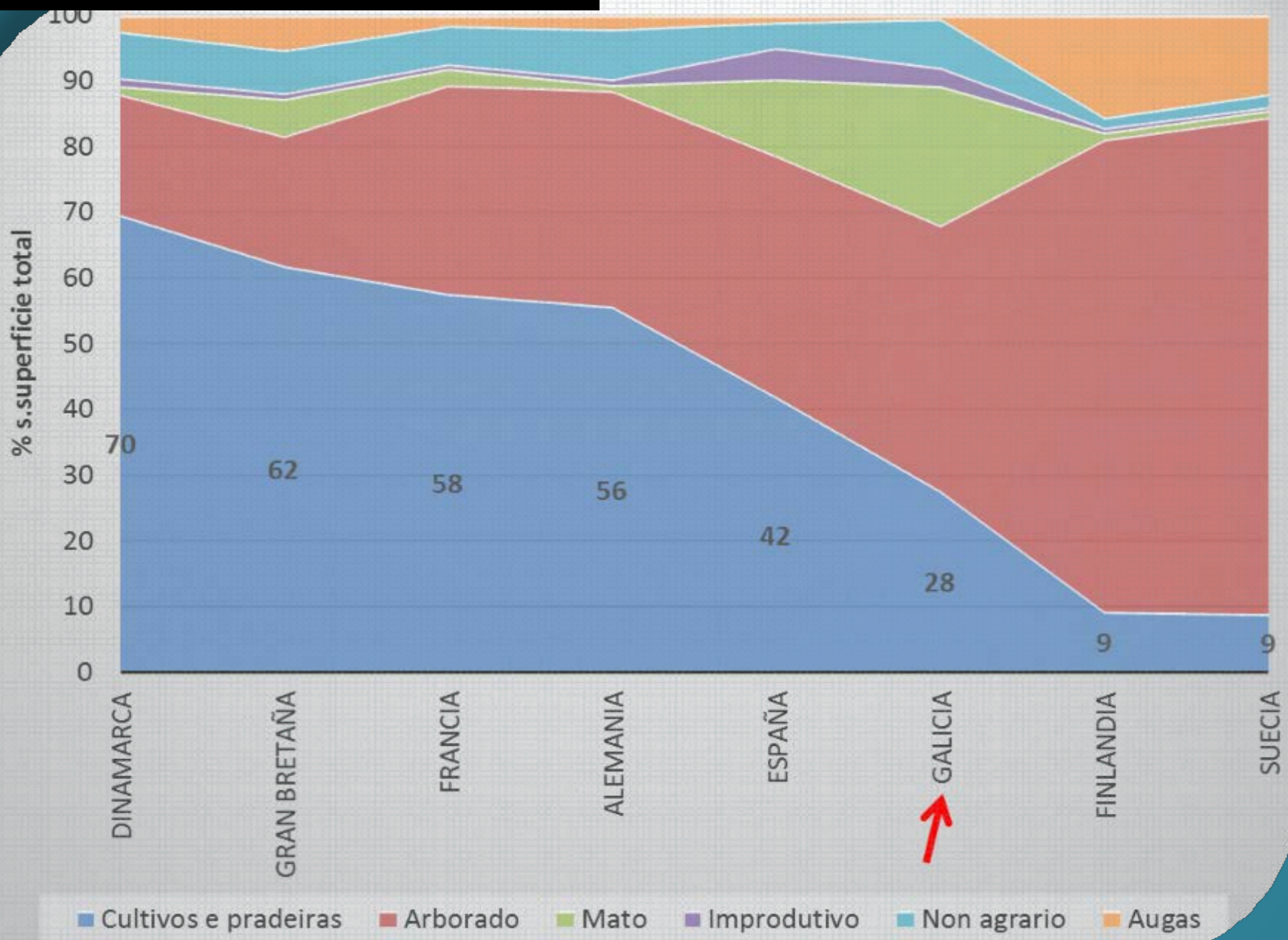


# COSTS OF PRODUCTION

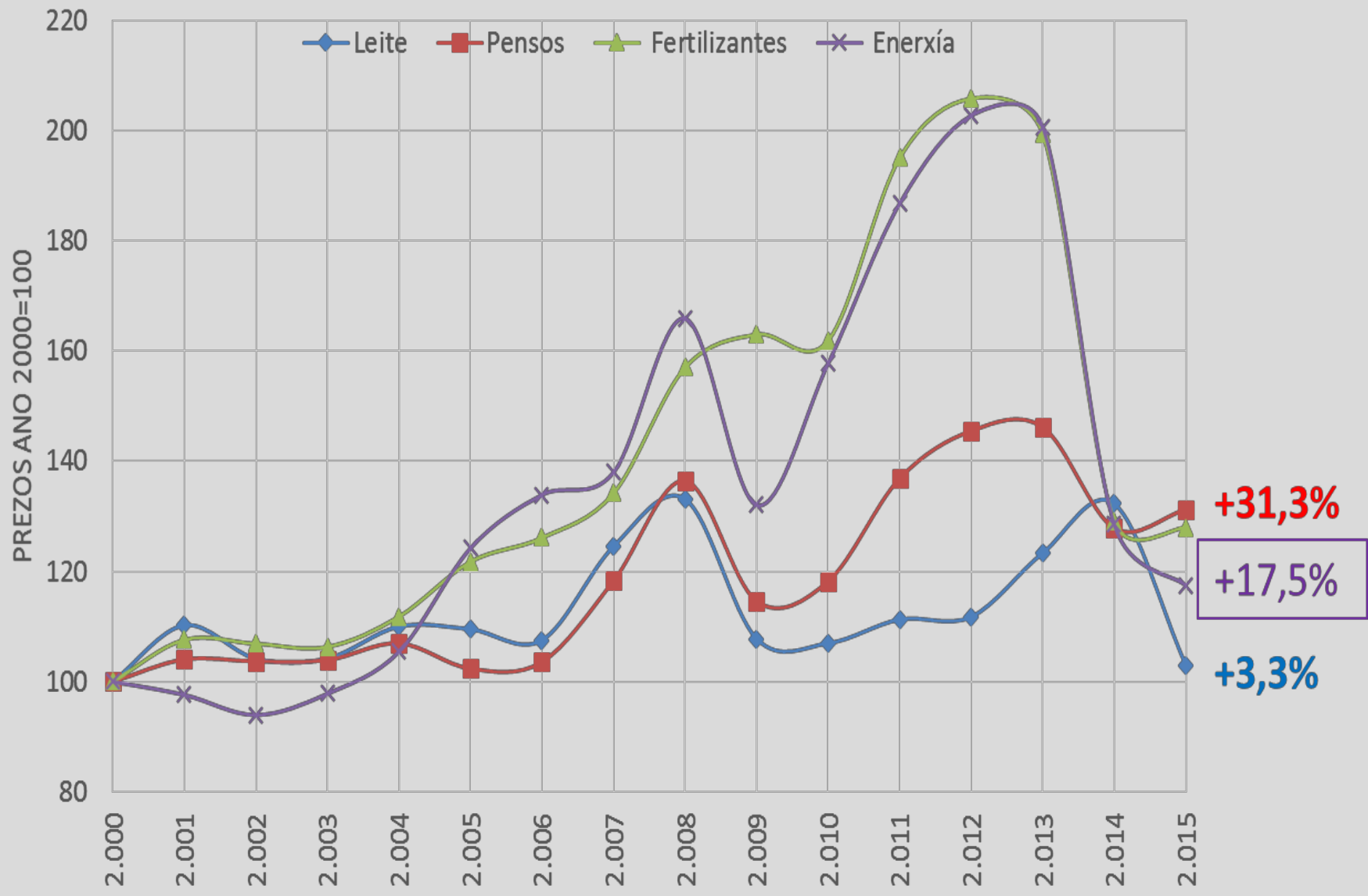
(€/t leche)



# COSTS OF PRODUCTION

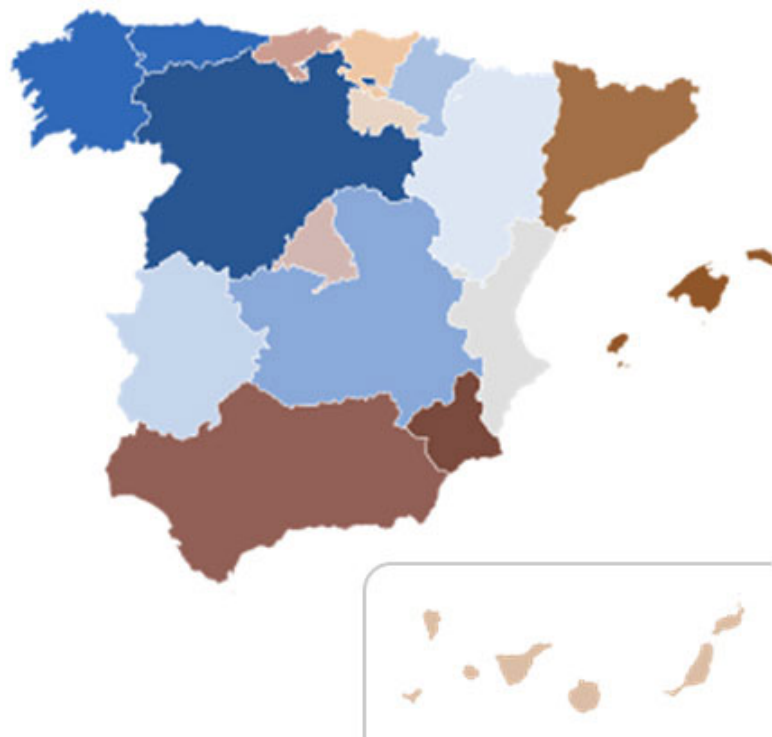


# COSTS OF PRODUCTION



# EVOLUTION OF THE MARKET

## Consumo de leche per cápita (litros)



1	Castilla y León	96,14
2	Asturias	91,5
3	Galicia	86,3
4	Castilla - La Mancha	86
5	Navarra	82
6	Extremadura	81,2
7	Aragón	76,8
<b>Media en España</b>		<b>72,85</b>
8	La Rioja	71,3
9	País Vasco	70,7
10	Cantabria	70,4
11	Madrid	69,6
12	Canarias	64,4
13	Comunidad Valenciana	63,3
14	Murcia	62
15	Andalucía	61,9
16	Cataluña	58,4
17	Baleares	53,6

Fuente: Panel de consumo alimentario: MAGRAMA

# EVOLUTION OF THE MARKET

## Consumo de derivados lácteos 2016

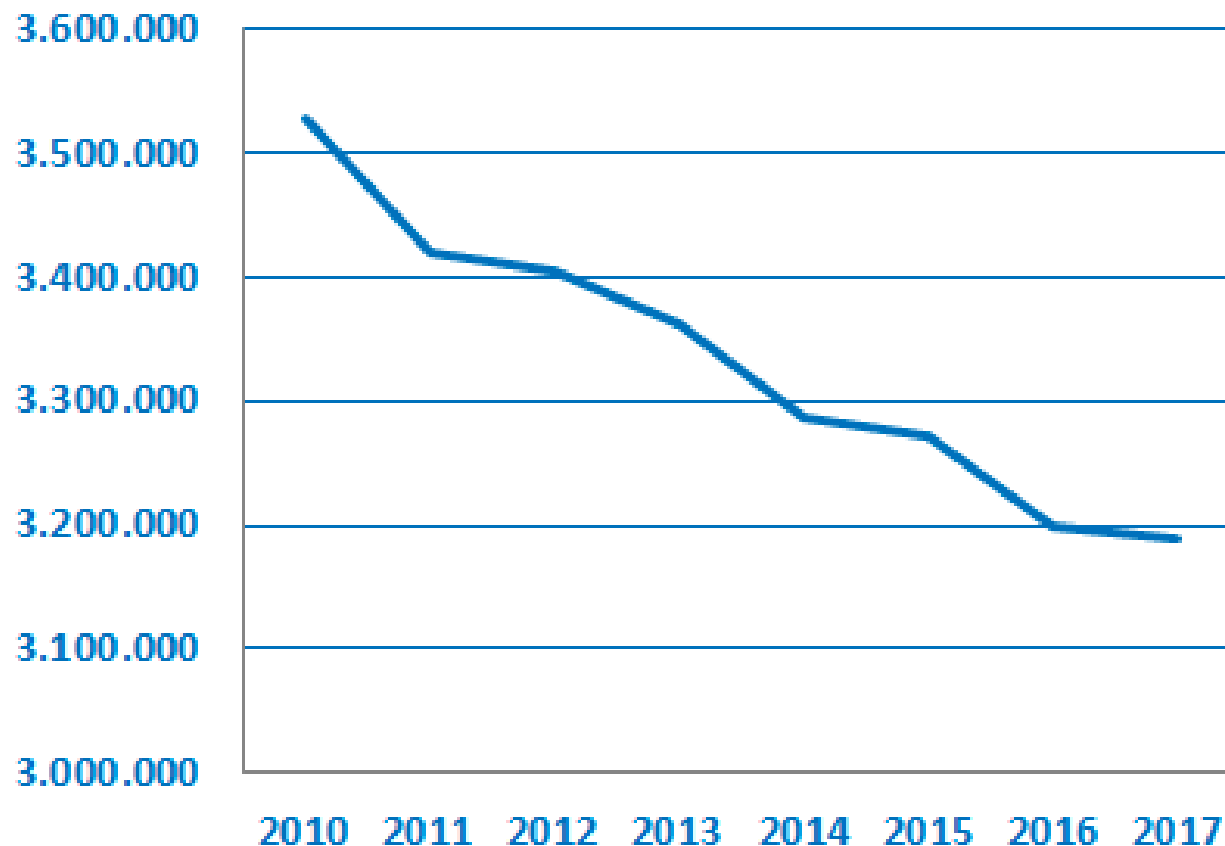


1	Asturias	44,21
2	Canarias	42,64
<b>Media en España</b>		<b>36,4</b>
3	Andalucía	36,32
4	País Vasco	36,29
5	Cantabria	35,74
6	Galicia	35,45
7	La Rioja	35,36
8	Extremadura	35,34
9	Baleares	34,71
10	Murcia	34,51
11	Cataluña	33,84
12	Castilla y León	33,39
13	Comunidad Valenciana	33,03
14	Aragón	32,35
15	Navarra	32,2
16	Castilla - La Mancha	31,79
17	Madrid	30,92

Fuente: Panel de consumo alimentario: MAGRAMA

# EVOLUTION OF THE MARKET

## Evolución del consumo de leche líquida (toneladas)

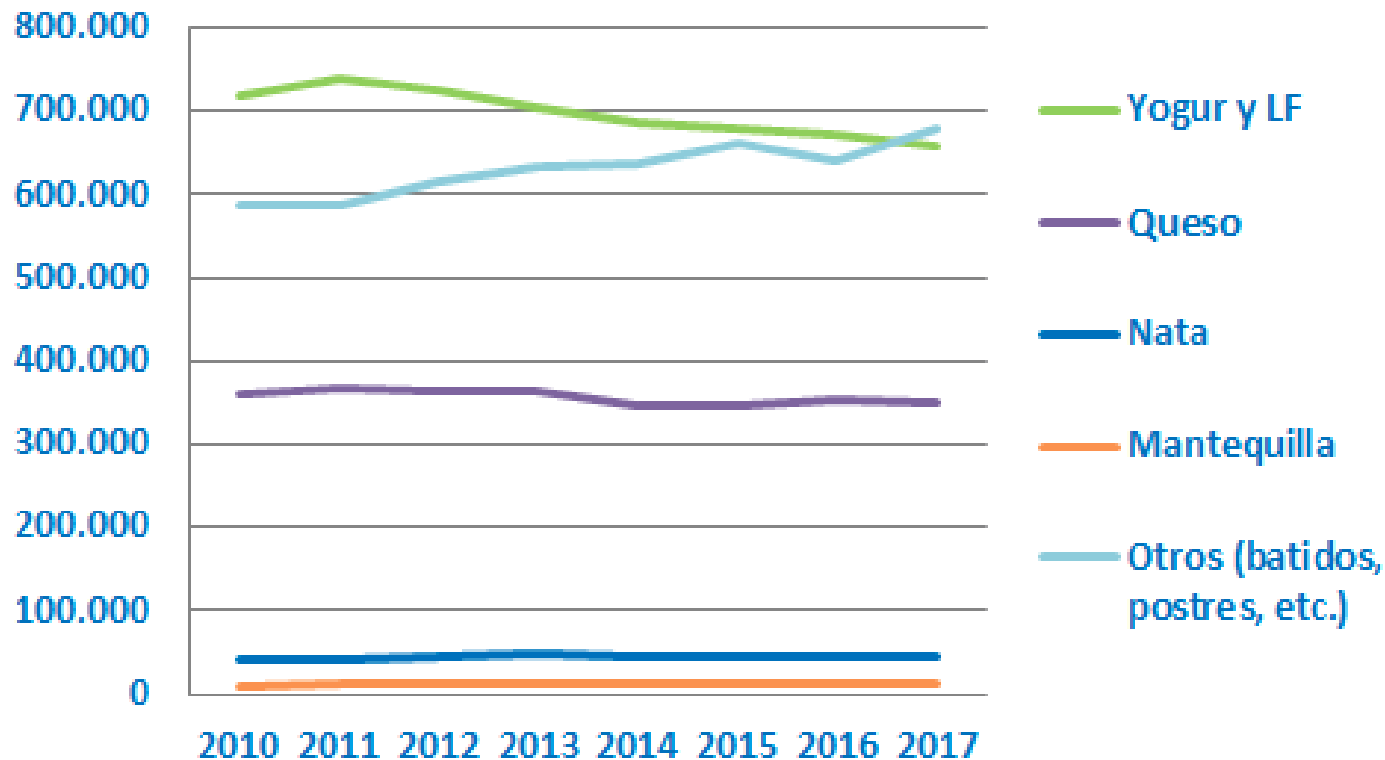


**Fuente:** Ministerio de Agricultura, Pesca y Alimentación (MAPA)



# EVOLUTION OF THE MARKET

## Evolución del consumo de lácteos, no incluye leche líquida (toneladas)



**Fuente:** Ministerio de Agricultura, Pesca y Alimentación (MAPA)

# COURSE PROGRAM

## Monday, June 3<sup>th</sup>.

10:00 h - Visit to the University of Santiago de Compostela-Campus of Lugo, Vice-rector of coordination of the Terra Campus [www.usc.es/gl/gobierno/vrlugo/index.html](http://www.usc.es/gl/gobierno/vrlugo/index.html)

11:00 h – Visit to EPSE of engineering [www.usc.es/es/centros/eps/](http://www.usc.es/es/centros/eps/),

12:00 h - visit to the technology transfer Center/ center library  
[www.usc.es/gl/servizos/biblioteca/busc/centros/intcentroslugo/](http://www.usc.es/gl/servizos/biblioteca/busc/centros/intcentroslugo/)

13:30- Food

16: 00 h -Visit Rof Codina and CEBIOVET [www.rofcodina.org/index.php/es/](http://www.rofcodina.org/index.php/es/),  
[www.cebiovet.com/index.php/es/](http://www.cebiovet.com/index.php/es/)

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*Manuel Marey Pérez*

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## Tuesday, June 4<sup>th</sup>.

9:00 h - Visit to dairy products and food Technologies (APLTA) [www.aplta.es/index.php/ES/](http://www.aplta.es/index.php/ES/)

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11:30 h - Quality Management and design of products and processes  
[http://www.usc.es/export9/sites/webinstitucional/gl/centros/eps/caixa\\_profesorado/CVA/ARBONES\\_MACINEIRA\\_ENRIQUE.pdf](http://www.usc.es/export9/sites/webinstitucional/gl/centros/eps/caixa_profesorado/CVA/ARBONES_MACINEIRA_ENRIQUE.pdf)

*Enrique Arbones*

13:30 h - Food

# COURSE PROGRAM

## **Wednesday, June 5<sup>th</sup>.**

9:00 h - Departure

10:15 h - Arrival to LIGAL (milk analysis laboratory) [www.ligal.es/es-es/Paginas/default.aspx](http://www.ligal.es/es-es/Paginas/default.aspx)

*Roberto Lorenzana Fernández*

12:00 h - visit to CIAM - Mabegondo (agricultural Research Center)

[www.ciam.gal/sp/index/?r=portada.index](http://www.ciam.gal/sp/index/?r=portada.index)

*Cesar Resch Zafra*

14:00 h - Food

16: 30 h - visit to UGASMA (farm and in-touch Alltech System) -

[www.youtube.com/watch?v=SuVbW2R7a7U](http://www.youtube.com/watch?v=SuVbW2R7a7U), [www.youtube.com/watch?v=FNmbmCuX2ew](http://www.youtube.com/watch?v=FNmbmCuX2ew)

*Laura Seoane Novo / Lourdes Celeiro Paez*

19:30 h - return to Lugo

---

## **Thursday, June 6<sup>th</sup>.**

9:00 h - Departure

9:30 h - visit to Innolact (Cheese factory) [www.quescrem.es/en/noticias/](http://www.quescrem.es/en/noticias/)

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[www.deputacionlugo.gal/es/temas/medioambiente/recria](http://www.deputacionlugo.gal/es/temas/medioambiente/recria)

14:00 h – Food

---

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9:00 h - Departure

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[www.monasteriodesobrado.org/index.php/dulce-de-leche/](http://www.monasteriodesobrado.org/index.php/dulce-de-leche/)

14:00 h – Return to Lugo and-closing of the visit

THANK YOU!

## WHAT IS BUSC ?

BUSC (Santiago University Library) is the service that provides support to students, lecturers, professors and researchers.

It consists of a Central Library (Biblioteca Xeral), eleven faculty libraries and four multidisciplinary libraries (including Biblioteca Intercentros de Lugo), located at the Santiago and Lugo campuses.

## OUR SERVICES & FACILITIES

- Reading rooms
- Group work rooms
- Extended opening hours
- Workstations
- Laptop lending service
- Loan service
- User training
- Mailing lists
- Interlibrary loan and documents delivery
- Information and reference
- And much more!



### BIBLIOTECA INTERCENTROS

#### DO CAMPUS DE LUGO

Bernardino Pardo Ouro s/n

(Campus Universitario)

27002 Lugo

Tel: 982 823 518

982 823 521

Mail: [intdire@usc.es](mailto:intdire@usc.es)

[intprest@usc.es](mailto:intprest@usc.es)

Web: [www.usc.es/biblioteca/](http://www.usc.es/biblioteca/)

[www.usc.es/biblioteca/busc/centros/intcentroslugo/](http://www.usc.es/biblioteca/busc/centros/intcentroslugo/)

Find us on:



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[www.pinterest.com/buscint/](https://www.pinterest.com/buscint/)

[www.netvibes.com/netintercentros](http://www.netvibes.com/netintercentros)

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## BIBLIOTECA INTERCENTROS DO CAMPUS DE LUGO

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*LIBRARY GUIDE*



UNIVERSIDADE DE SANTIAGO DE COMPOSTELA

## FAQs

### 1. How can I borrow items from the library?

You must register using your University Id Card (TUI). To borrow e-books, use your university username ([firstname.lastname@rai.usc.es](mailto:firstname.lastname@rai.usc.es) or [firstname.lastname@usc.es](mailto:firstname.lastname@usc.es)) and password to access the platform for e-book lending **PreLo** <http://prelo.usc.es>

### 2. How many items can I borrow? For how long?

You can borrow up to **20 items**, as follows:

- **3 handbooks**: for a maximum of **10 days**. Identify them by the "M" on the top of the spine. In the catalogue they are shown as "short loan" items
- **5 non-handbooks**: for **15 days**
- **10 accompanying materials** (CD, DVD,...) for **10/15 days**
- **2 eBooks** for **15 days**

### 3. Can I request books from another library within the USC?

**Yes**, whether they are available or have been lent, except for **handbooks**.

### 4. Can I reserve items that are out on loan?

**Yes**, up to **5 items**. Remember that it is not allowed to put on hold books that are available at Biblioteca Intercentros de Lugo. You can also reserve **2 eBooks** via **PreLo**.

### 5. Where do I pick up my books? How long are they kept at the hold shelf?

You have up to **2 days** to pick them up at the **main desk**. You will be notified by e-mail as soon as your books are available.

Please make sure you have provided your e-mail address to the library staff. In this way you can also be kept up to date about the library news through our **mailing lists**.

### 6. Can I renew my loans?

**Yes**, **twice**, within the **last 3 days** of the loan period, provided that no one else had requested them. Renewals are not allowed after their due date.

**EBooks** can be renewed **once**.

### 7. How do I make renewals, reservations and requests to other libraries?

There are two ways:

- Ask the library staff at the **main desk**
- Online at [www.usc.es/biblioteca](http://www.usc.es/biblioteca). Click on "Rexistro de usuario" and log in to your account using your full name and your TUI barcode (the 8-digit code on the back of your University card). Here you can renew your loans, request books, modify your data, etc.

### 8. Is it possible to use laptops and another digital devices inside the library?

**Yes**. All Library locations offer **Wi-Fi** and reading places with nearby plugs.

Get started to the **Internet**, looking for the wireless network named **wifiusc-web**, identifying with your **institutional username and password** (@usc.es @rai.usc.es).

In order to set the **Wi-Fi network in your device**, follow the guidelines to get **Eduroam**, an educational roaming access, for a better and more secure navigation. Download the app you will find here: <http://cat.eduroam.org/>

### 9. Opening hours

- **Regular opening hours**, from **8:30 a.m.** to **9.30p.m**<sup>1</sup>
- **Weekends and holidays**, from **10:00 a.m.** to **7:30 p.m.** Lending service will be available.
- **Examination period**: the library will be open as a studying room up to **3 a.m.**

### 10. How can I get help?

- Ask the library staff:
- At the **main desk** or at the **Information and Reference Service** (both located at the library hall)
  - By **phone**: 982 823 521 – 982 823 518
  - By **e-mail**: [intprest@usc.es](mailto:intprest@usc.es)

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<sup>1</sup> For non-academic periods, check the timetables

## Centro de Investigaciones Agrarias de Mabegondo (CIAM)

“The Farm” was the Experimental and Agricultural College established in 1888 just a couple of kilometres away of nowadays A Coruña downtown.

Since early seventies last century Agricultural and Experimental Centre is at Mabegondo. These facilities were part of a plan with a vision towards future in which education, research and transfer shared a common target, to improve productivity and standard of living of rural areas of Galicia.

CIAM is a 300 hectares farm with cattle and sheep for research, the centre has another three experimental farms in Galicia, one in Salceda de Caselas close to the portuguese border for horticultural trials, a second in south Lugo province with irrigation facilities and continental climate and a third not too far away from Mabegondo but at 700 meters above sea level where trials under mountain conditions are carried out.

At Mabegondo is where research related with dairy is performed; the scope of our last ten years dairy trials is framed on what we call a whole packet of R&D in dairy and this packet could be summarized as how to produce more with less, back to legumes, protein self-sufficiency, milk fatty acids profile improvement and authentication procedure of dairy cows feed intake.

Most of our trials are run in close cooperation with dairy industry and suppliers companies; cooperation of dairy farmers is always key in our projects; we are able to share achieves in short time with users due to a very close collaborative effort with LIGAL.

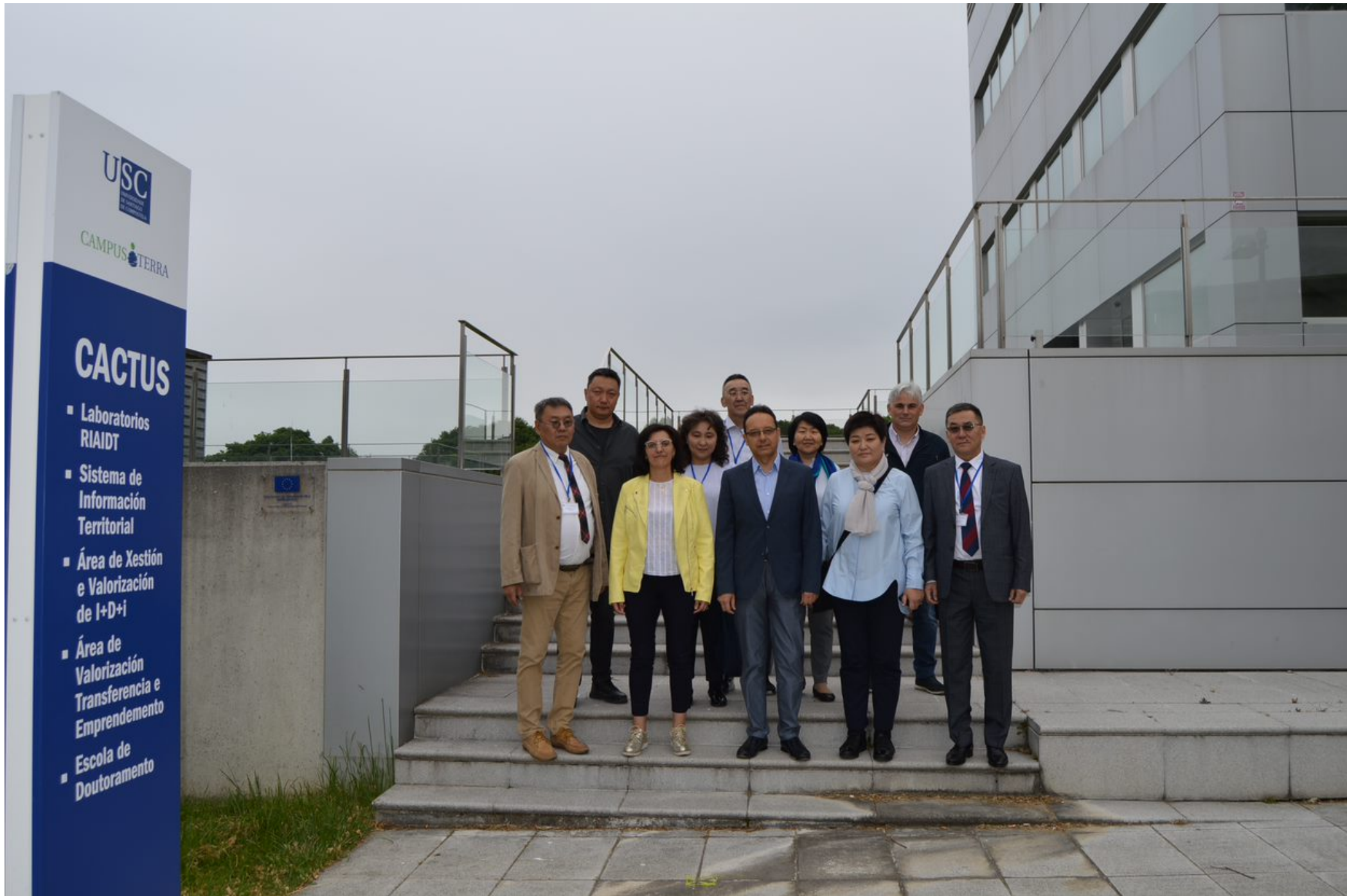


**XUNTA DE GALICIA**  
CONSELLERÍA DO MEDIO RURAL



INSTITUTO GALEGO  
DA CALIDADE  
ALIMENTARIA

**INGACAL**



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CAMPUS TERRA

## CACTUS

- Laboratorios RIAIDT
- Sistema de Información Territorial
- Área de Xestión e Valorización de I+D+i
- Área de Valorización Transferencia e Emprendemento
- Escola de Doutoramento











