

The French dairy sector at the crossroads

Situation, prospects and challenges

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6^e Séminaire résidentiel

**Les enjeux de l'élevage
dans nos sociétés de demain**

AGROCAMPUS OUEST, Rennes
20-24 mars 2017



Some publications on the dairy sector (for 2015-16)

INRA (2016).

Rôles, impacts et services issus des élevages en Europe.

Rapport pour les Ministères en charge de l'agriculture et de l'environnement.

Rapport (1042 pages) : <http://tinyurl.com/juog5be> ; Synthèse (137 p.) : <http://tinyurl.com/j9w82zv>

CHATELLIER V. (2016).

Le commerce international, européen et français de produits laitiers.

INRA Productions animales, 29 (3), 143-162.

<http://tinyurl.com/jbwx8yc>

PERROT C., CHATELLIER V., GOUIN D.M., RICHARD M., YOU G. (2016).

Le secteur laitier français est-il compétitif face à la concurrence européenne et mondiale ?

Colloque de la Société Française d'Economie Rurale (SFER), Clermont-Ferrand, 9-10 juin, 20 p.

<http://tinyurl.com/j5rve5u>

ROGUET C., GAIGNE C., CHATELLIER V., CARIOU S., CARLIER S., CHENUT R., DANIEL K., PERROT C. (2015).

Spécialisation territoriale et concentration des productions animales européennes.

INRA Productions Animales, vol 28 (1), pp 5-22.

<http://tinyurl.com/zzlrkja>

CHATELLIER V. (2015).

La fin des quotas laitiers : un enjeu territorial

La Revue Foncière, 20-24 p.

<http://tinyurl.com/o77srdr>

Plan

- 1- Price volatility in the dairy sector**
- 2- Consumption of dairy products**
- 3- Milk production**
- 4- Trade of dairy products**
- 5- Dairy enterprises and dairy farms**

Introduction

→ An increase in demand for dairy products...

- Approximately +20% at world level by 2025
- A sharp rise of consumption in developing countries (mainly in big Asian cities)
- A necessary adaptation of products to the heterogeneity of expectations
- A saturation of demand in many industrialized countries
- Innovation is an important lever for the future level of consumption

→ ...but the development of milk production is not always easy

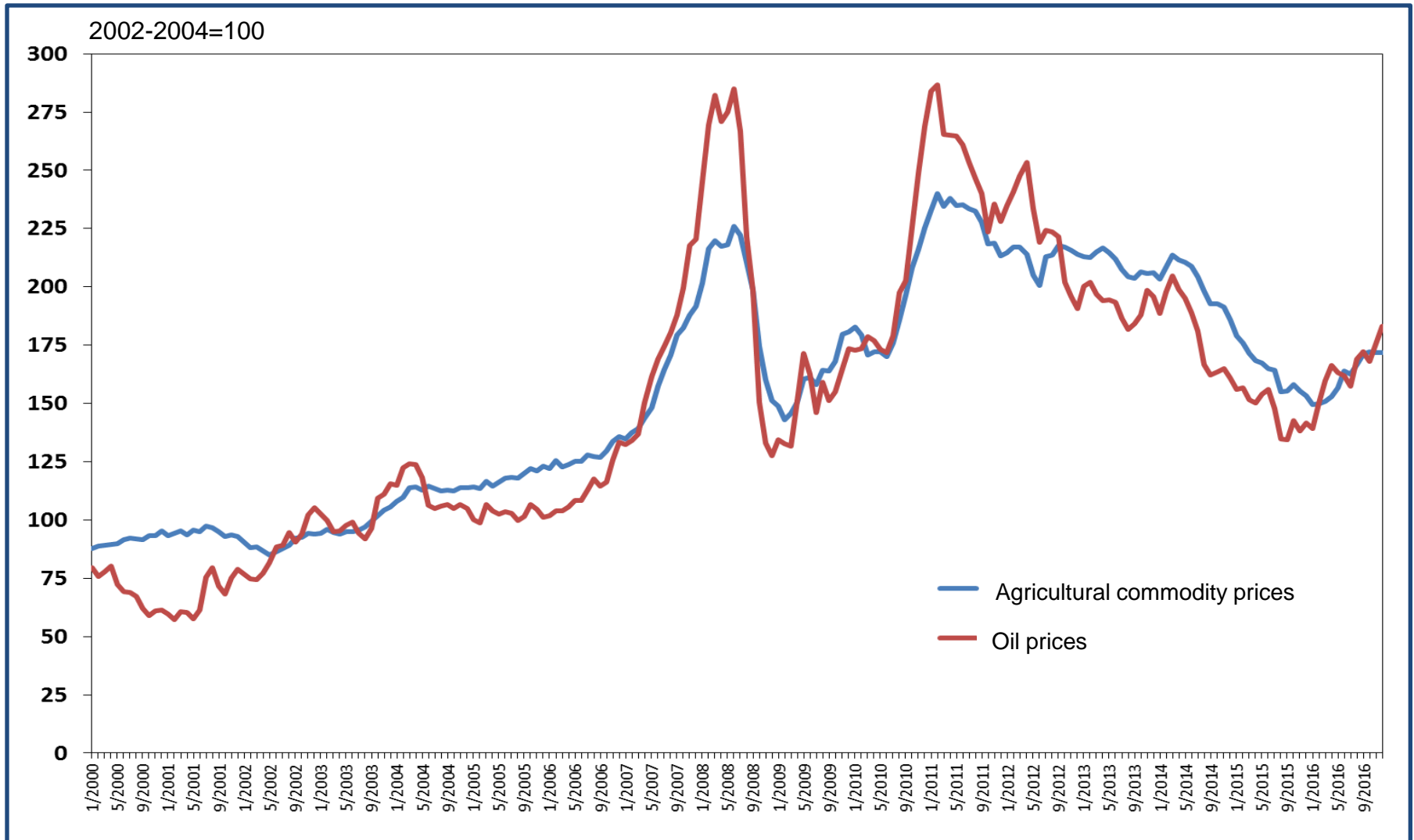
- Many countries are already in deficit for dairy products (Africa, Asia ...)
- Forage areas and water are not equally distributed across countries
- A competition for land occupation between agricultural productions
- In some countries, milk production induces some imports for feeding livestock
- Sanitary requirements and traceability are heterogeneous at world level

1- Price volatility in the dairy sector



International price volatility

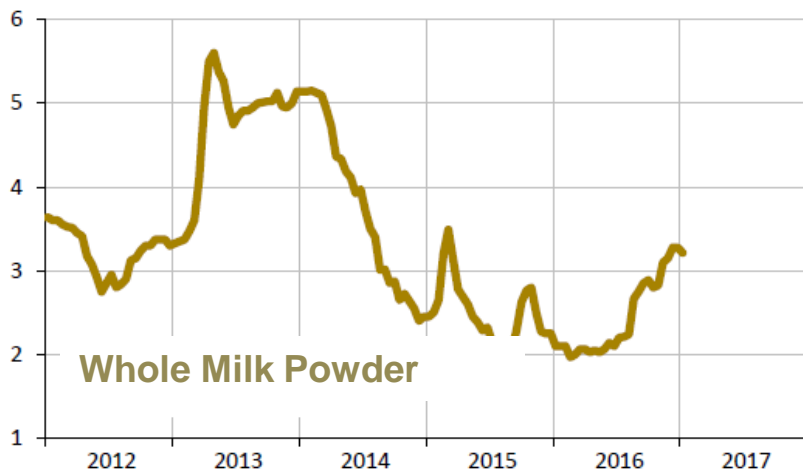
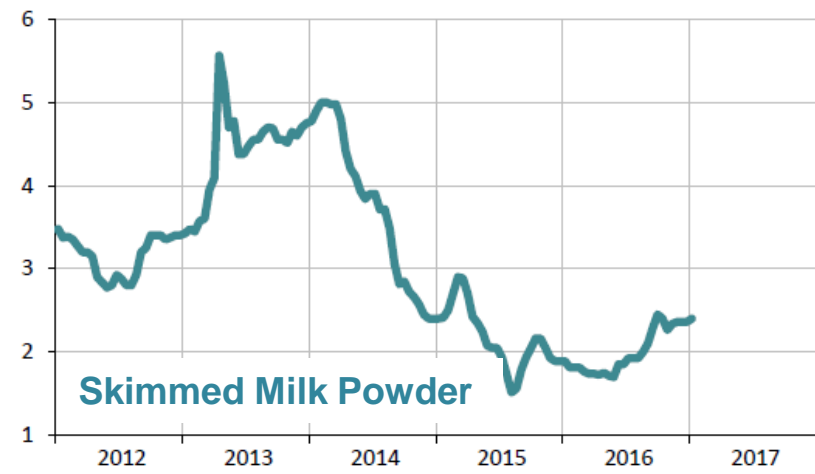
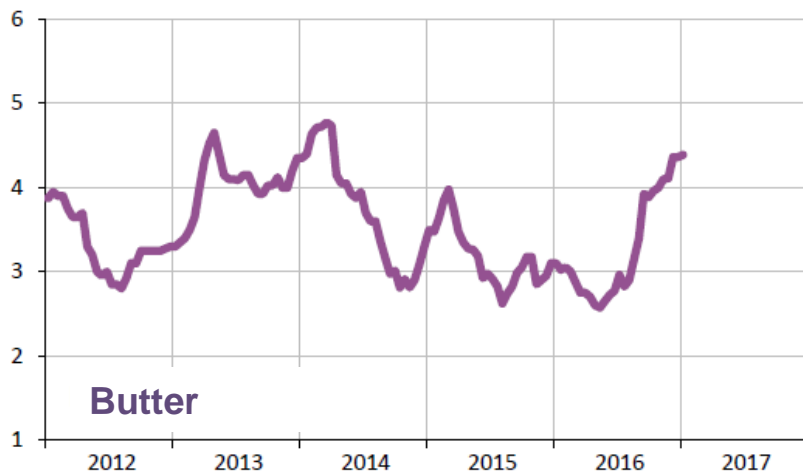
(FAO aggregate index and oil price)



FAO

International prices of dairy products

(FOB price – Oceania ; 1000 USD/tonne)



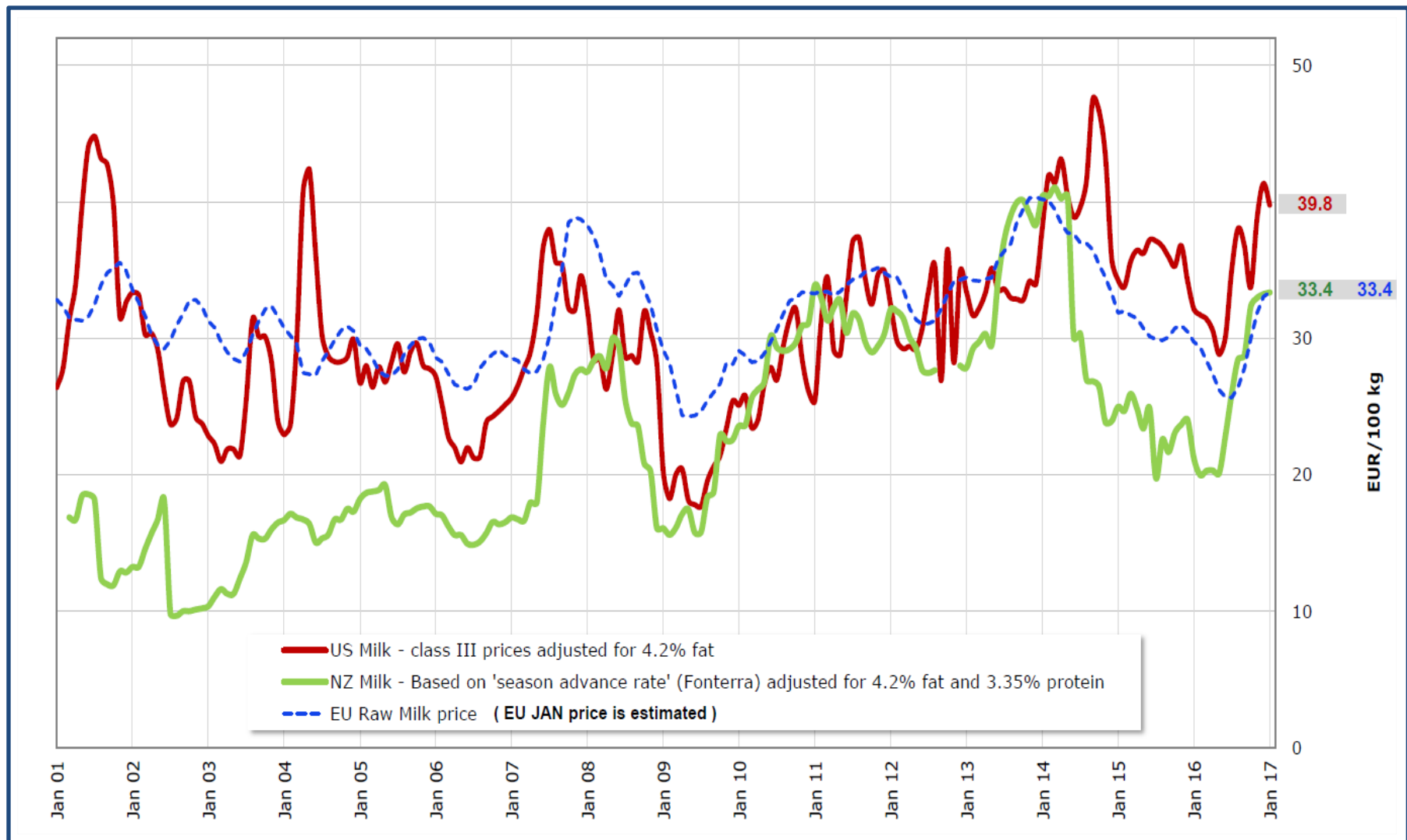
CNIEL from USDA

Factors explaining price volatility

- ❑ **Energy prices.** Links are increasing through inputs such as fertilizers and transport and through demand for agricultural products (bioenergy).
- ❑ **Meteorology.** This is the most common factor behind price volatility. This is more difficult to demonstrate for climate change.
- ❑ **Stocks level.** They play a role in mitigating the gaps between supply and demand for agricultural products.
- ❑ **Increase in demand.** If production does not keep pace with demand, prices will tend to increase.
- ❑ **Exchange rate.** Movements of currencies can potentially have an impact on competitiveness because they affect domestic prices of agricultural products.
- ❑ **Commercial restrictions.** Both export and import restrictions amplify price volatility on international markets.
- ❑ **Speculation.** High levels of speculative activity in futures markets amplify short-term price movements.

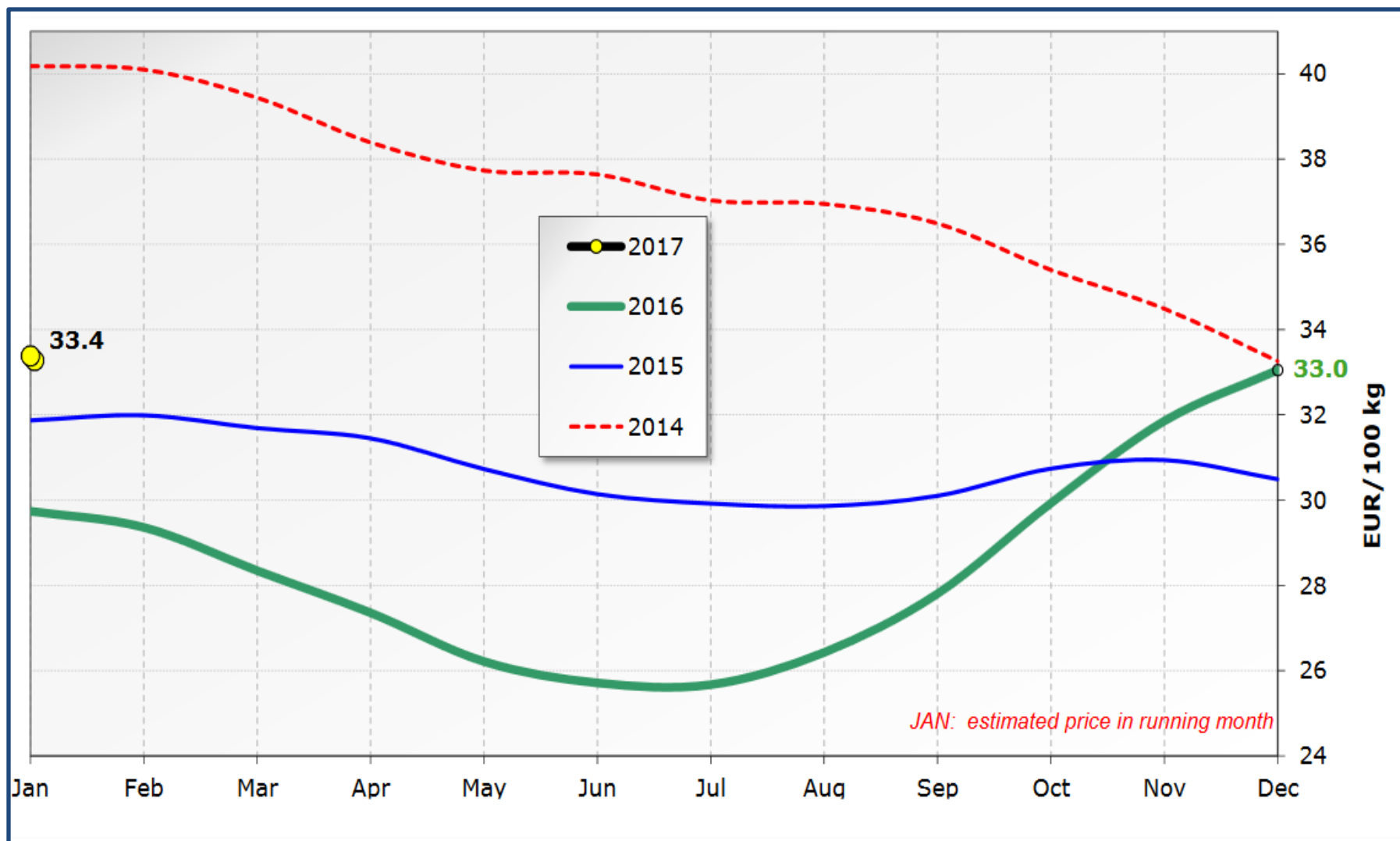
Raw milk prices evolution in U.S., New Zealand and EU

(euros per 100 kg)



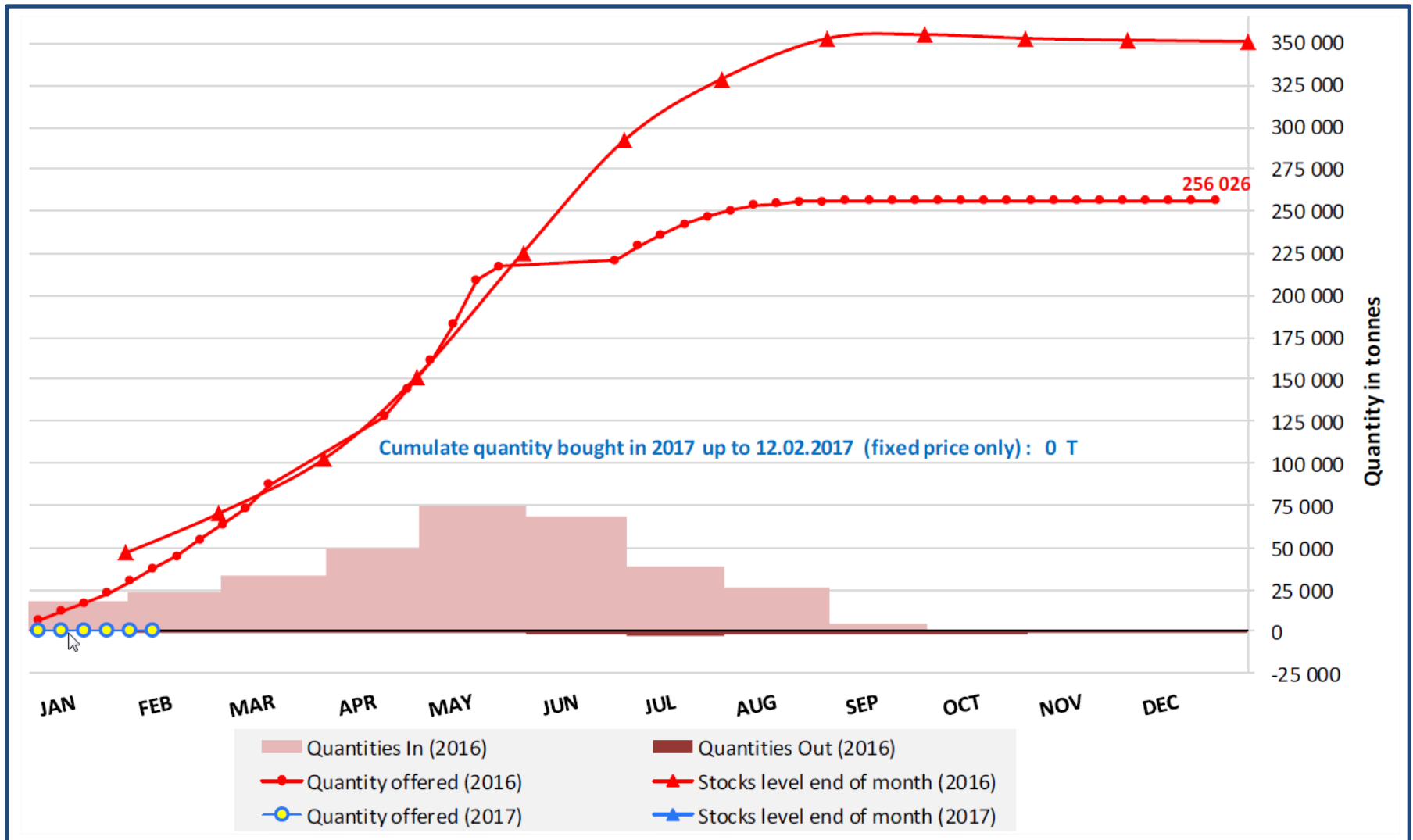
USDA, LTO

Milk prices paid to the European producers (euros per 100 kg)



DG AGRI

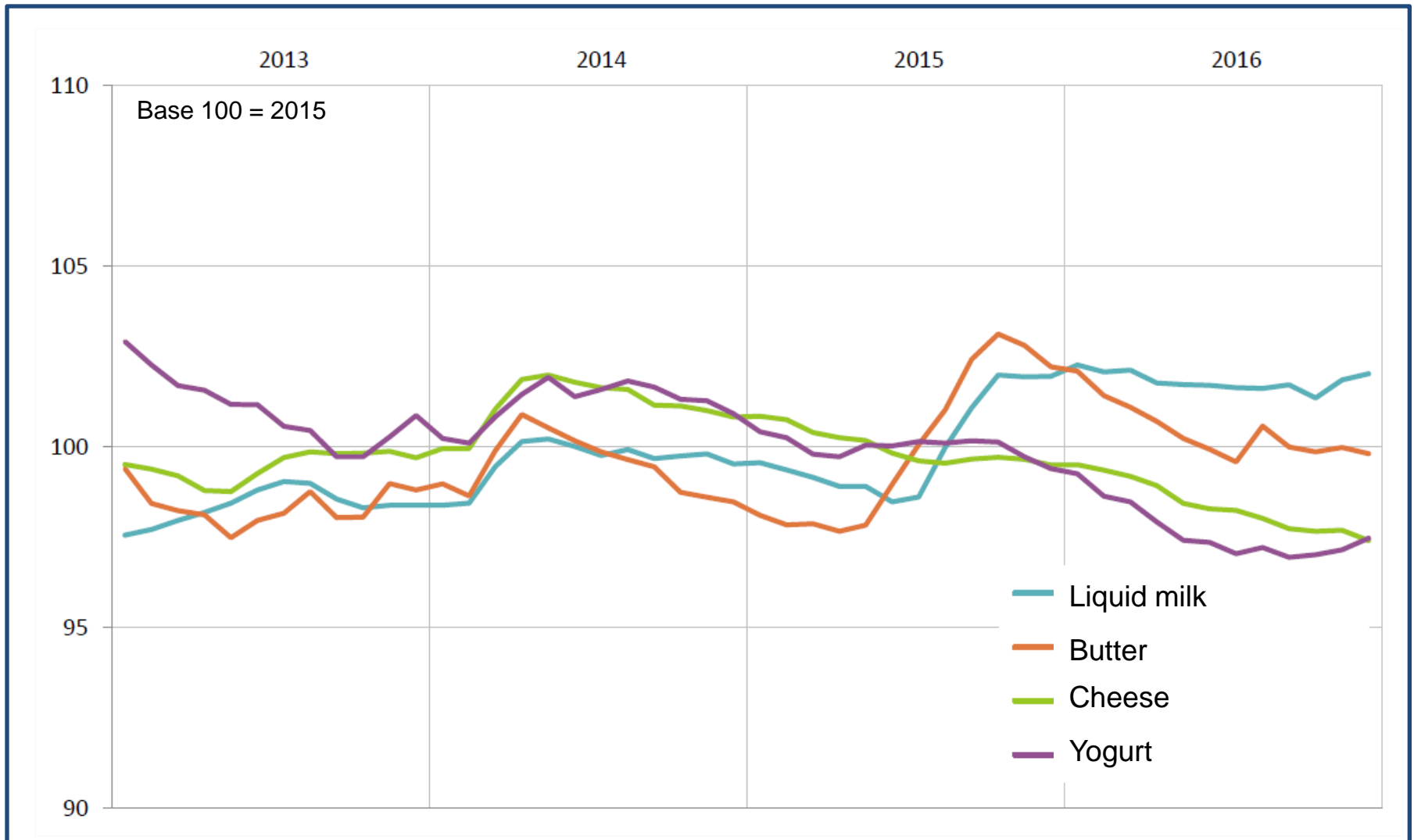
Public SMP Intervention scheme 2016-2017 (tonnes)



DGAGRI

The selling price of dairy products to the consumer

(Base 100 = 2015 ; in France)



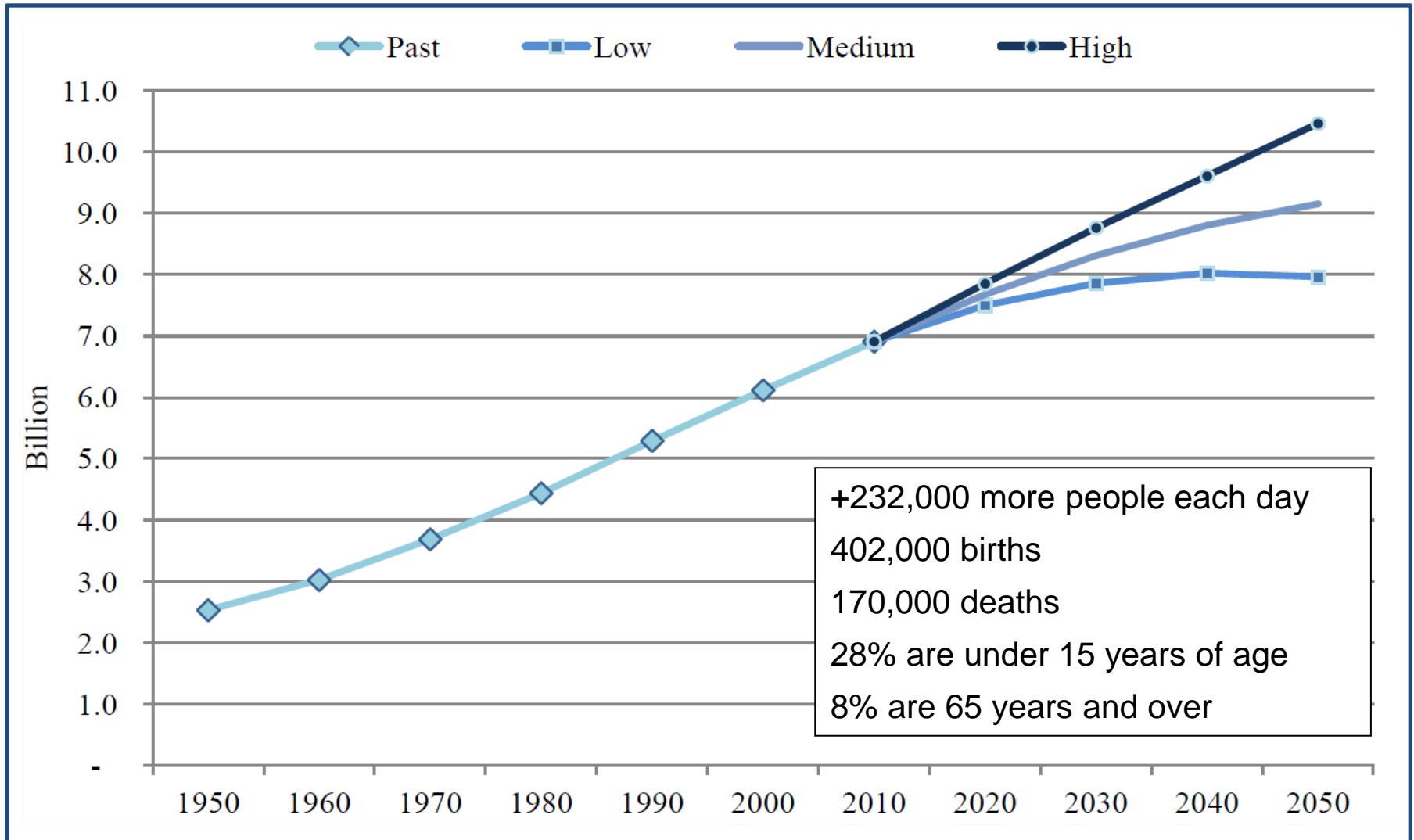
INSEE

2- Consumption of dairy products



The evolution of the world population between 1950 and 2050

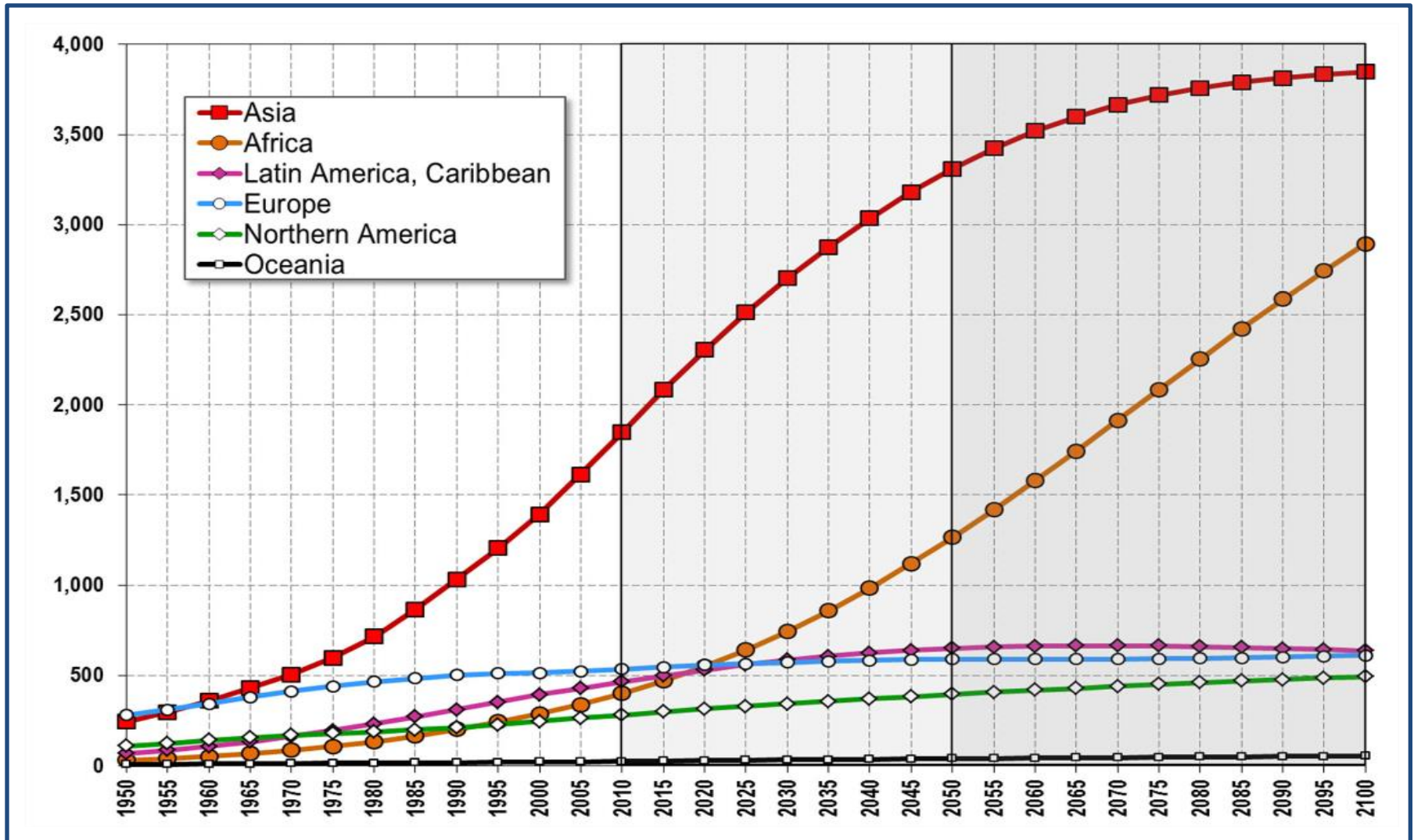
(Billions of inhabitants)



ONU - Population Division of the Department of Economic and Social Affairs

The evolution of the world population between 1950 and 2050

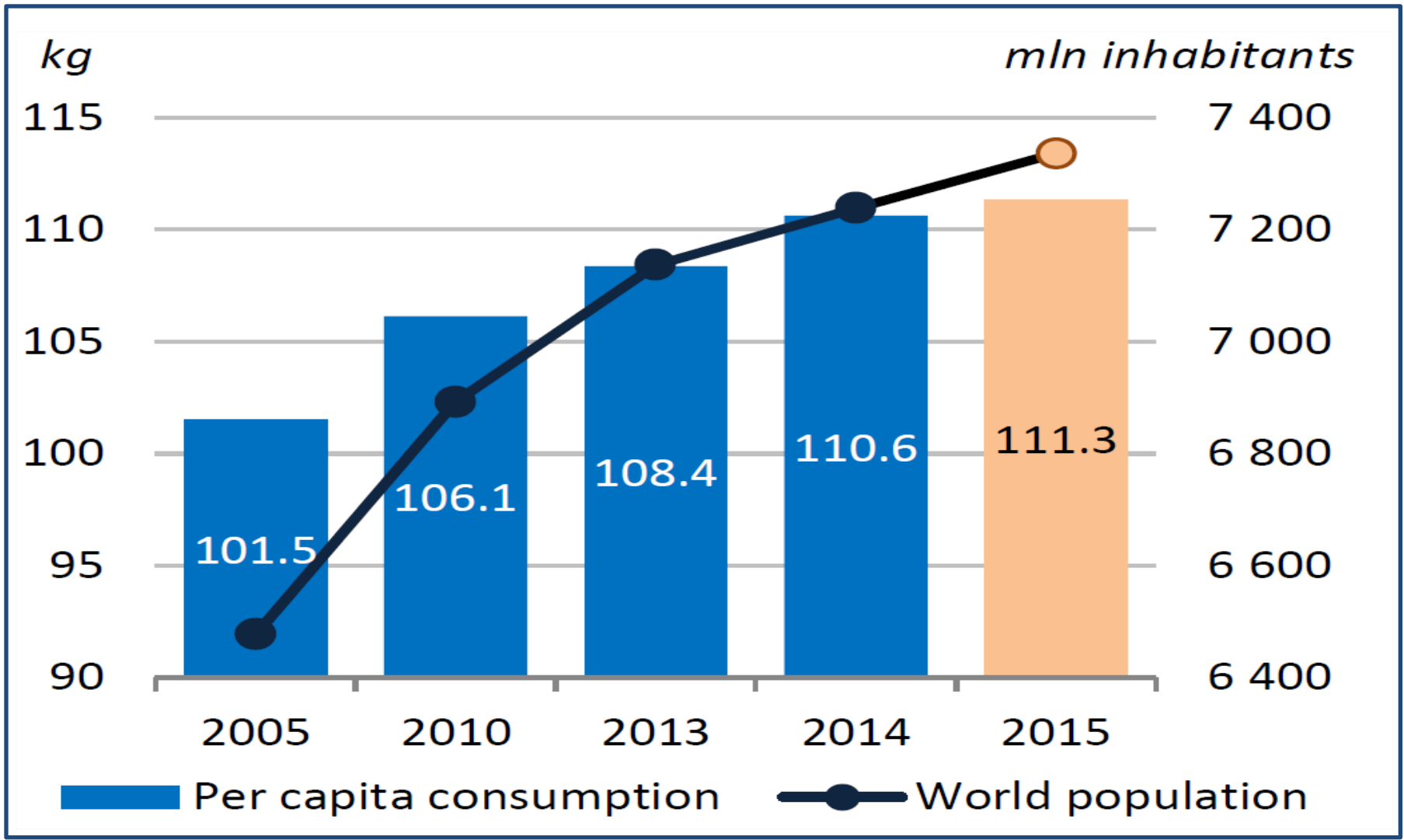
(Billions of inhabitants)



ONU - Population Division of the Department of Economic and Social Affairs

Consumption of dairy products per capita at world level

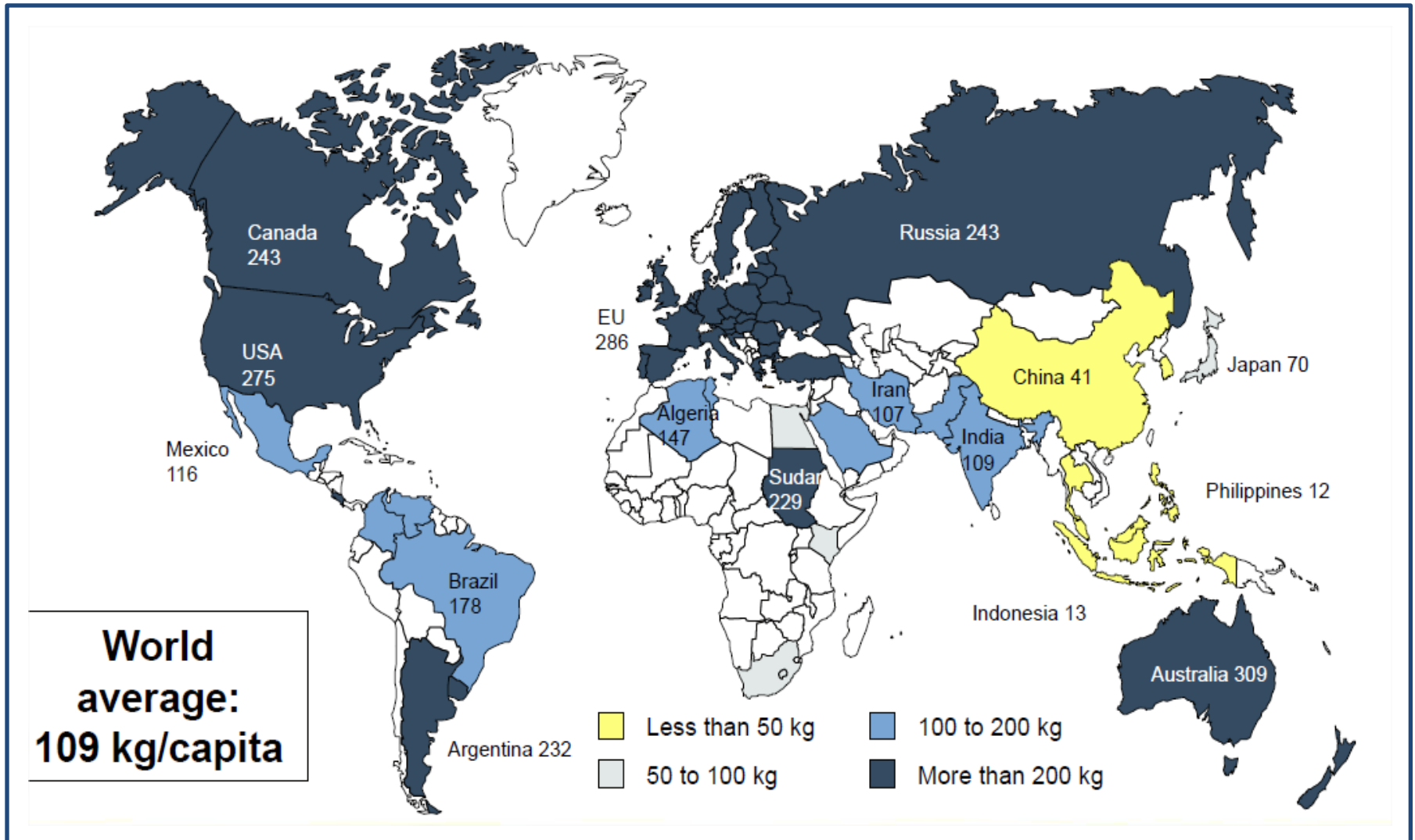
(Kg per capita and per year)



International Dairy Federation – World dairy situation

Consumption of dairy products per capita

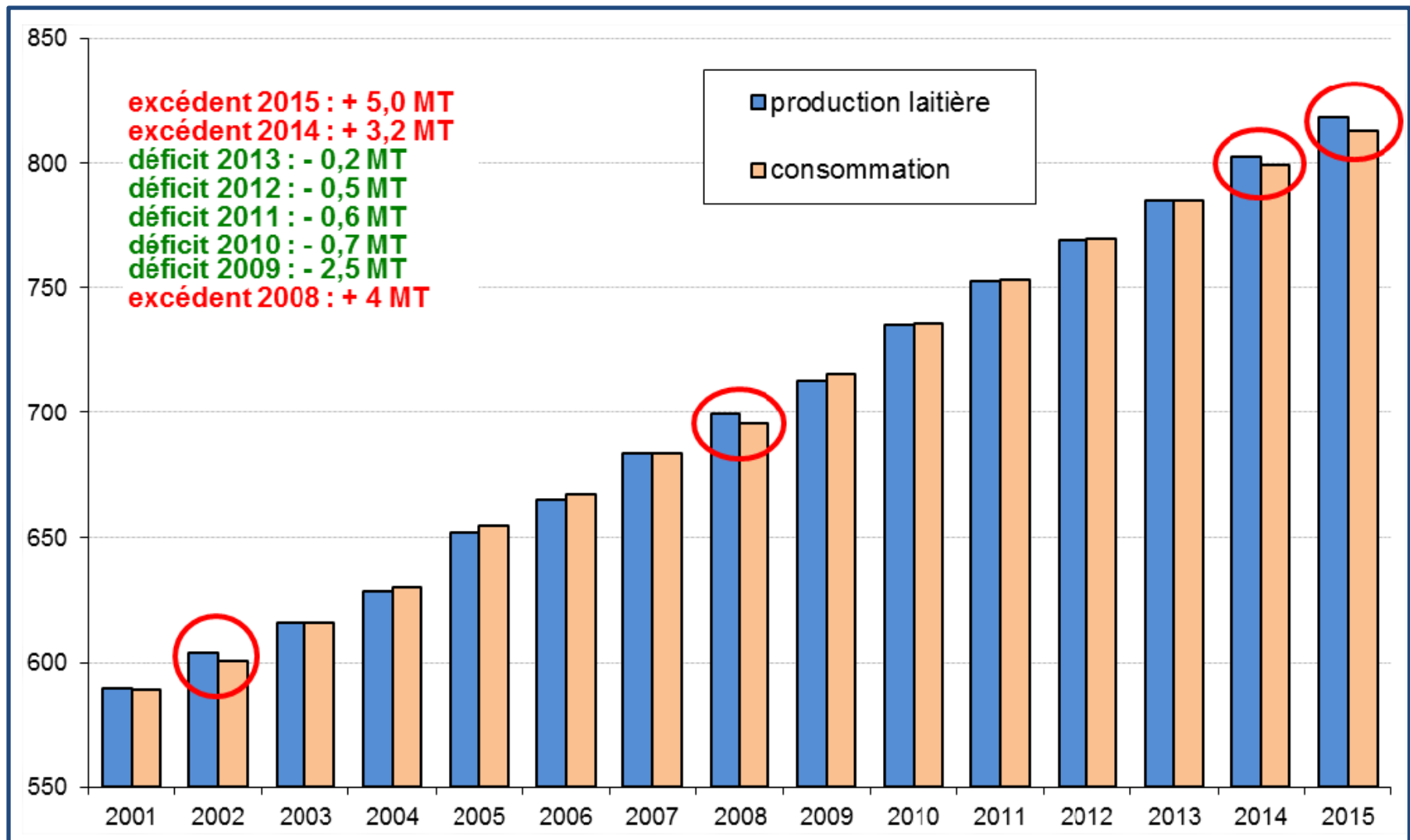
(Kg per capita and per year)



CNIEL / IDF, FAO Food Outlook, PRB

Milk production and milk consumption in the world

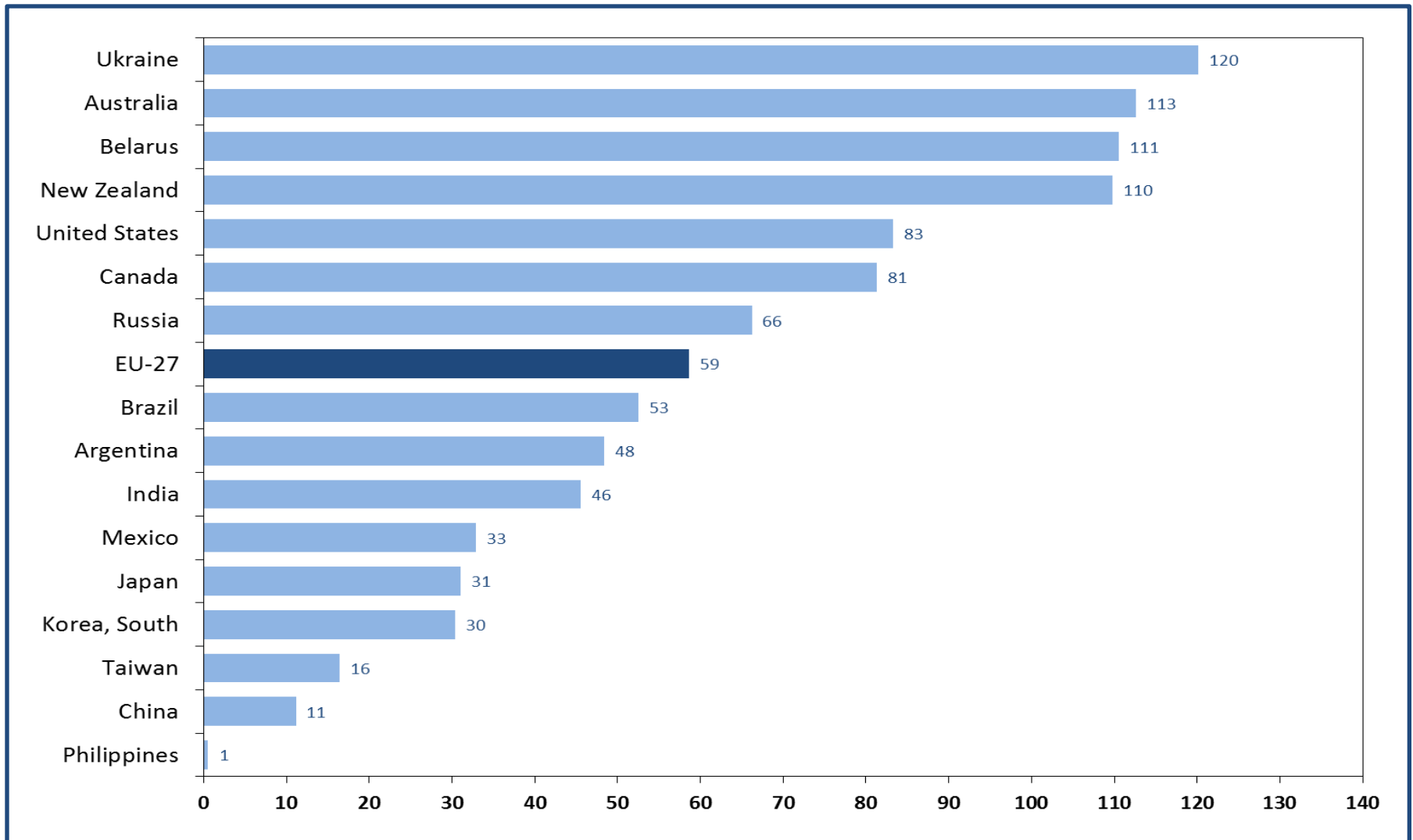
(Million tonnes)



ATLA

Consumption of liquid milk per capita

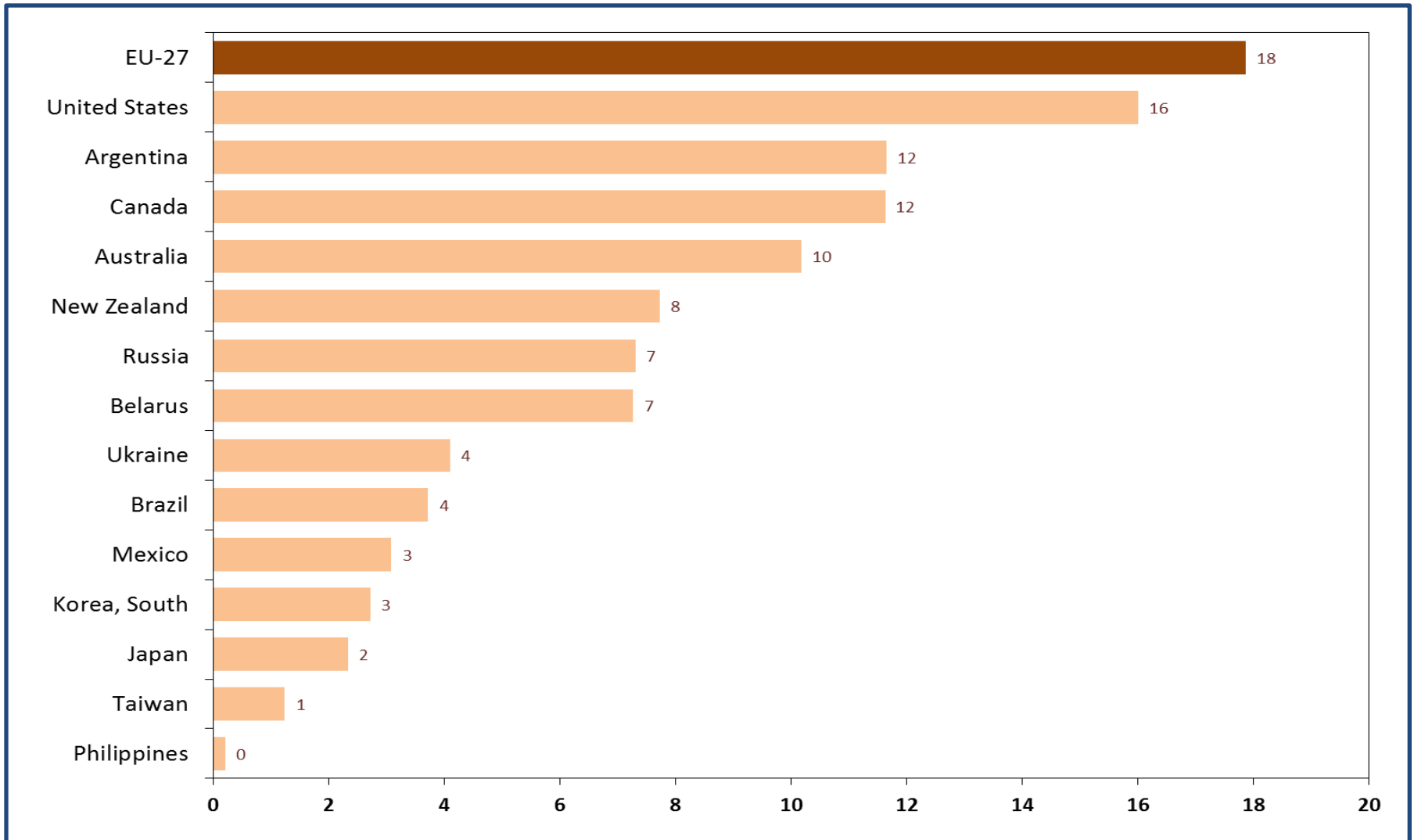
(Kg per capita and per year)



FAO

Consumption of cheese per capita

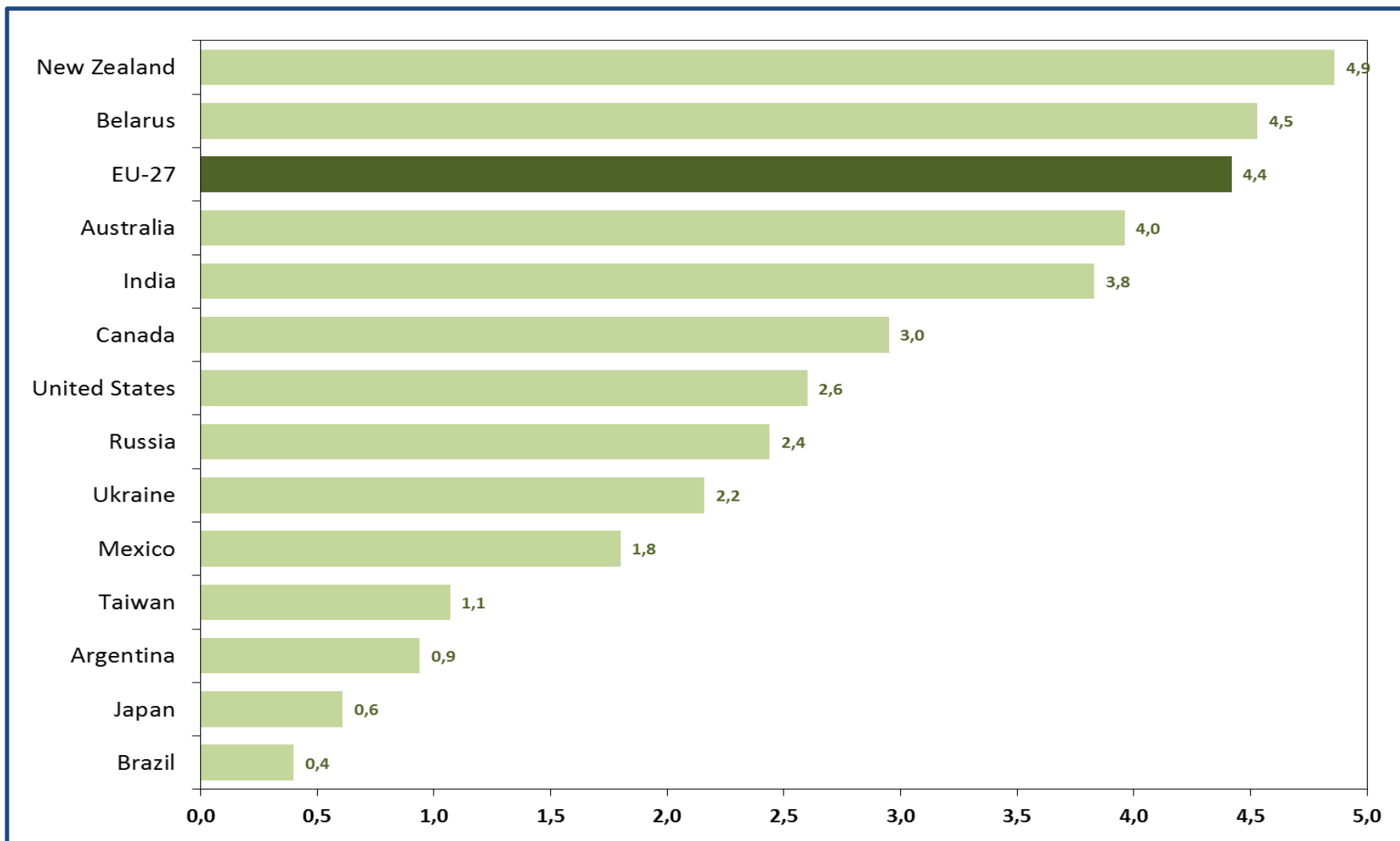
(Kg per capita and per year)



FAO

Consumption of butter per capita

(Kg per capita and per year)



FAO

Consumers at the center of our strategies

→ Paying attention to new forms of consumption

- An augmentation of out-of-home catering
- Increasingly « nomadic » food consumption
- Attention to the links between food / environment / health

→ Innovation on food products

- The products that will be consumed in 20 years are not all existing
- Marketing is sometimes more important than specifications

→ Educating for food consumption and reassuring

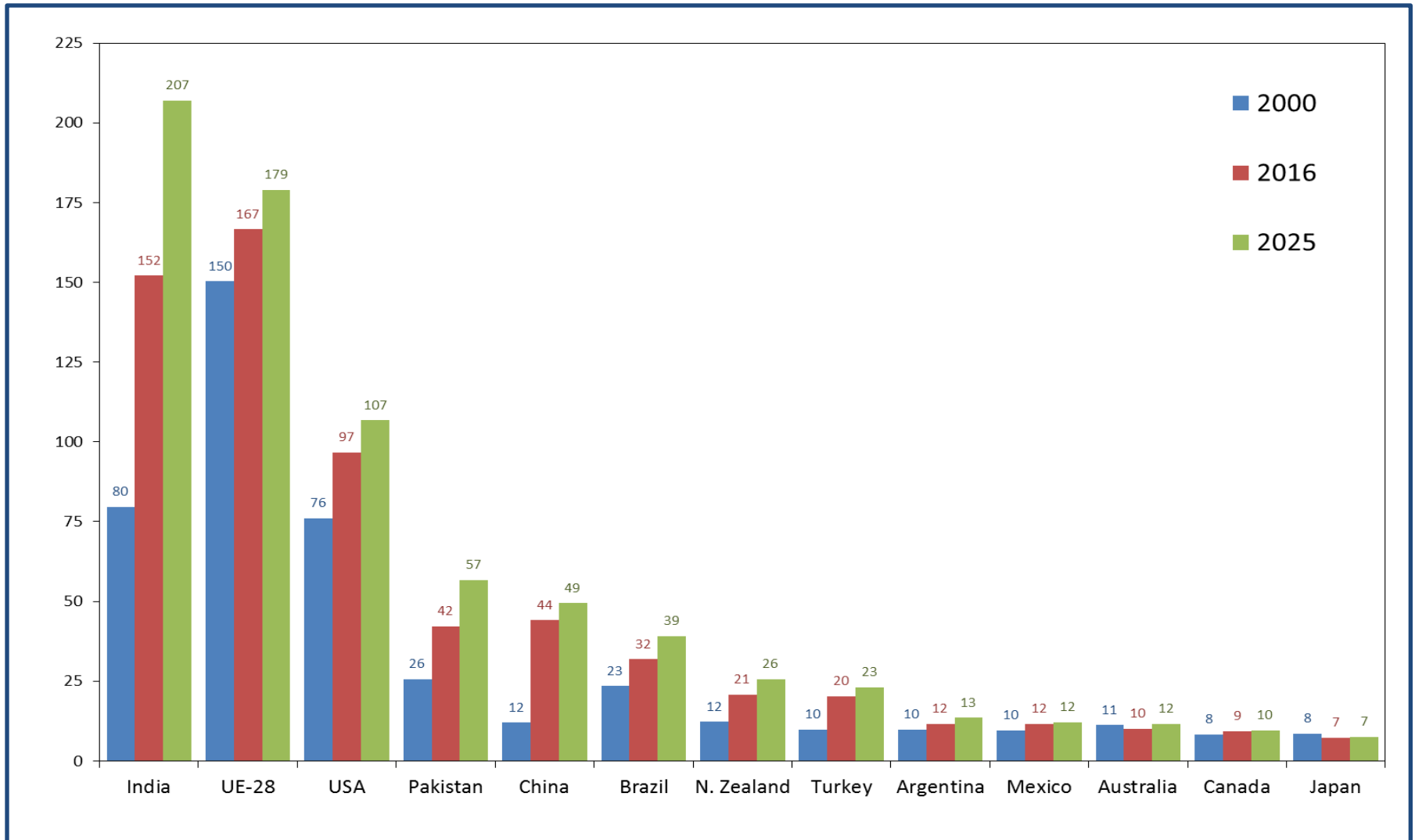
- Food culture is closely linked to education (family + school)
- Better explain the links between food products and the productive model
- Opening the doors of conventional agriculture to citizens

3- Milk production



World production of cow milk and it's location

(millions tons)

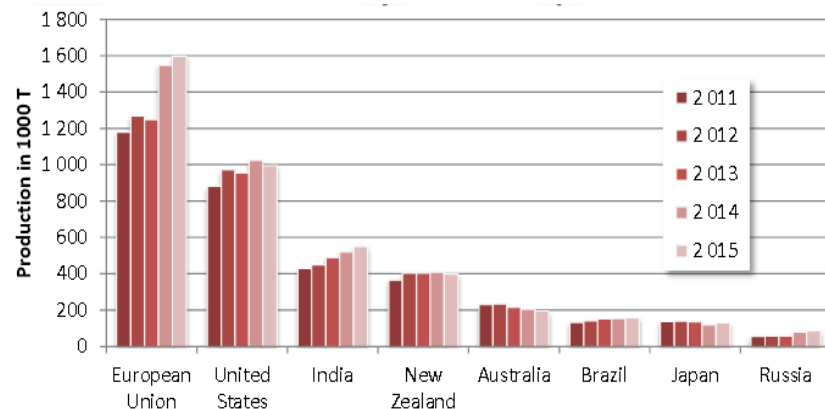


FAO

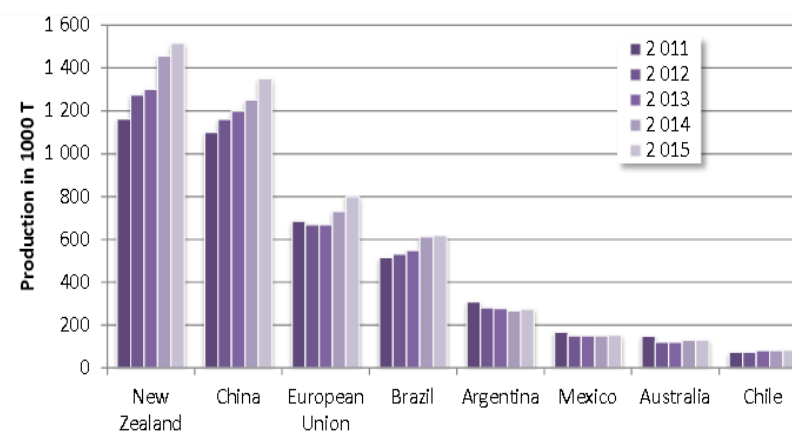
Production of dairy products worldwide

(Thousand tons)

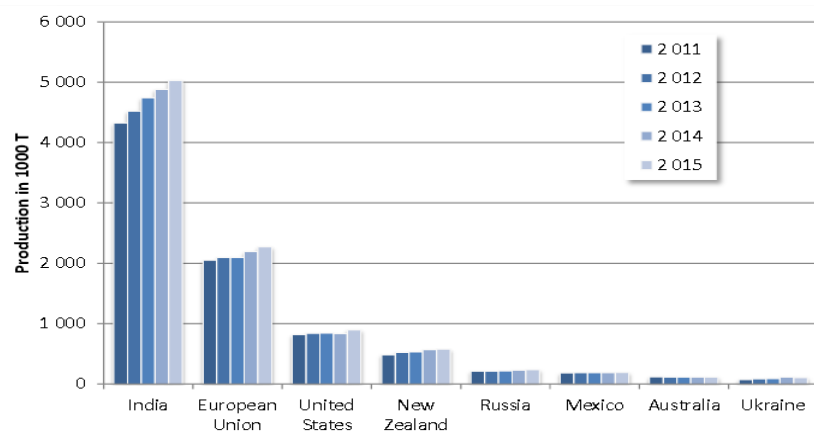
Skimmed milk powder



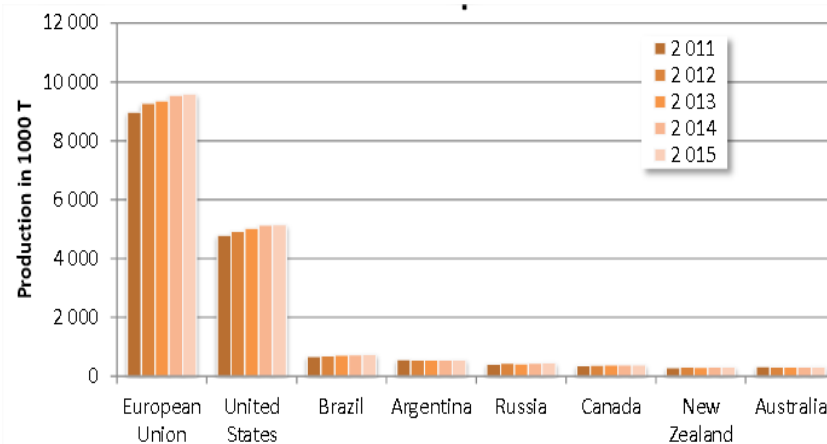
Whole milk powder



Butter



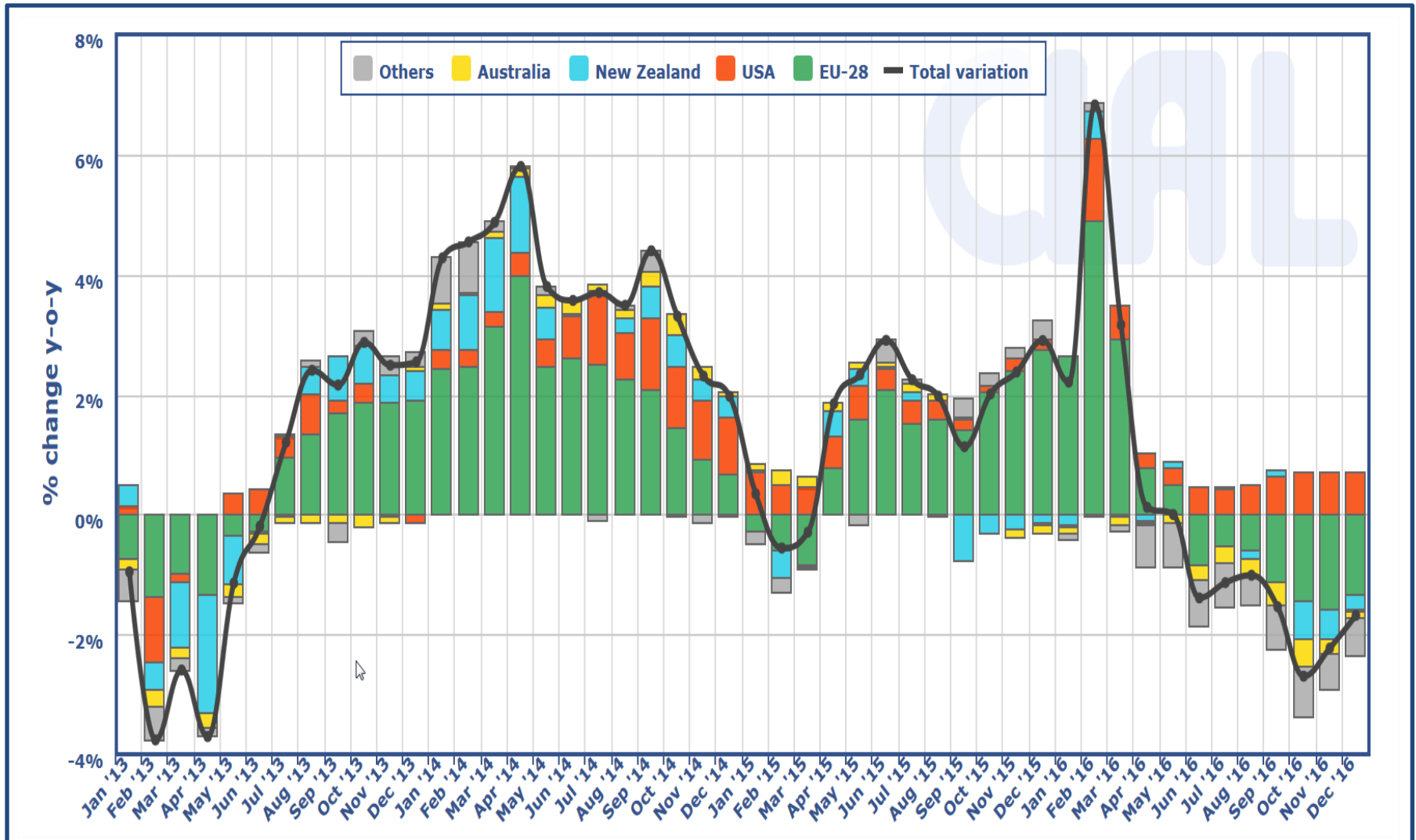
Cheese



CLAL

Global supply variation in the key exporters of dairy products

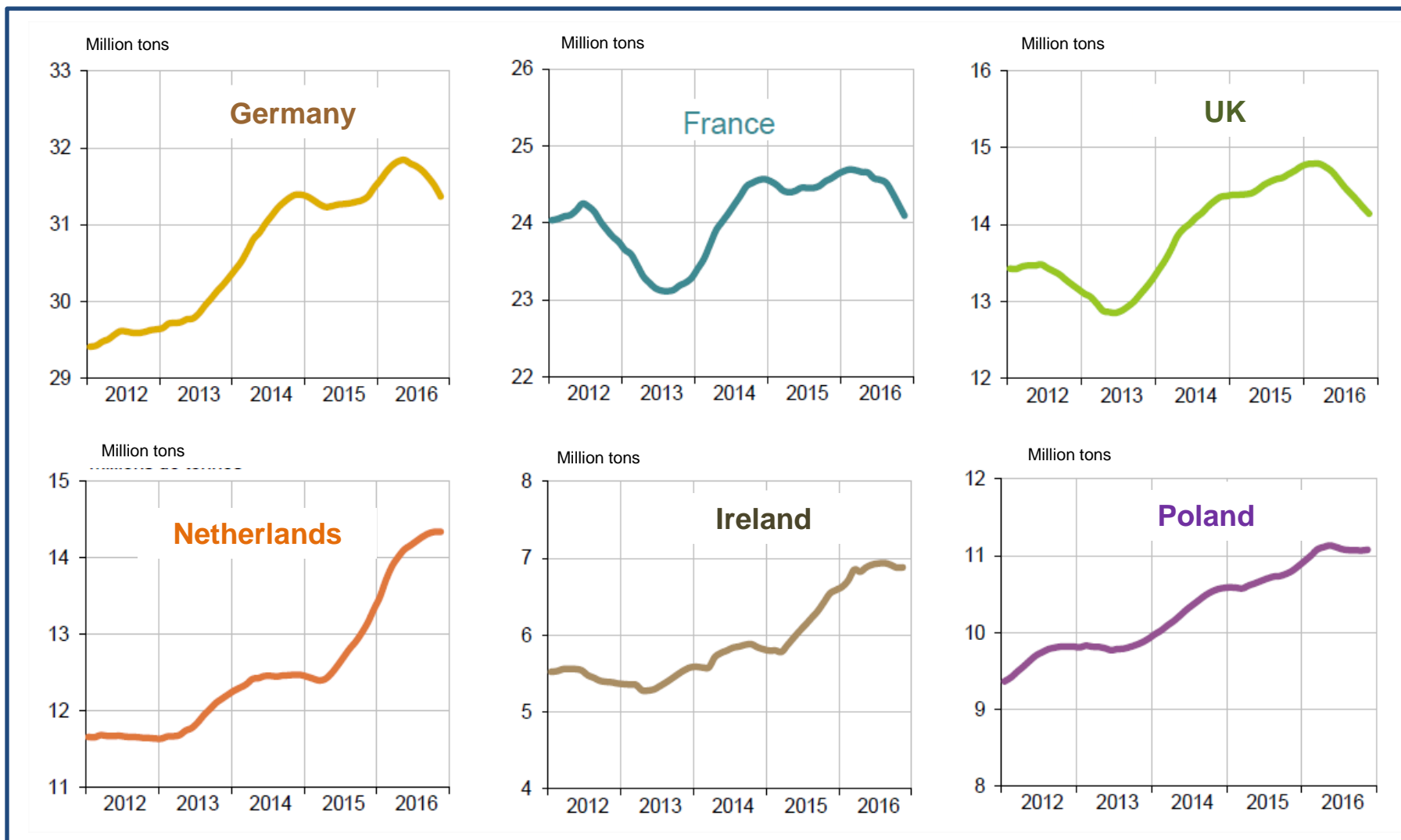
(% change year over year)



Others : Argentina, Ukraine, Belarus, Chile, Uruguay, Turkey

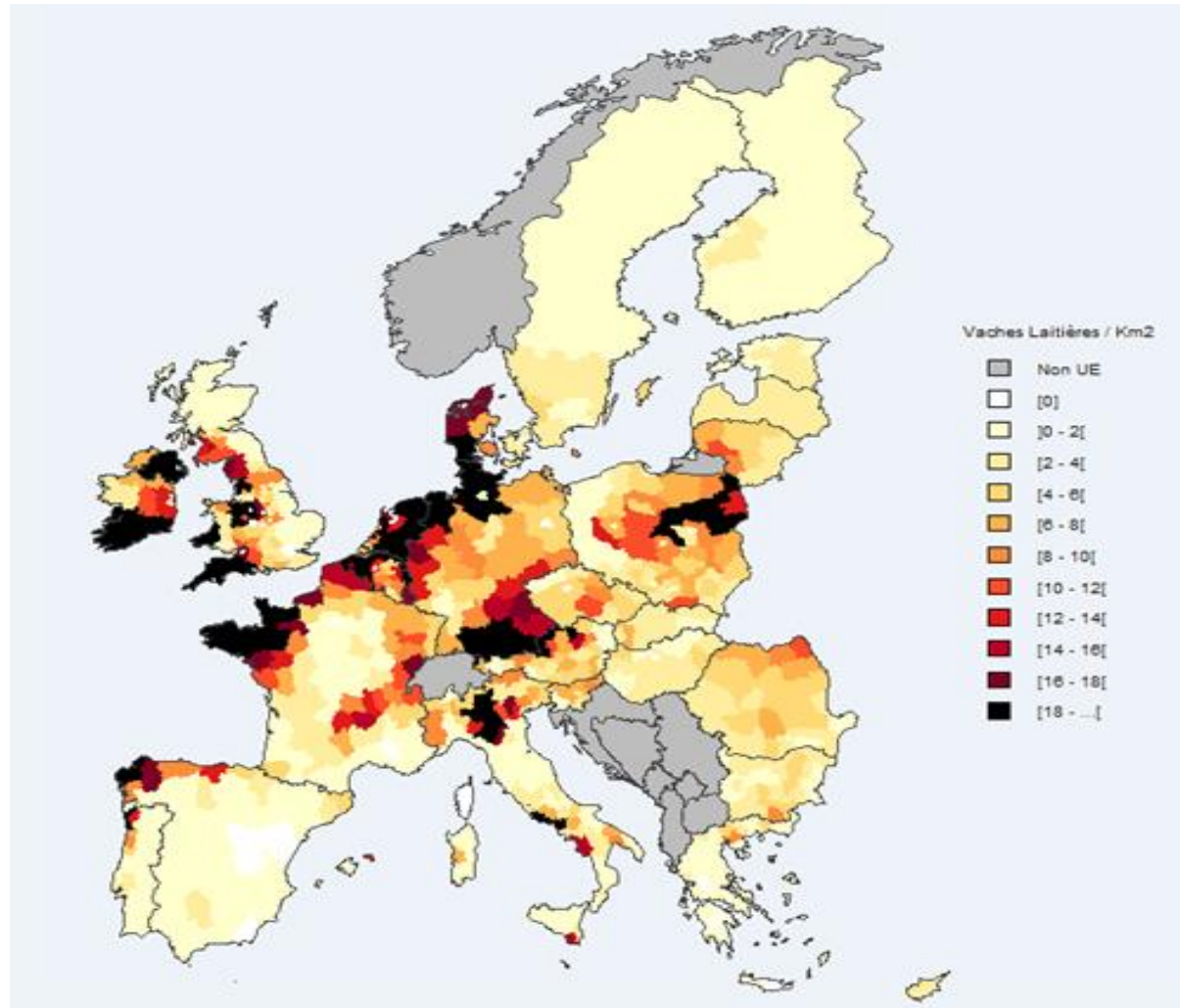
CLAL

Monthly milk collection in several EU countries



CNIEL from ZMB, FAM, DairyCo, CLAL, Eurostat

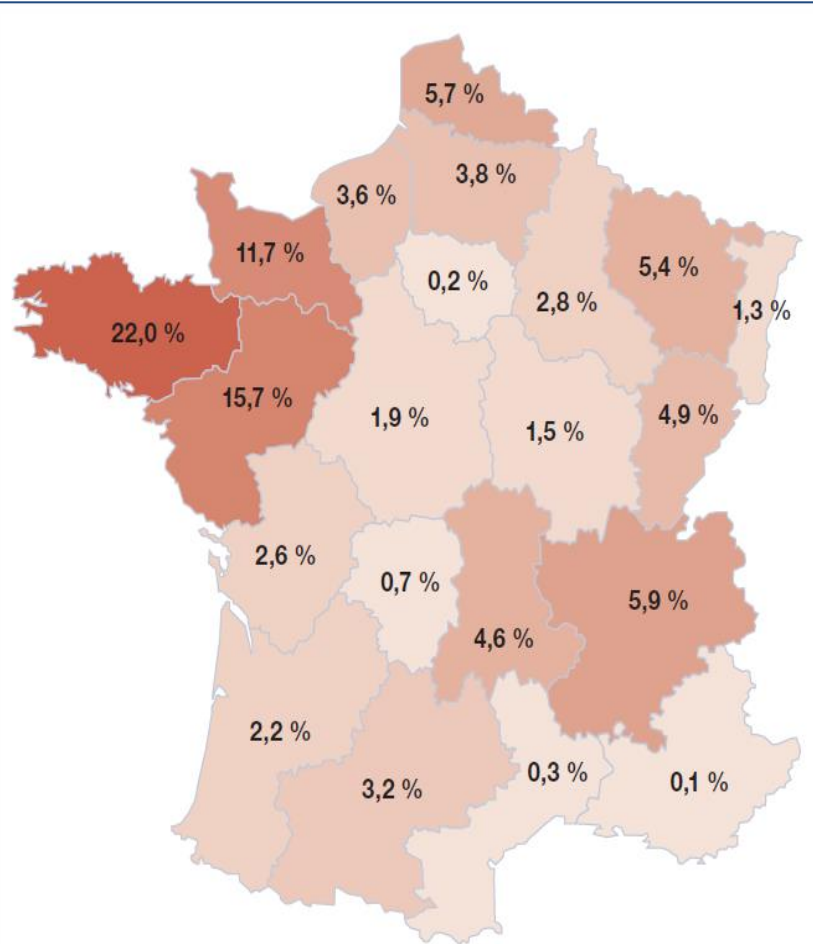
Dairy cows per KM2



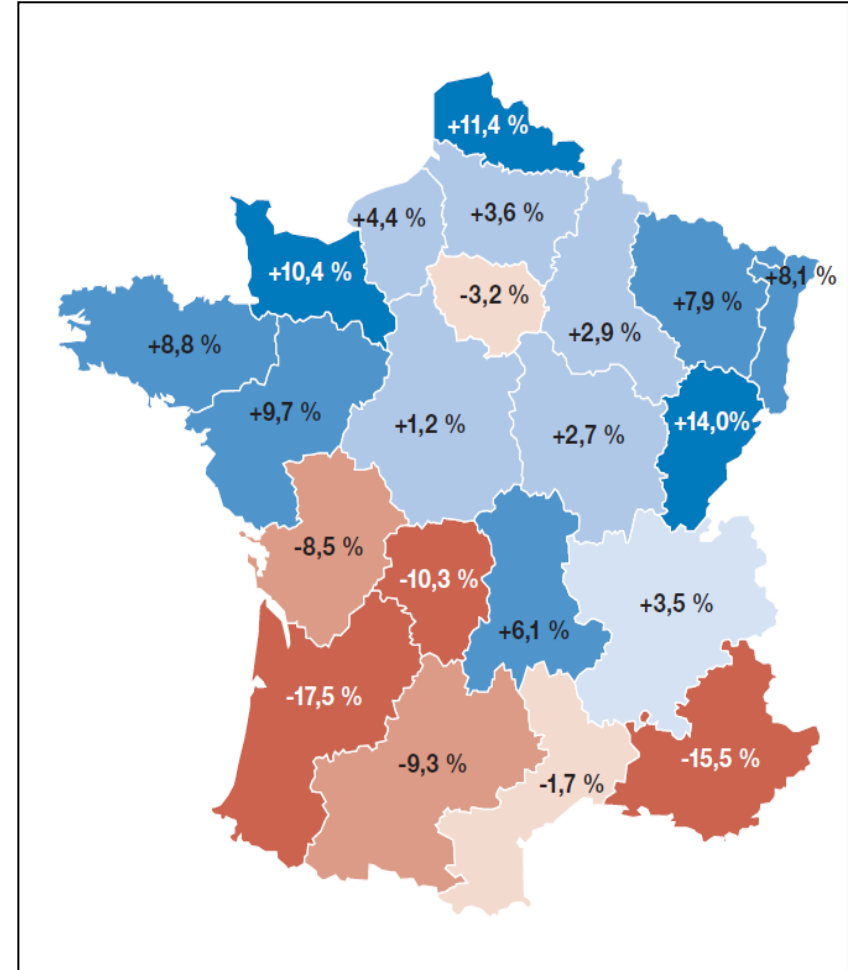
INRA, SMART-LERECO

Milk deliveries in French regions and variation since 2008

Milk deliveries (% France in 2014)

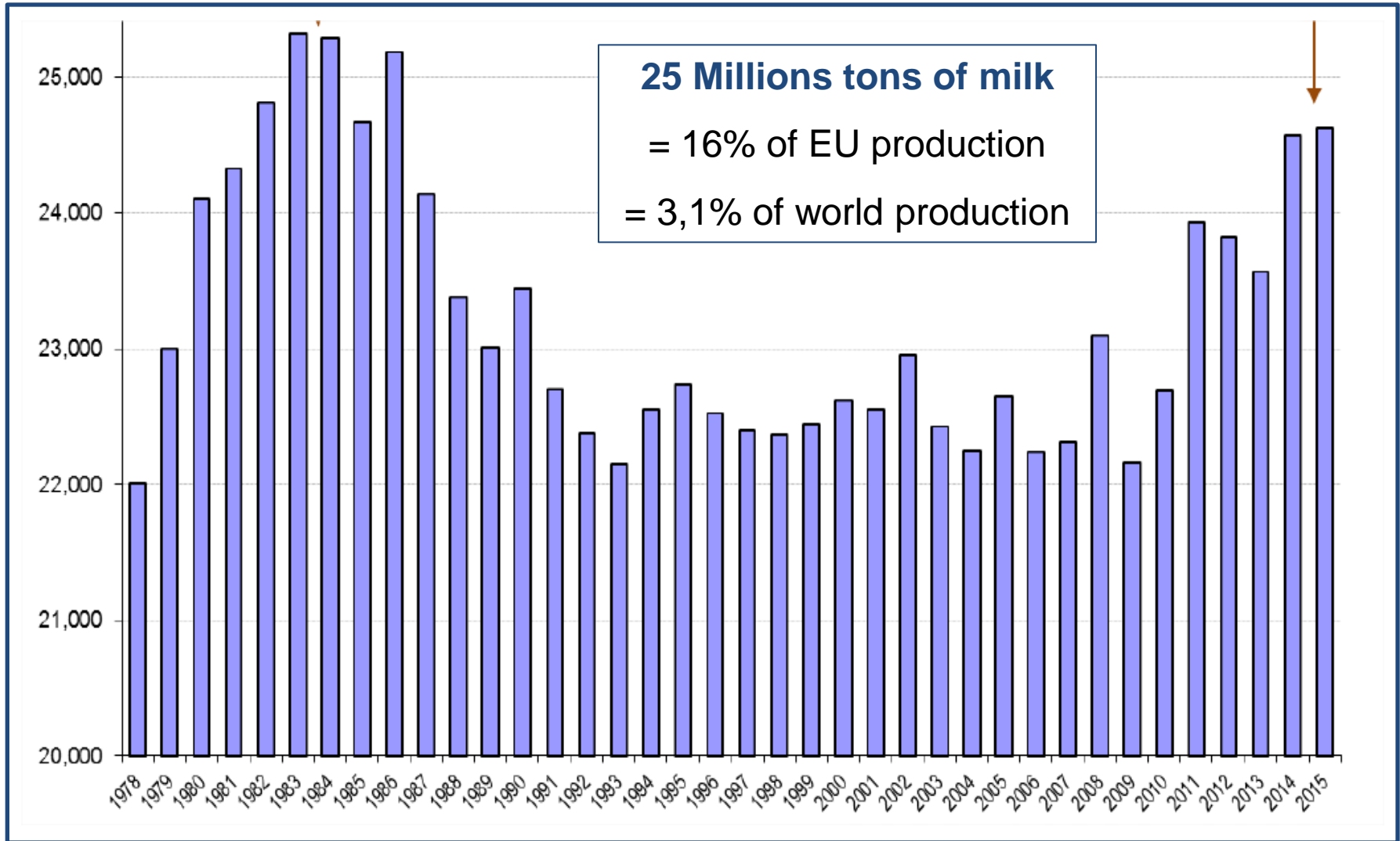


Variation 2014/2008



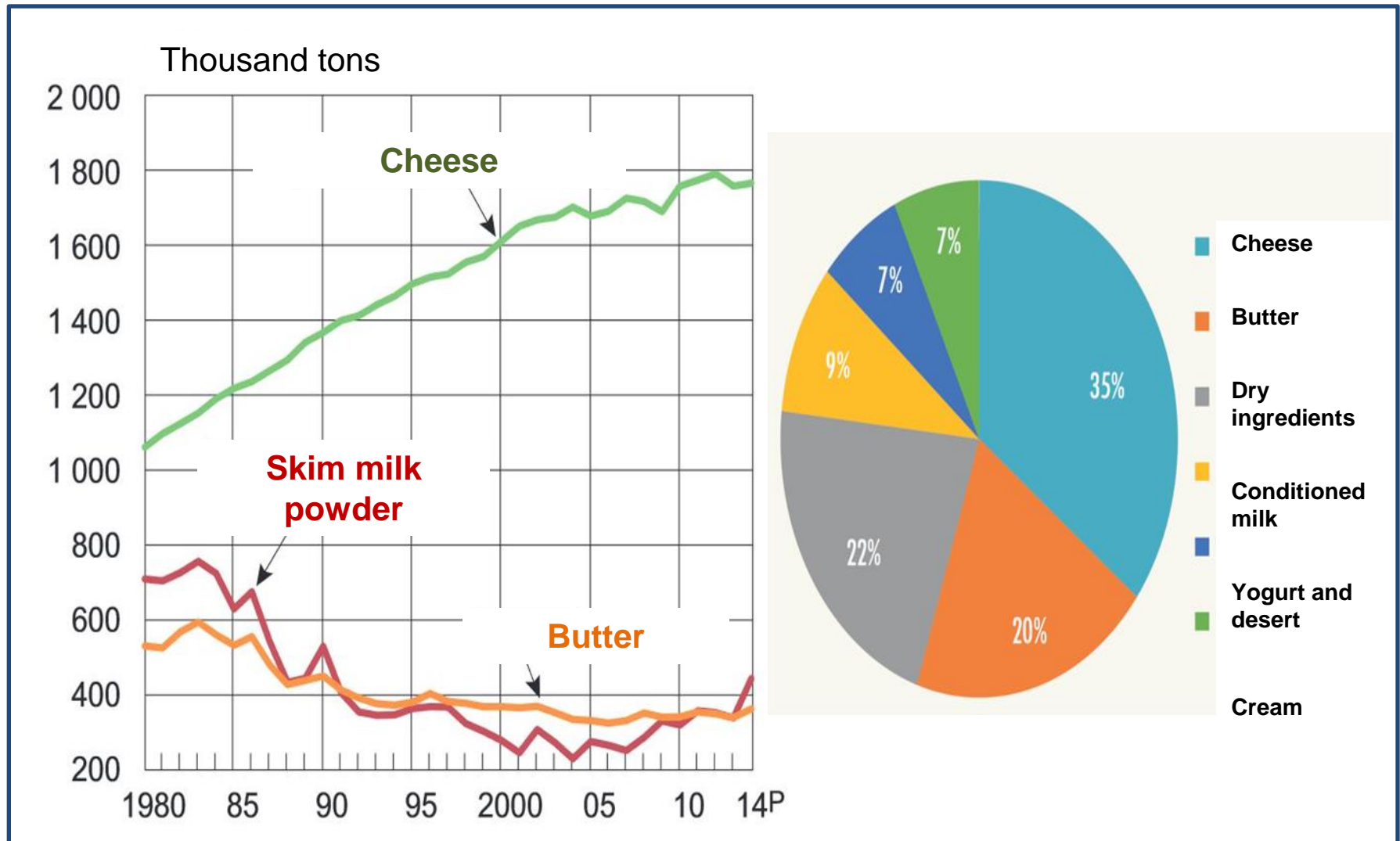
FranceAgriMer

Milk deliveries in France (thousand tons)



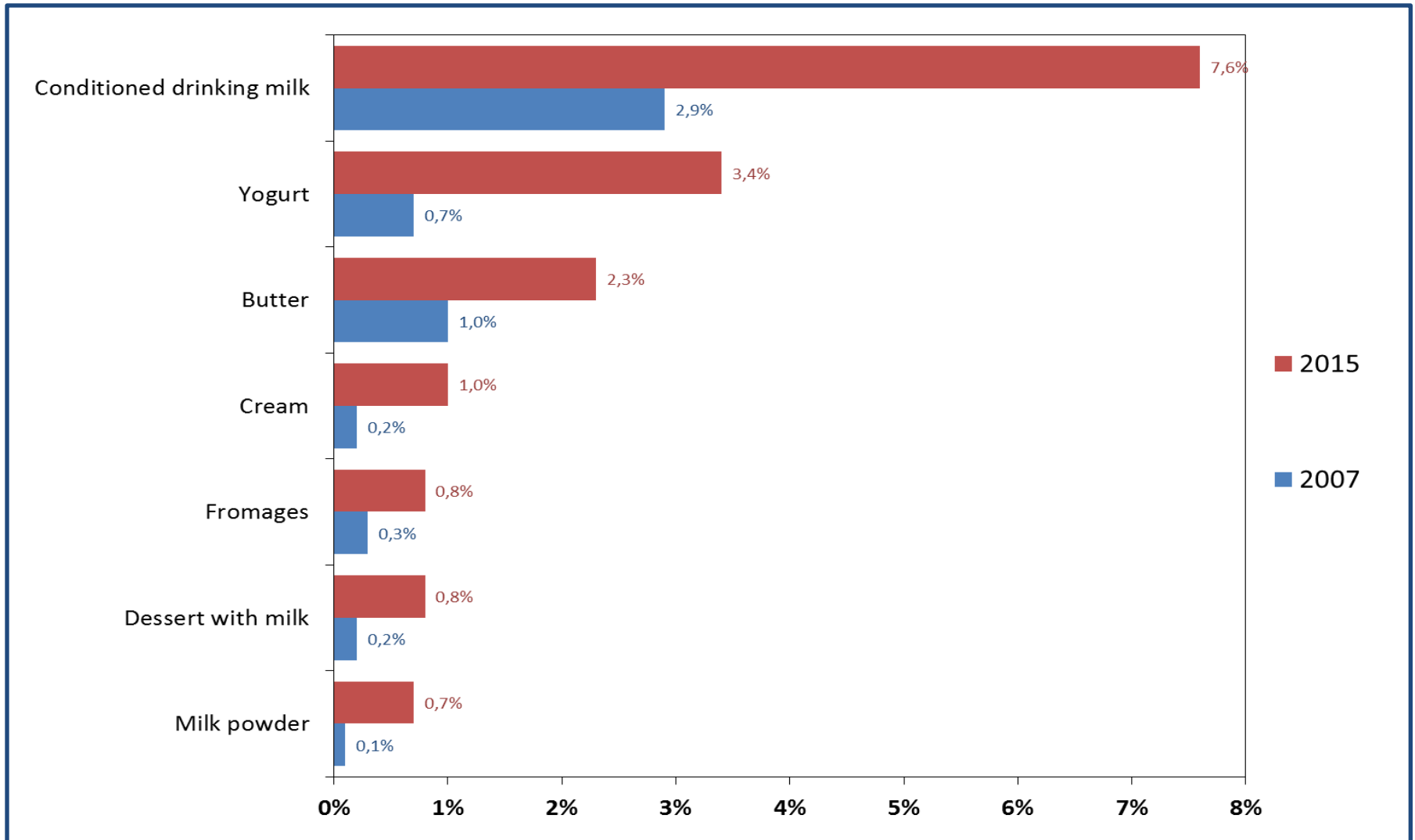
FranceAgriMer

How is the milk produced in France used ?



CNIEL from SSP

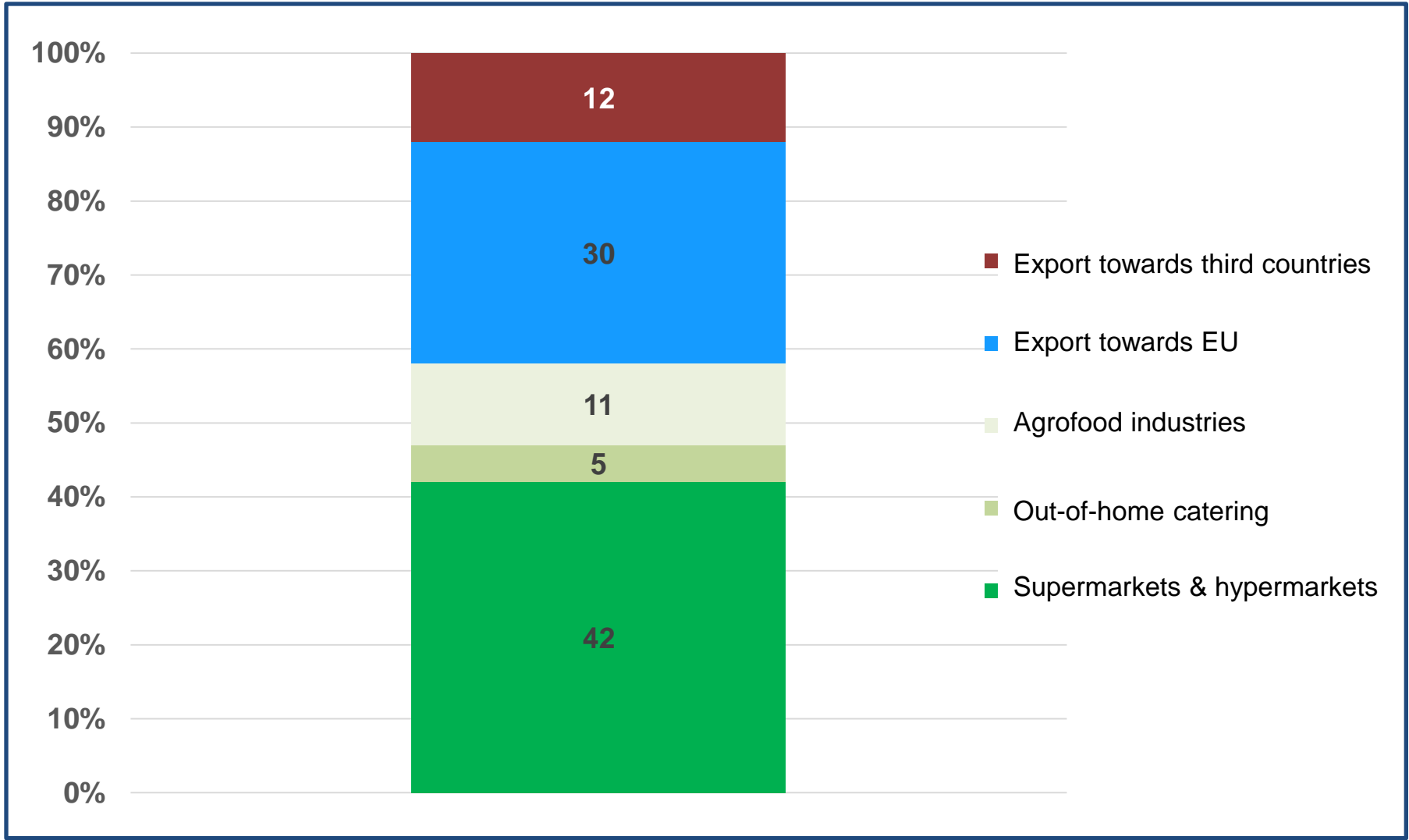
The share of dairy products from organic farming (France)



FranceAgriMer

The destination of French milk deliveries

(% in milk equivalent, 2015)



IDELE

4- Trade of dairy products



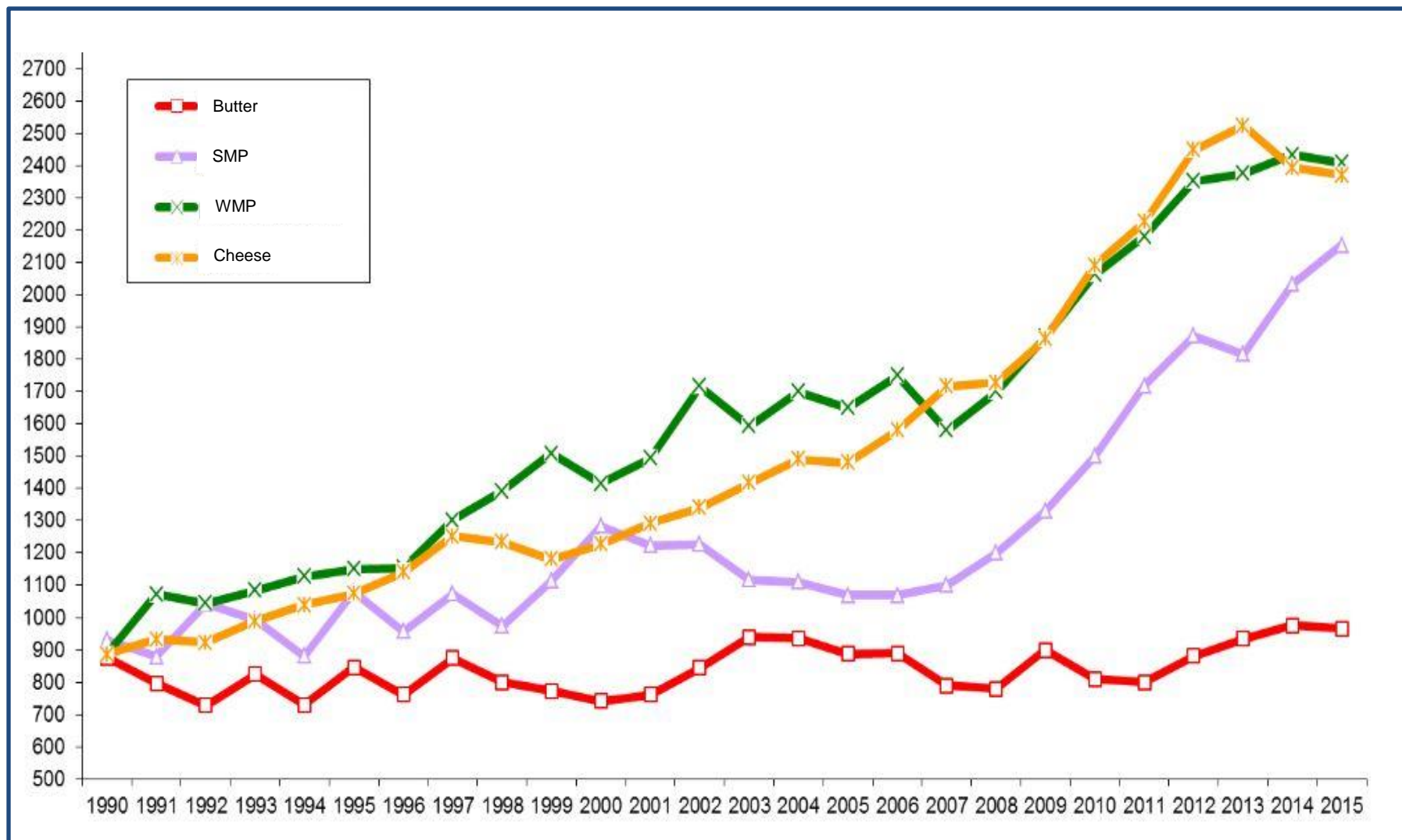
Self-sufficiency rate in dairy products per region (%)

Region	2005	2015
Asia	92%	90%
Europe	106%	111%
<i>EU</i>	<i>109%</i>	<i>112%</i>
<i>Non-EU</i>	<i>101%</i>	<i>108%</i>
North America	102%	108%
South America	102%	101%
Africa	84%	83%
Central America	75%	78%
Oceania	245%	309%

International Dairy Federation – World dairy situation

International trade in dairy products

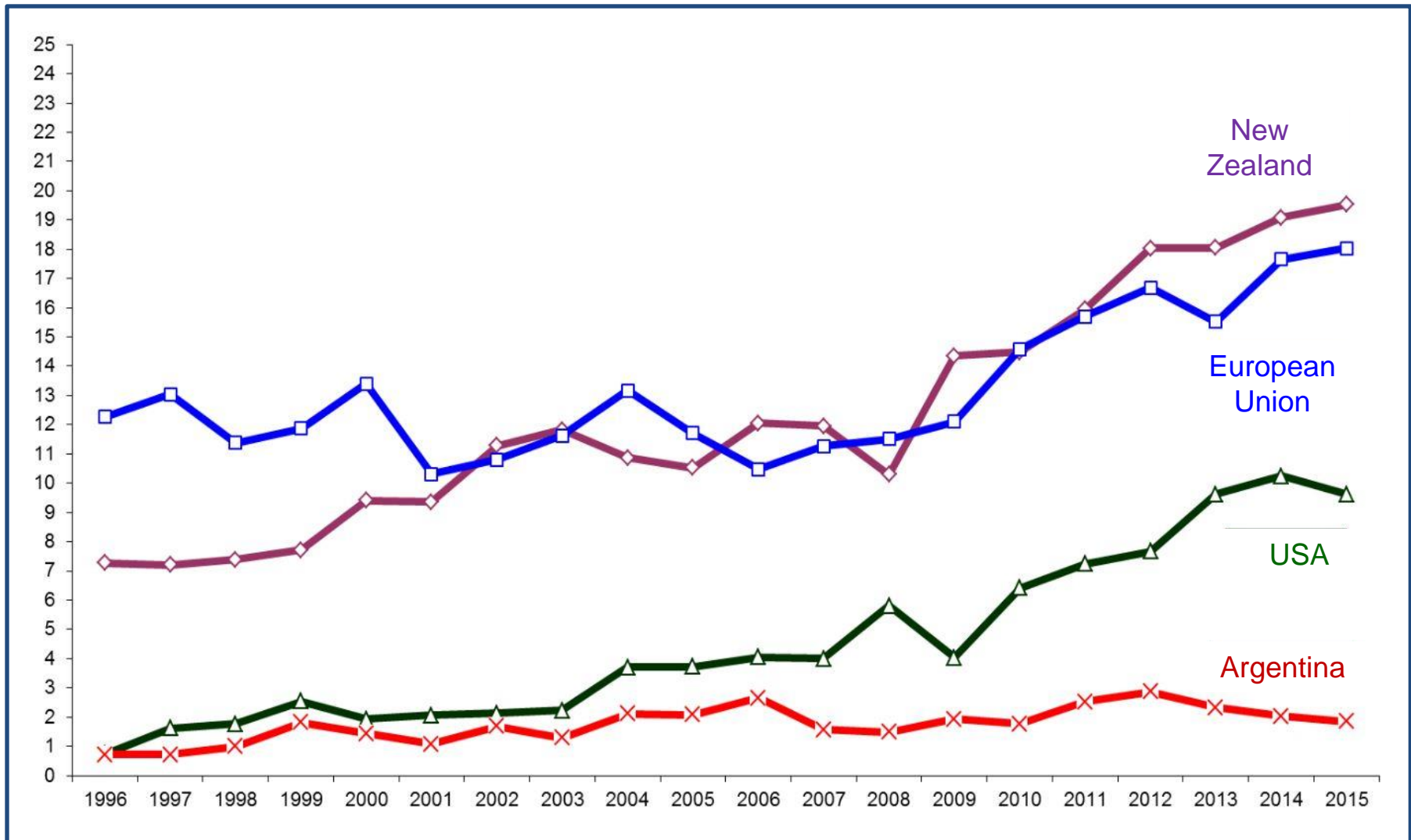
(thousands tons)



ATLA from FIL

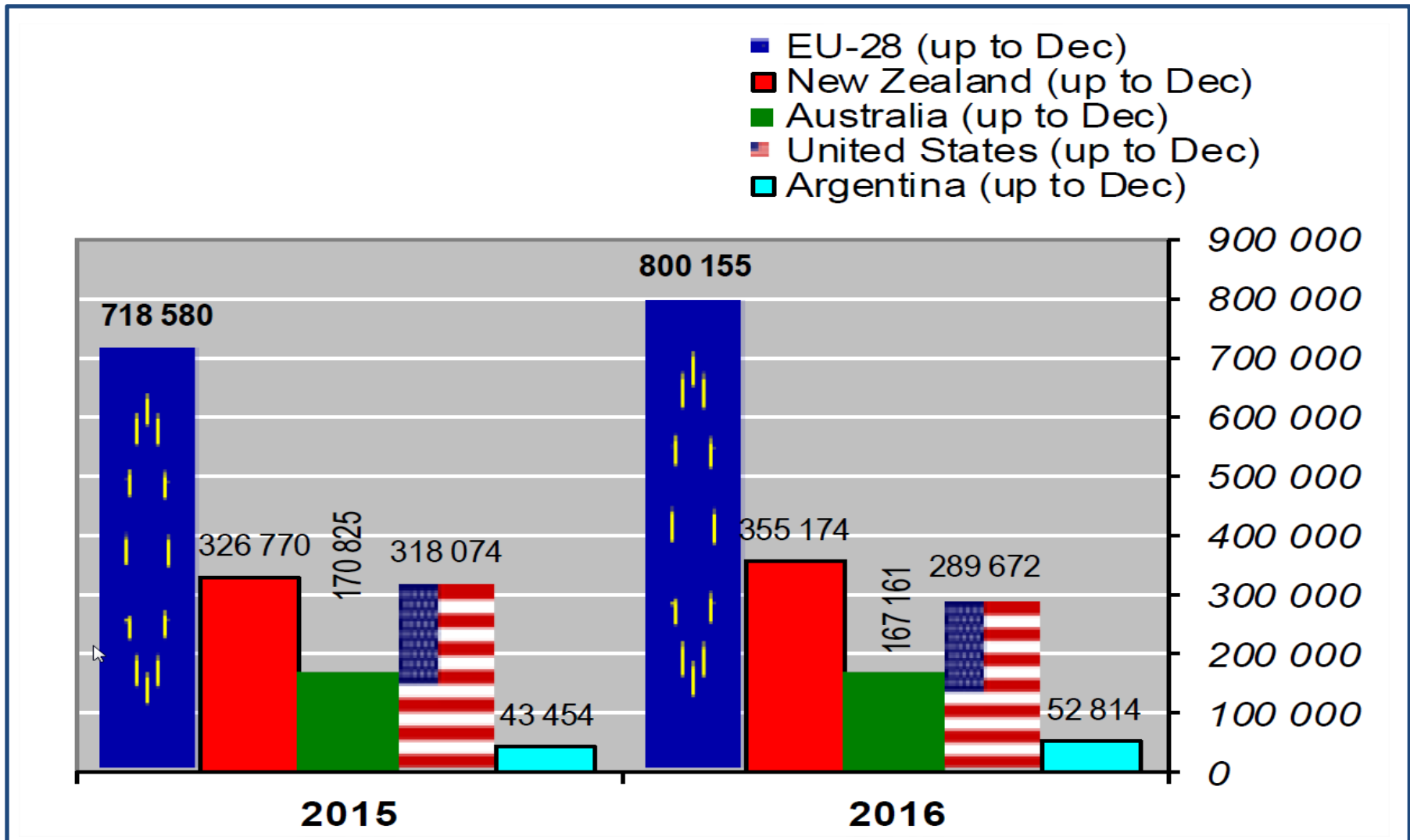
The main exporters of dairy products

(in milk equivalent)



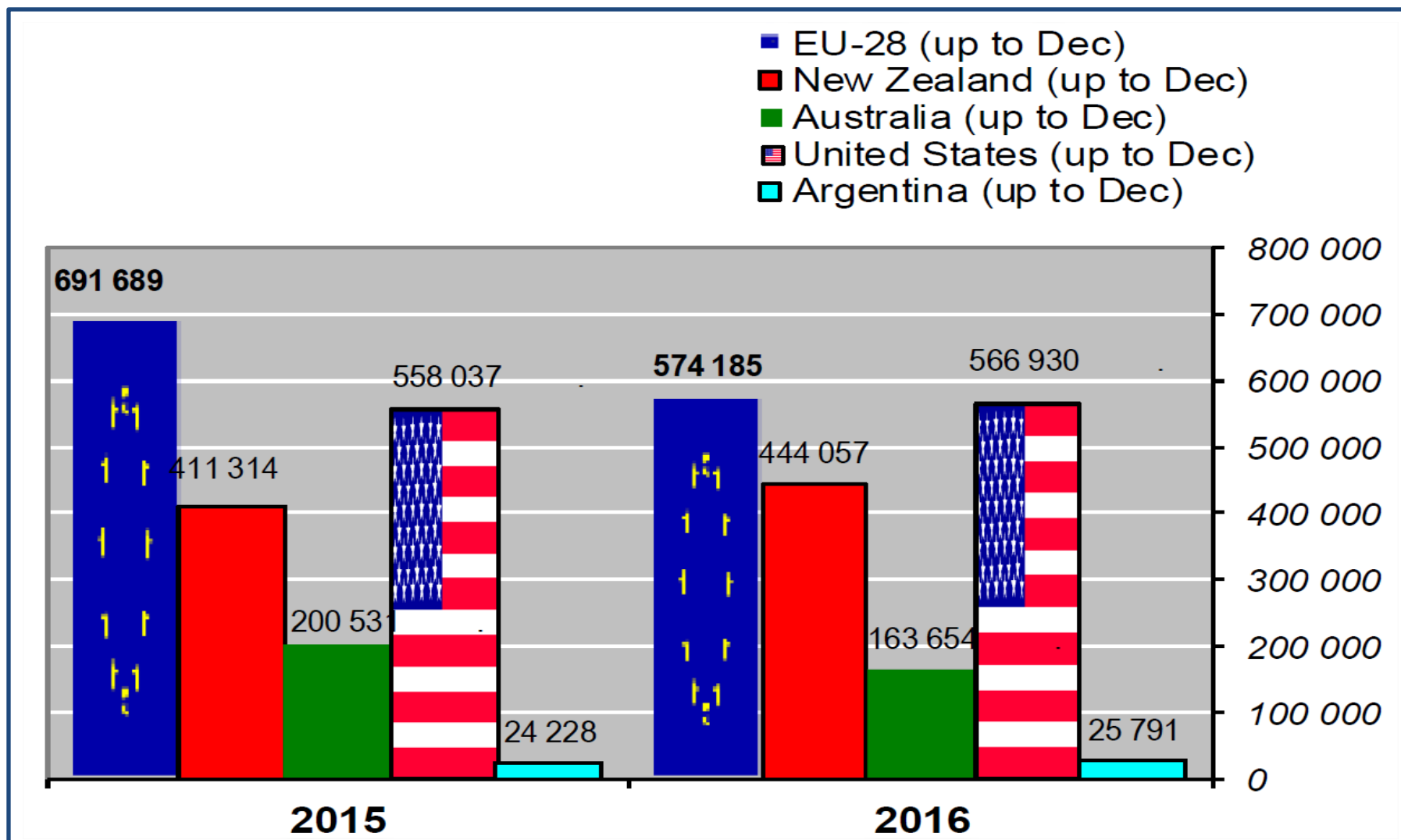
ATLA from FIL

Cheese exports (tonnes)



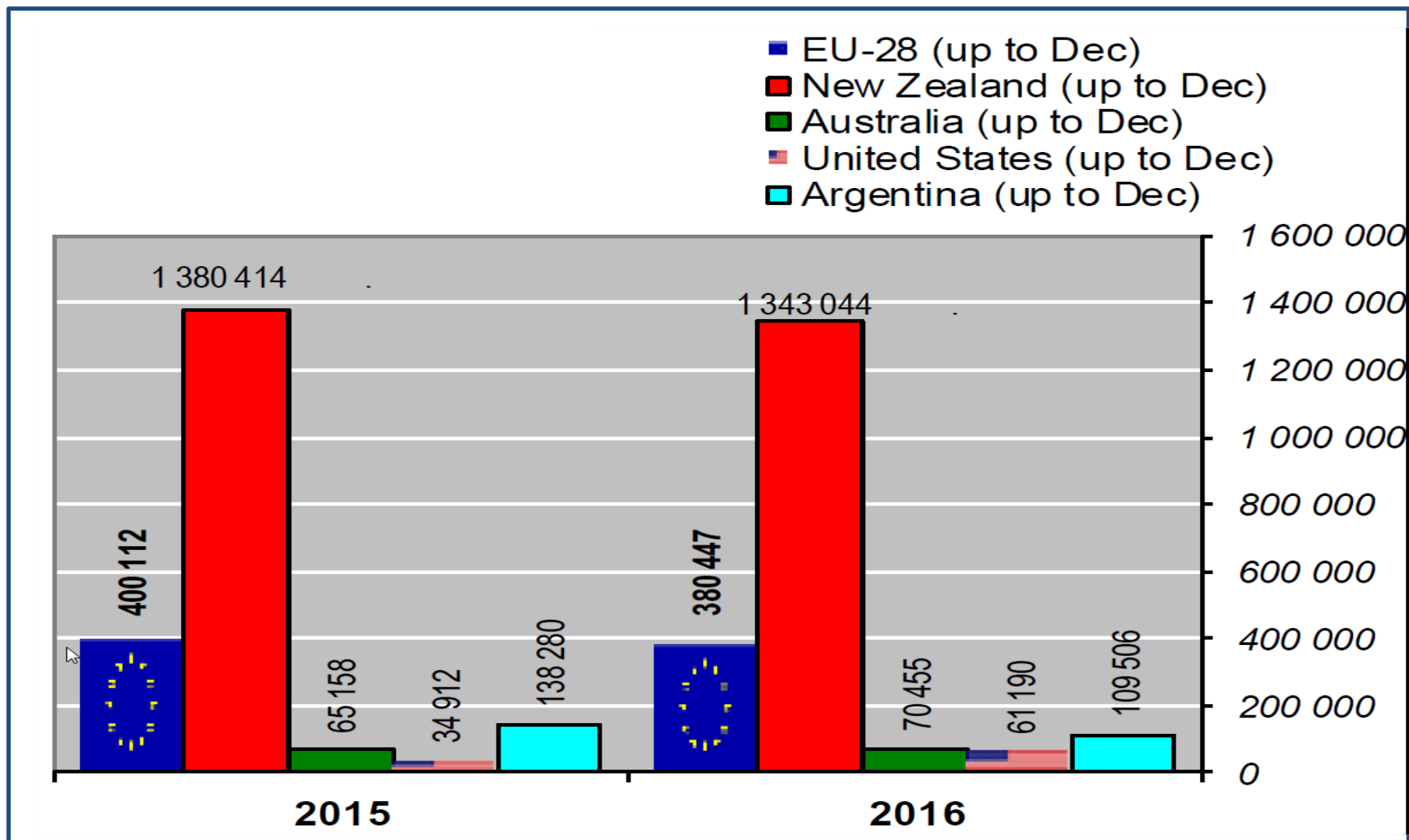
DG AGRI

Skimmed milk powder exports (tonnes)



DG AGRI

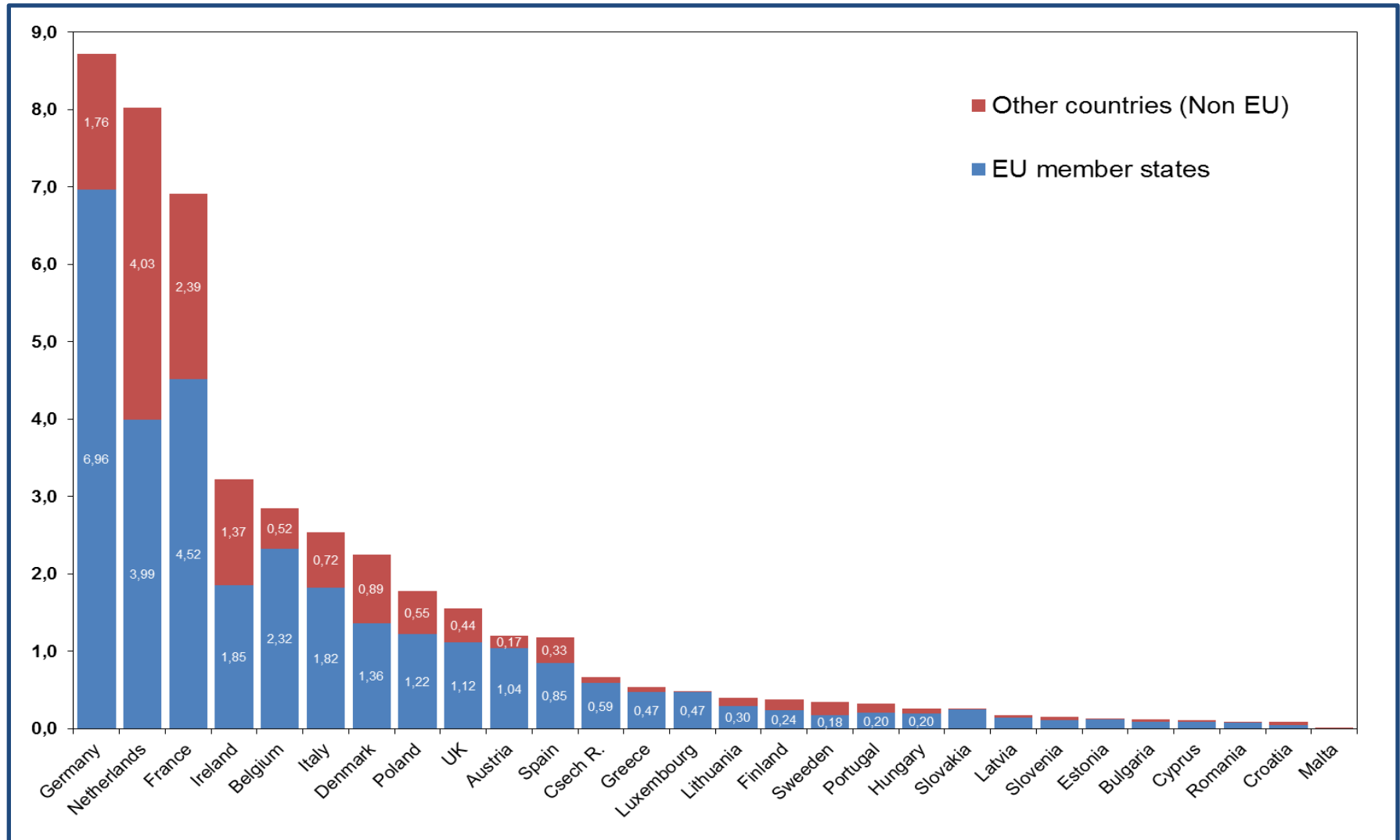
Whole milk powder exports (tonnes)



DG AGRI

French exports of dairy products in EU member states

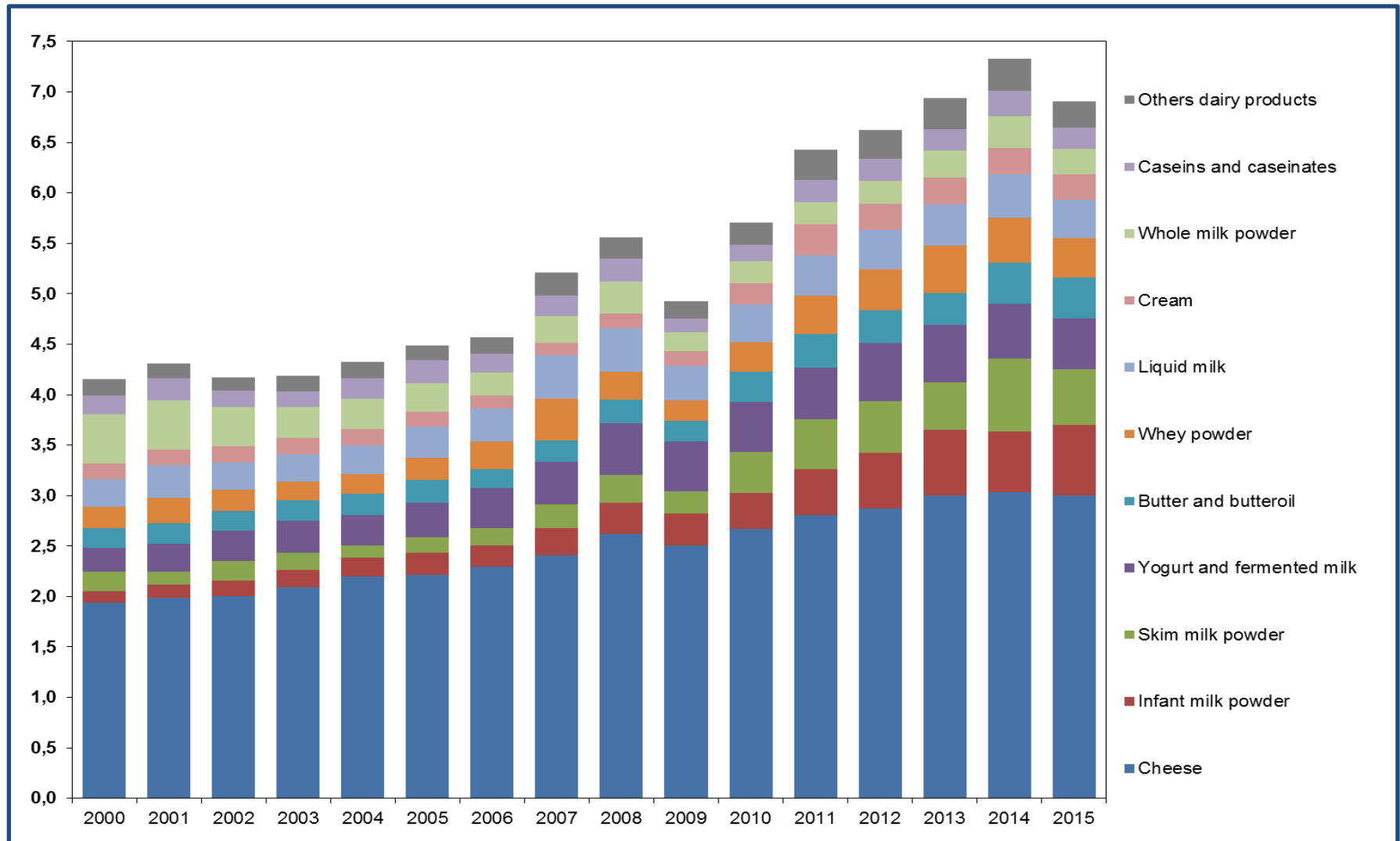
(Billion euros, 2015)



INRA, SMART-LERECO by COMEXT

French exports of dairy products

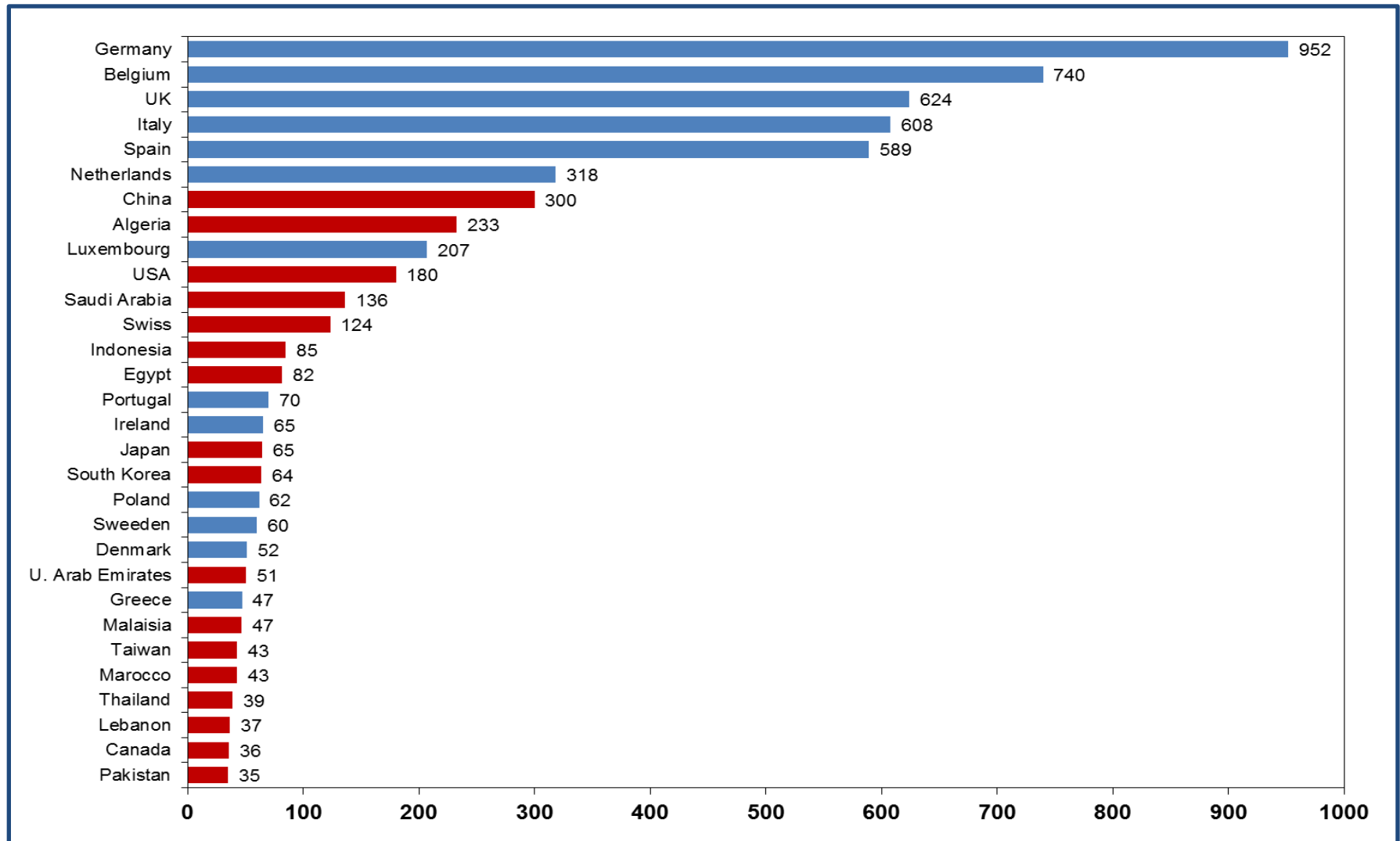
(Billion euros, 2015)



INRA, SMART-LERECO by COMEXT

French exports of dairy products

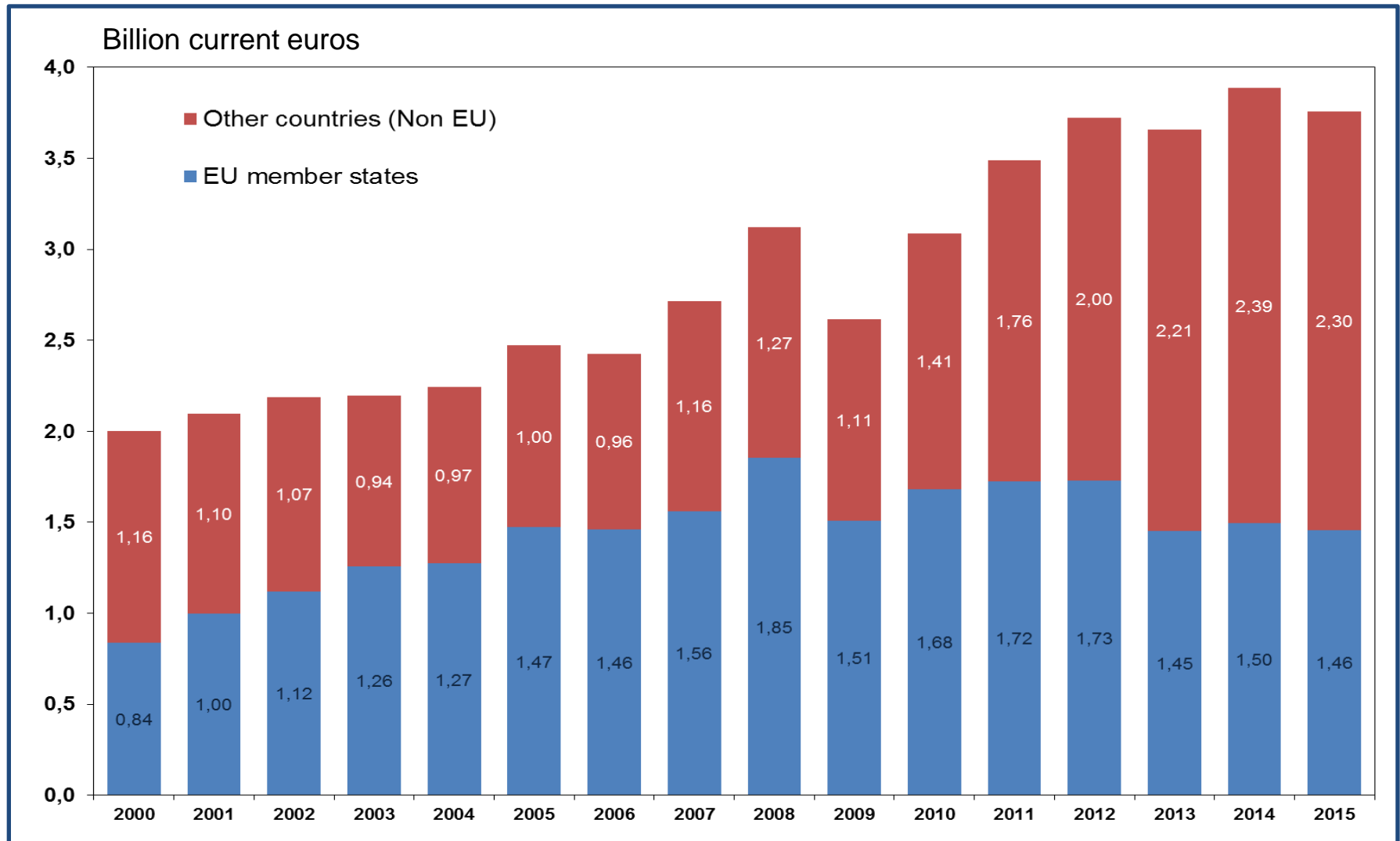
(Billion euros, 2015)



INRA, SMART-LERECO by COMEXT

The trade balance of France in dairy products

(Billion current euros)



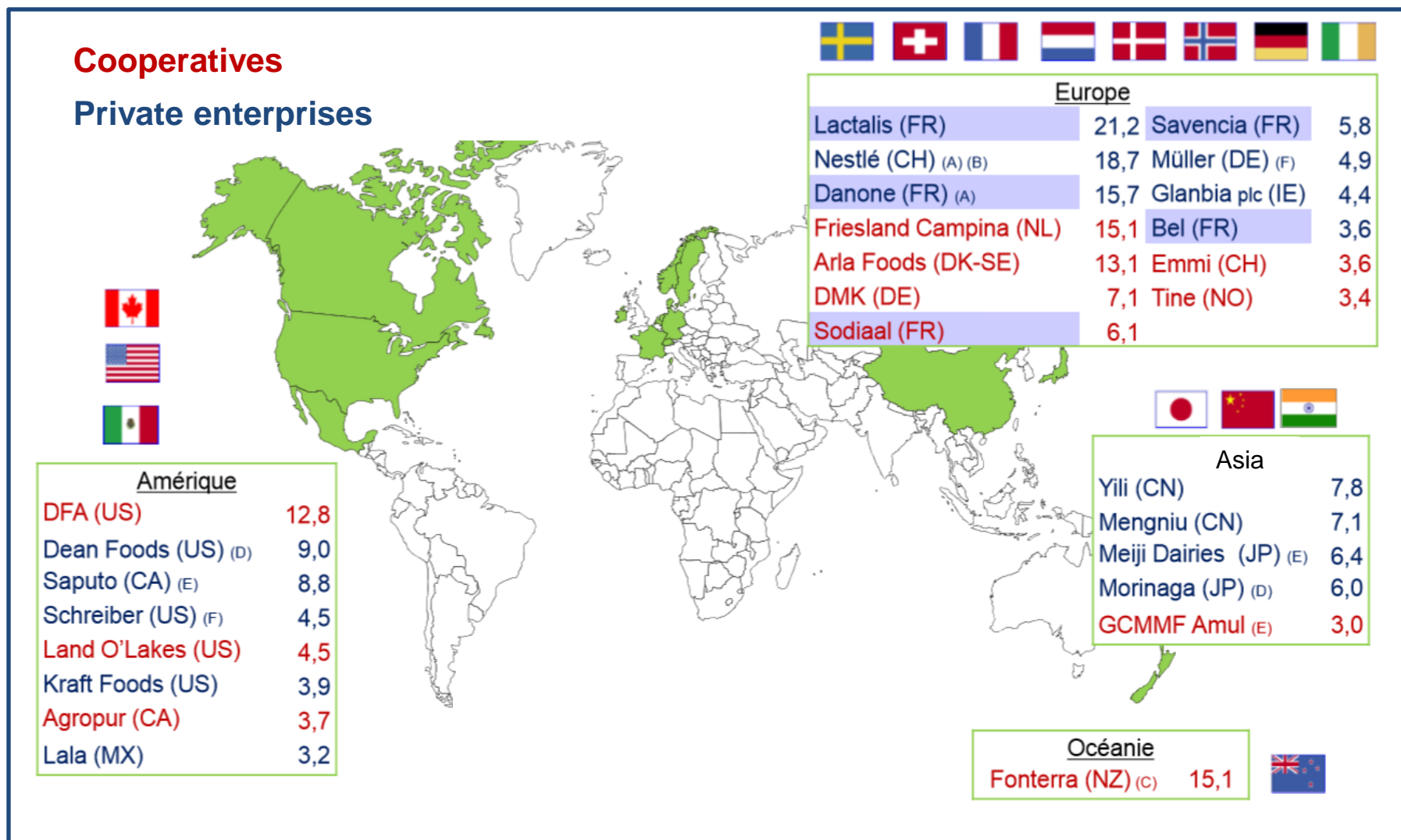
INRA, SMART-LERECO by COMEXT

5- Dairy enterprises and dairy farms



The main dairy groups in the world

(Turnover in billions of USD in 2013)



CNIEL

End of quotas: from public regulation to private regulation

→ Indicators which are important for dairy enterprises

- Milk cow density : to reduce costs for milk transport
- Proximity to consumers
- Milk production cost and the economic performance of the production area

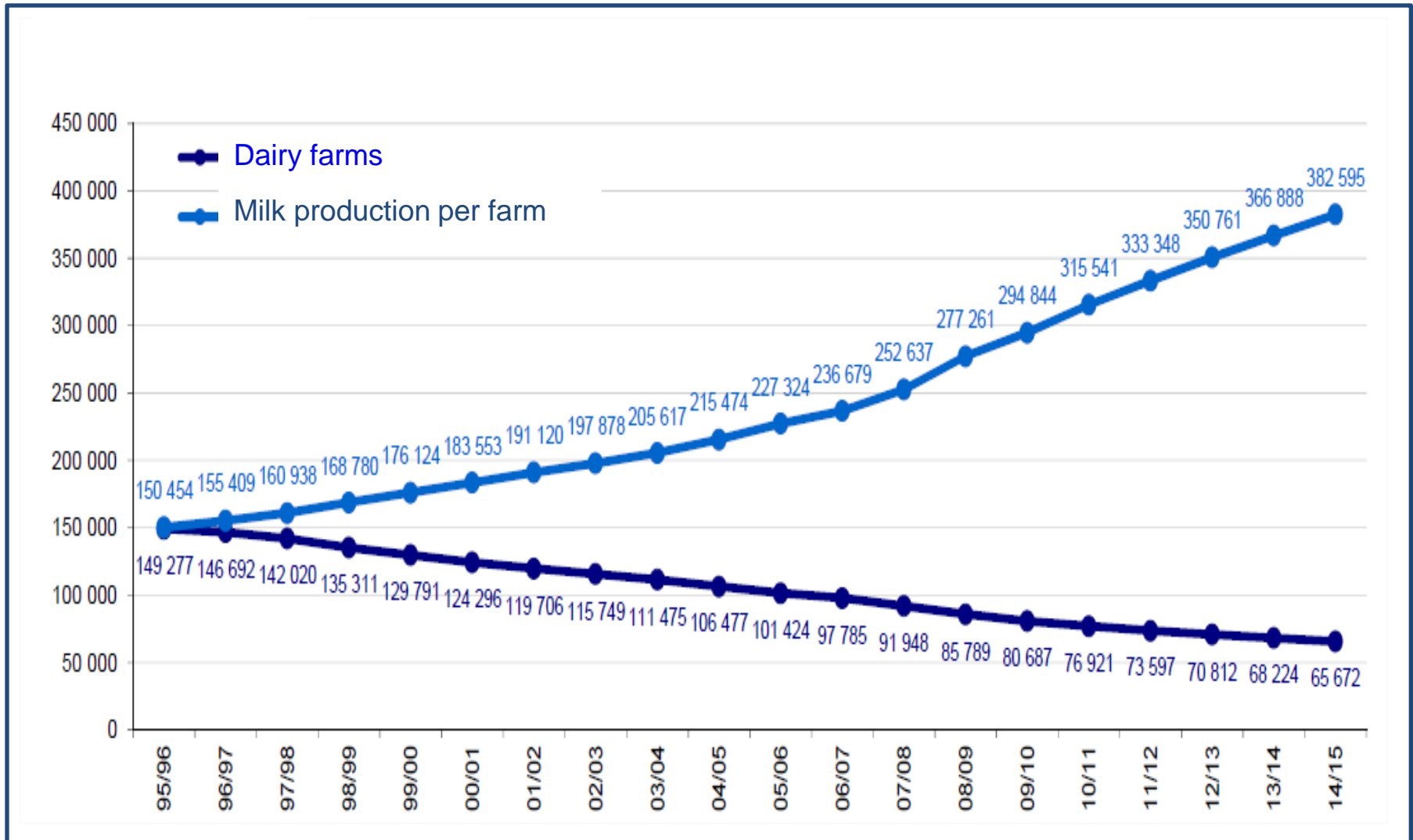
→ With the end of milk quotas, dairy enterprises will have levers to act

- Allocation of milk volume (contract) to farmers
- Flexibility of allocation based on market opportunities
- More or less restrictive rules governing seasonality

→ Breeders will be more dependent on enterprises

- Growth opportunities (or not) will depend on their enterprise
- The price of milk will be influenced by criteria more internal to the enterprise
- The more productive/efficient farms will be favored over time

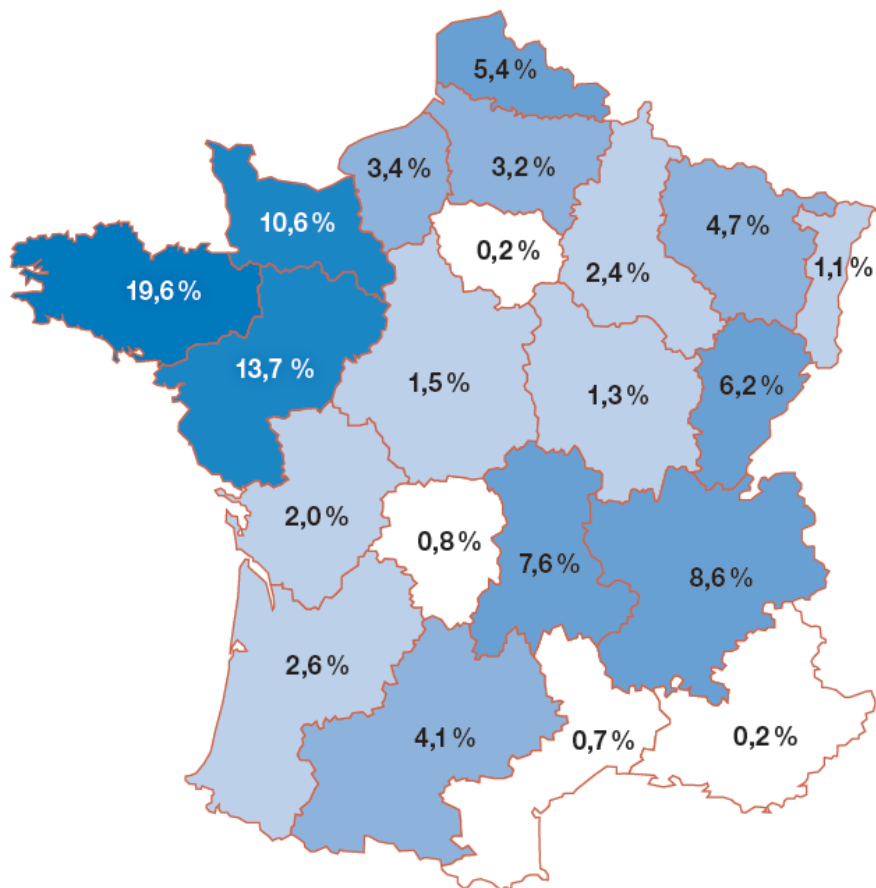
French dairy farms and milk production per farm



FranceAgriMer

French dairy farms

% du total national en 2014

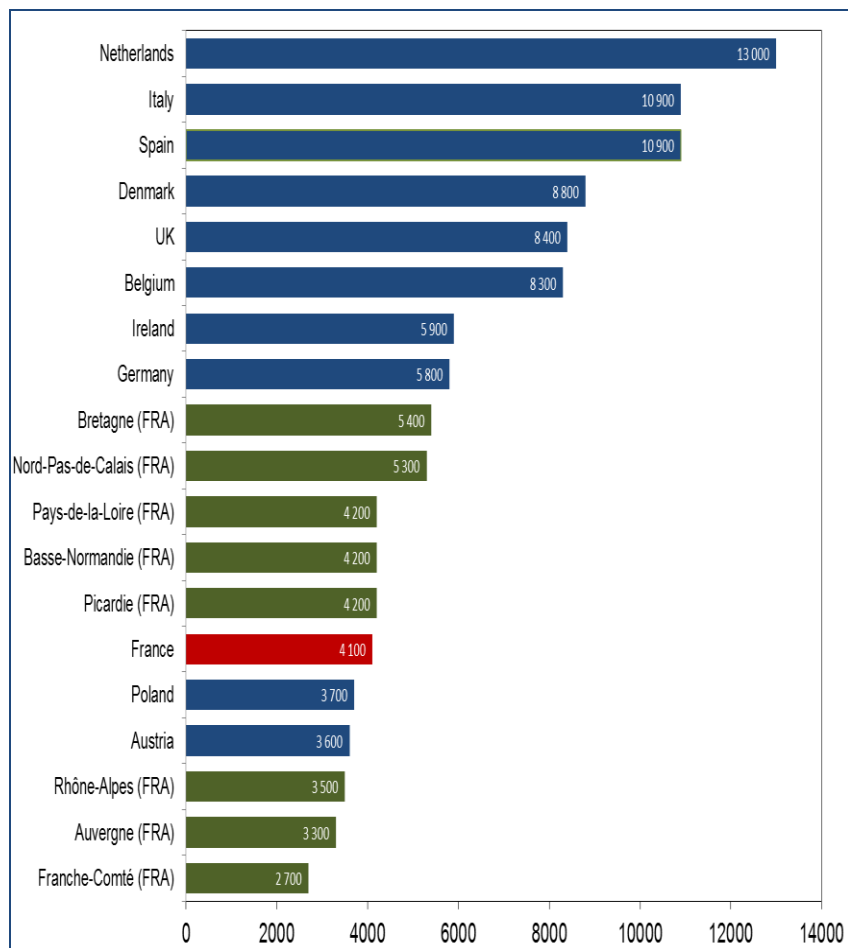


	1983	2014
ALSACE	7 303	700
AQUITAINE	19 318	1 668
AUVERGNE	25 207	4 837
BASSE-NORMANDIE	39 760	6 768
BOURGOGNE	9 482	835
BRETAGNE	66 129	12 450
CENTRE	10 875	948
CHAMPAGNE-ARDENNE	8 633	1 555
FRANCHE-COMTÉ	13 130	3 925
HAUTE-NORMANDIE	11 470	2 135
ÎLE-DE-FRANCE	673	102
LANGUEDOC-ROUSSILLON	2 510	448
LIMOUSIN	5 423	507
LORRAINE	14 433	3 020
MIDI-PYRÉNÉES	17 879	2 597
NORD-PAS-DE-CALAIS	13 851	3 443
PAYS DE LA LOIRE	49 843	8 704
PICARDIE	10 506	2 063
POITOU-CHARENTES	21 004	1 266
PROVENCE-ALPES-CÔTE D'AZUR	1 277	148
RHÔNE-ALPES	36 239	5 483
FRANCE	384 945	63 602

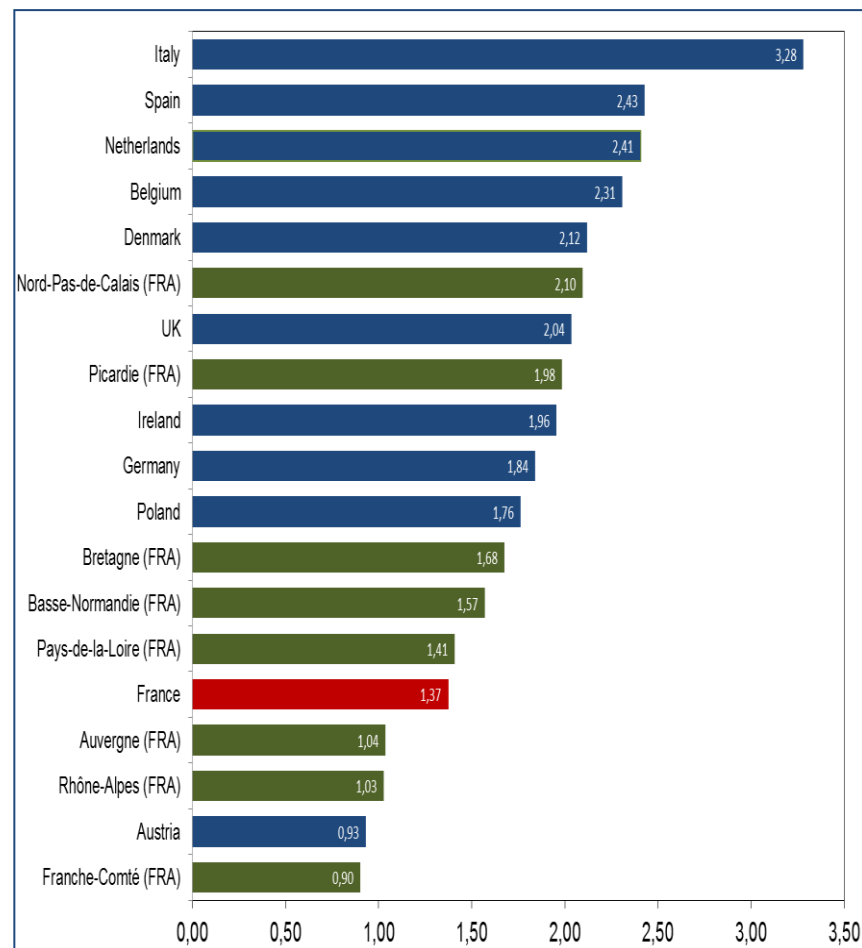
CNIEL d'après SSP - Enquête Annuelle Laitière

A low level of intensification in French dairy Farms

Milk production (Kg) per ha (UAA)

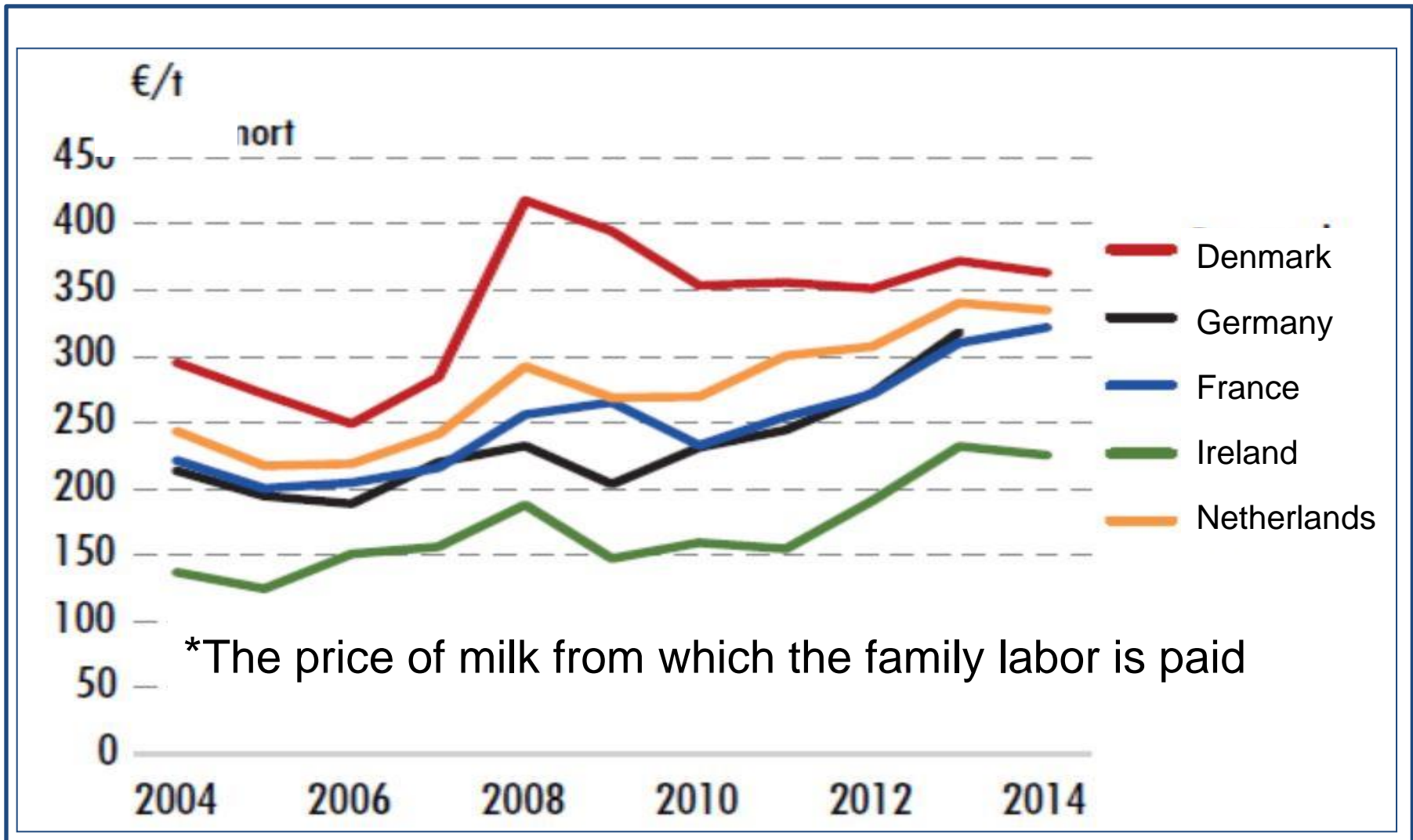


Herbivorous LU per ha of fodder surface



FADN / INRA SMART-LERECO

The average milk production cost*



Perrot, Chatellier, Mercier-Gouin, Richard, You, et al, 2016. Download this publication : <http://tinyurl.com/j5rve5u>

Conclusion



Future for French dairy sector

→ Some competitive advantages

- A favorable geographical location (climate, proximity to the sea and deficit countries)
- A good forage production with high yields
- A low price of the land
- Productivity reserve (sometimes) due to a low level of intensification
- A high level of consumption of dairy products (but a stable/decreasing global market)
- Innovative companies, with a strong experience in technologies and exportations

→ How to succeed?

- Optimize production costs by diluting fixed costs at farm and firm level
- Promote long-term financing of structuring investments
- Boosting product innovation to appeal to tomorrow's consumers and find new markets
- Strengthening the links between the different players in the agri-food chain
- Towards a better communication with citizens on the useful role of agriculture for society

