

# The dynamics of European egg production and egg trade between 1990 and 2010 – with special reference to the EU

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## Objectives of the report

The main objectives of the report are:

- to document the dynamics in the laying hen flocks in Europe and the EU (27) and to analyse which impacts it had on the contribution of Europe to the global laying hen population,
- to analyse the dynamics of global egg production over the past two decades and to show what impacts the political and socio economic transformation processes had on the contribution of Europe to the global egg production volume,
- to analyse the changing trade patterns and to identify countries with an egg surplus and an egg deficit,
- to analyse the impacts that the banning of conventional cages had on egg production and egg trade in the EU and to document the status of the transformation process in housing systems in the first quarter of 2012,
- to summarise the main challenges which the egg industry in the EU (27) is confronted with and which impacts this may have on the future development of egg production and egg trade.

## Hen population and egg production

Table 1:  
The ten European countries with the highest number of laying hens in 2010  
(Source: FAO database)

<b>2010</b>		
<b>Country</b>	<b>Laying hens (1,000)</b>	<b>Share (%)</b>
Russia	155,906	19.8
Ukraine	109,300	13.9
Italy	68,000	8.6
Spain	52,000	6.6
France	51,310	6.5
Poland	48,727	6.2
Un. Kingd.	47,000	6.0
Romania	44,504	5.6
Netherlands	34,845	4.4
Germany	34,036	4.3
10 countries	645,628	81.9
Europe	788,013	100.0

Table 2:  
The development of global egg production between 1990 and 2010;  
data in 1,000 t  
(Source: FAO database)

Continent	1990	2010	Change (%)
Africa	1,543	2,668	+ 72.9
Asia	13,805	37,485	+ 171.5
Europe	11,663	10,472	- 10.2
N America*	5,361	8,222	+ 53.4
CS America	2,632	4,471	+ 69.9
Oceania	244	254	+ 4.1
World	**35,249	63,572	+ 80.4

\* Canada, Mexico, USA

\*\* sum does not add because of rounding

Table 3:  
The ten leading European countries in  
egg production in 2010  
(Source: FAO database)

2010		
Country	Production (1,000 t)	Share (%)
Russia	2,261	21.6
Ukraine	974	9.3
France	947	9.0
Spain	840	8.0
Italy	737	7.0
Germany	664	6.3
Netherlands	631	6.0
Un. Kingd.	619	5.9
Poland	618	5.9
Romania	298	2.8
10 countries	8,589	*82.0
Europe	10,472	100.0

\* sum does not add because of rounding

Table 4:  
The ten leading EU (27) member countries  
in egg production in 2010  
(Source: FAO database)

2010		
Country	Production (1,000 t)	Share (%)
France	947	14.1
Spain	840	12.5
Italy	737	11.0
Germany	664	9.9
Netherlands	631	9.4
Un. Kingd.	619	9.2
Poland	618	9.2
Romania	298	4.4
Belgium	189	2.8
Hungary	152	2.3
10 countries	5,695	84.7
EU (27)	6,727	100.0

The main results this part of the report can be summarised as follows:

- Between 1990 and 2010, the global laying hen population increased from 3.6 billion to 6.5 billion birds or by almost 80%.
- Whereas Asia's share of the global number of laying hens increased from 44.2% to 63.8% in the analysed time period, Europe lost almost 160 million laying hens or more than half of its former share of the global laying hen flocks.
- Global egg production grew from 35.2 mill. t in 1990 to 63.6 mill. t in 2010 or by 80.4%. Asia's contribution to the global production volume increased from 39.2% to 59.0%. In the same time period the share of European countries fell from 33.1% to only 16.5%.
- Germany, the biggest egg producing country in the EU in 1990, lost its leading position to France. In 2010, it only ranked in sixth place in Europe and in 4th place in the EU (27). This was a result of the banning of cages from January 2010 on, three years earlier than in most other EU (27) member countries.

### **European egg trade**

The main results of the trade analysis can be summarised as follows:

- The volume of global egg exports increased from 0.94 mill. t in 2000 to 1.64 mill. t in 2009 or by 74%
- Europe and Asia dominated global exports with a share of 67% respectively 25%. A similar percentage was reached in egg imports.
- In Europe, about 1.1 mill. t of shell eggs were traded. The Netherlands contributed almost 36% to the export volume, Germany imported about 41% of the eggs which were traded in Europe.
- The Netherlands and Germany also dominated egg trade in the EU (27). In 2010, the Netherlands shared 48% of the export volume, Germany 49% of the import volume.

Table 5:  
The ten leading EU (27) member countries in egg exports and egg imports in 2010  
(Source: MEG 2012)

<b>Egg exports</b>			<b>Egg imports</b>		
<b>Country</b>	<b>1,000 t</b>	<b>Share (%)</b>	<b>Country</b>	<b>1,000 t</b>	<b>Share (%)</b>
Netherlands	567	47.9	Germany	474	48.9
Poland	151	12.8	Netherlands	152	15.7
Spain	115	9.7	France	86	8.9
Germany	109	9.2	Belgium/Lux.	56	5.8
France	78	6.6	Italy	35	3.6
Belgium/Lux.	67	5.7	Un.Kingdom	34	3.5
Latvia	19	1.6	Czech Rep.	23	2.4
Slovakia	12	1.0	Austria	20	2.1
Lithuania	11	0.9	Poland	14	1.4
Finland	8	0.7	Slovakia	12	1.2
10 countries	1,137	*96.0	10 countries	906	93.4
EU (27)*	1,184	100.0	EU (27)*	970	100.0

\* sum does not add because of rounding

## Perspectives

The phase of political and economic transformation in Eastern European countries has more or less come to an end even though it will at least in some of the countries take some more years to adapt completely to market economies. It can also be expected that the transformation process from conventional cages to other housing systems for laying hen can be completed in 2012. This does, however, not alter the situation that there will be two different production systems for eggs in Europe parallel to each other. In the EU (27), conventional cages will no longer be permitted, but in several European countries outside the EU they may still be used, even though there are also countries, i.e. Norway and Switzerland, which also do not permit such cage systems. This raises the question if eggs stemming from countries which still permit conventional cages can be imported into the EU. In a presentation at the IEC Spring Conference in Venice, Herman Versteijlen (European Commission) declared that such eggs may be imported when they are printed with a "3" and when it is guaranteed that the eggs are salmonella-free. The EU Commission does not have legal means to prohibit such imports, as the Commission cannot decide in which housing systems non-EU countries produce shell eggs for consumption. The only way to minimise the import volume of such eggs is the decision of the food retailers not to list such eggs.

The banning of conventional cages may make the EU (27) for some time to an egg deficit region and imports from outside necessary. It will be of interest to monitor the countries of origin of imported eggs.

But there are some other challenges at the horizon in the European Union which will demand reactions. One challenge is the ongoing discussion about the necessity and methods of debeaking laying hen chicks. It can be expected that within the next years this method will be banned and that breeding companies will have to find a solution to the problem of feather pecking and cannibalism, especially with the increasing number of hens in barn systems. A second challenge is the selection of male chicks which cannot be used for egg production. Here, too, new methods have to be developed to enable the separation during the hatching process. A third challenge is the increasing opposition in several countries not only of animal welfare groups but of the society in general against keeping animals in large numbers in confined facilities. This is a challenge which is not easy to handle, for on the one hand side the consumer asks for low prices for high quality animal products whereas on the other side he often does not understand that these prices are only possible when large numbers of animals are kept in modern facilities which are equipped with the latest technology. One of the tasks for the egg industry in the near future will be to open their hen houses to the public and to inform the average consumer about the ways in which eggs are and have to be produced and that these housing systems not only guarantee a high quality standard of the product but also meet the standards of animal welfare.