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EU egg production since the exit from conventional cages: housing systems affect the volume of production

Abstract

Within five years after banning conventional cages for laying hens in the EU, the situation has stabilized and egg production exceeds the demand. This report shows the current egg production in the 28 countries, based on recent reports of the Committee for the Common Organisation of the Agricultural Market for Eggs.

Keywords

EU, egg production, housing systems

Housing systems in EU laying hen husbandry

In 2016, 384 Mio laying hens were kept in EU member countries. **Table 1** and figure 1 document the share of the four housing systems which are used presently. Enriched cages are the dominating housing system with a share of 55.6%, followed by barn and free range systems. The share of organic egg production is still very low with a share of only 4.6 %.

The regional concentration of laying hen husbandry in the EU is quite high. The 10 member countries with the largest hen population shared 86.1 % of the to-

Table 1. Housing systems in EU laying hen husbandry in 2016 (Source: EU Committee 2017)

Housing system	Laying hens (Mio)	Share (%)
Enriched cages	213.476	55.6
Barn	98.544	25.7
Free range	54.309	14.1
Organic	17.738	4.6
Total	384.068	100.0

tal inventory (**Table 2**). Germany was in a leading position with 52.6 Mio hens, followed by France, Spain and Poland. These four countries contributed 48.8% to the EU laying hen population, the leading seven countries 70.9 %. The laying

hen inventory reflects the number of inhabitants.

In **table 3**, the five member countries with the highest hen inventory in each housing system are documented. A com-

Table 2. The ten EU member countries with the highest laying hen inventories in 2016
(EU Committee 2017)

Country	Laying hens (Mio)	Share (%) in the EU laying hen flocks
Germany	52.580	13.7
France	48.598	12.7
Spain	43.612	11.4
Poland	43.474	11.3
United Kingdom	42.176	11.0
Italy	41.627	10.8
Netherlands	34.180	8.9
Romania	8.209	2.1
Portugal	8.192	2.1
Sweden	8.041	2.1
Top 10 countries	330.698	86.1
EU (28)	384.068	100.0

Table 3. The five countries with the highest number of laying hens in each housing system in 2016
(Source: MEG 2017)

Country	Laying hens (Mio)	Share (%)
Enriched cages		
Spain	40.535	92.9
Poland	38.387	88.3
France	33.584	69.1
Italy	27.353	65.7
United Kingdom	16.599	39.4
Barn systems		
Germany	32.628	62.1
Netherlands	20.923	74.6
Italy	12.166	29.2
Sweden	5.298	77.5
Austria	4.305	66.8
Free range		
United Kingdom	22,284	52.8
Germany	9.302	17.7
France	8.832	18.2
Netherlands	5.291	15.5
Spain	1.756	4.0
Organic		
Germany	5.566	10.6
France	3.500	7.2
Netherlands	1.833	5.4
Italy	1.366	3.3
Sweden	1.312	16.3

parison reveals significant differences between these countries. The number of laying hens in enriched cages was highest in Spain and Poland. Germany and the Netherlands were leading in barn systems, the United Kingdom and Germany in free range laying hen husbandry. The highest number of laying hens in organic husbandry is found in Germany and France.

The highest share of enriched cages is found in Lithuania (95.6%) and Spain (92.9%), whereas Sweden (65.9%) and Austria (65.5%) were top ranking for barn systems. The United Kingdom (52.8%) and Ireland (40.5%) had the highest share of their laying hens in free range systems. Organic laying hen husbandry reached the highest share in Denmark (28.6%) and Sweden (16.3%).

Figure 2 documents the variation between the 28 EU member countries regarding the share of the four housing systems.

Patterns of egg production

Between 2012 and 2016, egg production in the EU increased by 6.1%, from 7.0 to 7.5 Mio t (Table 4). In response to the decision to phase out conventional cages in all EU member countries by 2012, investments in new facilities could not be realized in all countries in time. As a result, egg production initially dropped, then returned to and finally exceeded former production. Between 2012 and 2013, the production volume grew significantly by 3.6%; in the following years at a decreasing rate: 1.4% between 2013 and 2014, 1.0% between 2014 and 2015 and only 0.1% between 2015 and 2016.

Table 5 shows the top ten EU countries in egg production in 2016. Changes in ranking compared to Table 2 are interpreted as the result of differences in the share of housing systems in the member countries. France ranks in an unchallenged first place, followed by Germany, Spain and Italy. The regional concentration in egg production is rather high. The top ten countries produce 84.4% of the total EU egg production. With the exception of the Netherlands, the ranking in egg production reflects the human population in each country.

A projection of production and demand until 2025

In **table 6**, the development of production and demand is extrapolated from 2017 to 2025.

Egg production in the EU currently exceeds consumption by about 5.0%. Unless the excess production can be exported either as shell eggs or as egg products, a lasting period of relatively low egg prices is expected. As a way out of this dilemma, more emphasis on added value of eggs and egg products is recommended.

References and additional literature

Committee for the Common Organisation of the Agricultural Markets (Ed.): EU Market Situation for Eggs. Brussels, August 27th, 2017. https://circabc.europa.eu/sd/a/18f7766e-e9a9-46a4-bbec-94d4c181183f/23.03.2017_eggs_Europa.pdf

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Table 4. The development of egg production in the EU between 2012 and 2016
(Source: MEG 2017)

Year	Egg production (Mio t)	Index (2012 = 100)
2012	7.047	100.0
2013	7.303	103.6
2014	7.400	105.0
2015	7.470	106.0
2016	7.478	106.1

Table 5. The top ten countries in EU egg production in 2016
(Source: MEG 2017)

Country	Egg production (1,000 t)	Share (%) in EU production
France	953	12.7
Germany	881	11.8
Spain	866	11.6
Italy	840	11.2
United Kingdom	776	10.4
Netherlands	715	9.6
Poland	600	8.0
Romania	345	4.6
Belgium	176	2.4
Czech Republic	156	2.1
10 countries	6,308	84.4
EU	7,478	100.0

Table 6. Projected development of egg production and consumption in the EU between 2017 and 2025 (Source: EU Committee 2017)

Year	Production Mio t	Consumption Mio t	Surplus %
2017	7.762	7.391	5.0
2019	7.885	7.498	5.2
2021	8.010	7.607	5.3
2023	8.138	7.718	5.4
2025	8.270	7.831	5.6
Increase (%)	6.5	6.0	

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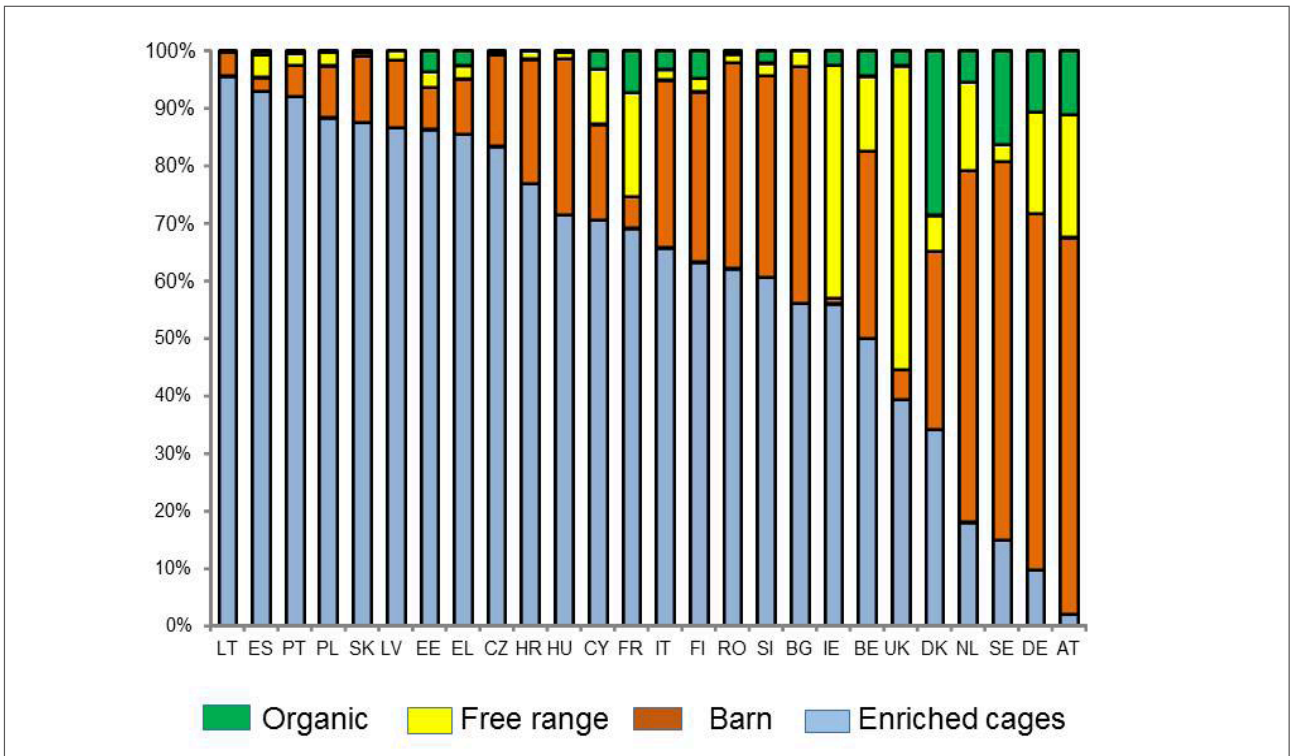


Figure 1. The share of housing systems in EU laying hen husbandry (EU Committee 2017)

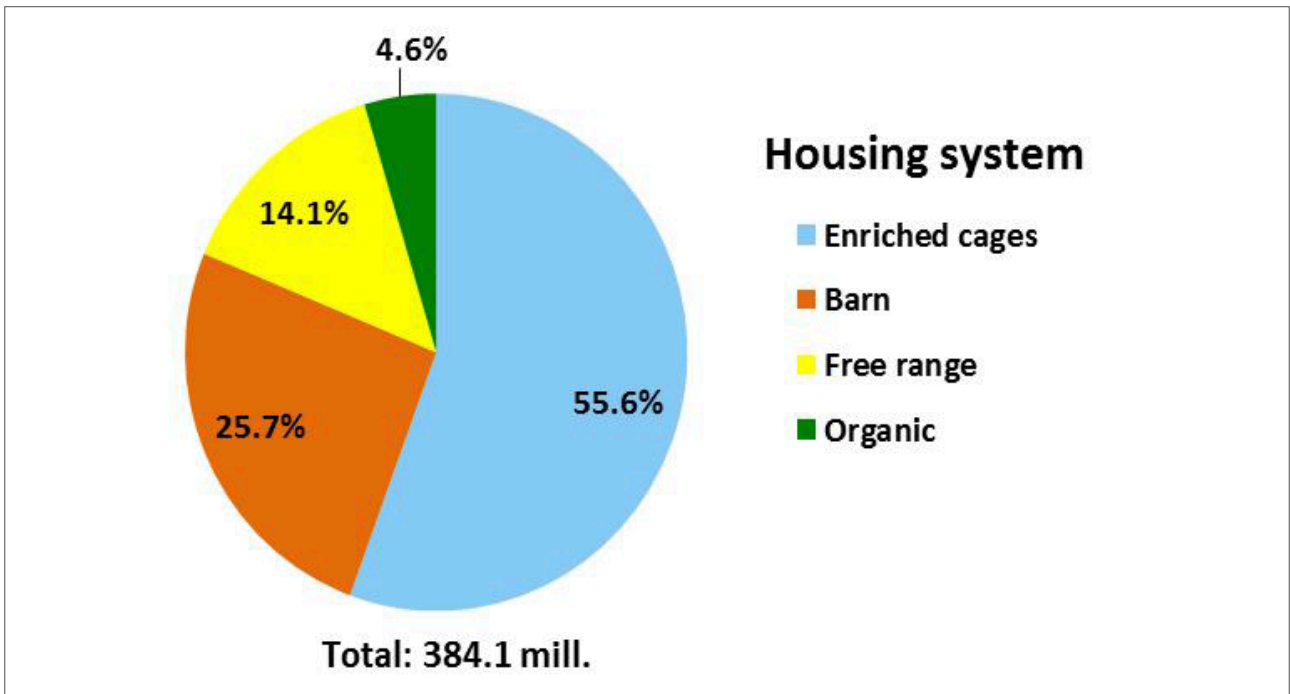


Figure 2. Housing systems in laying hen husbandry in the EU member countries (2016) (Source: MEG 2017)