Perspectives and challenges for the EU egg sector

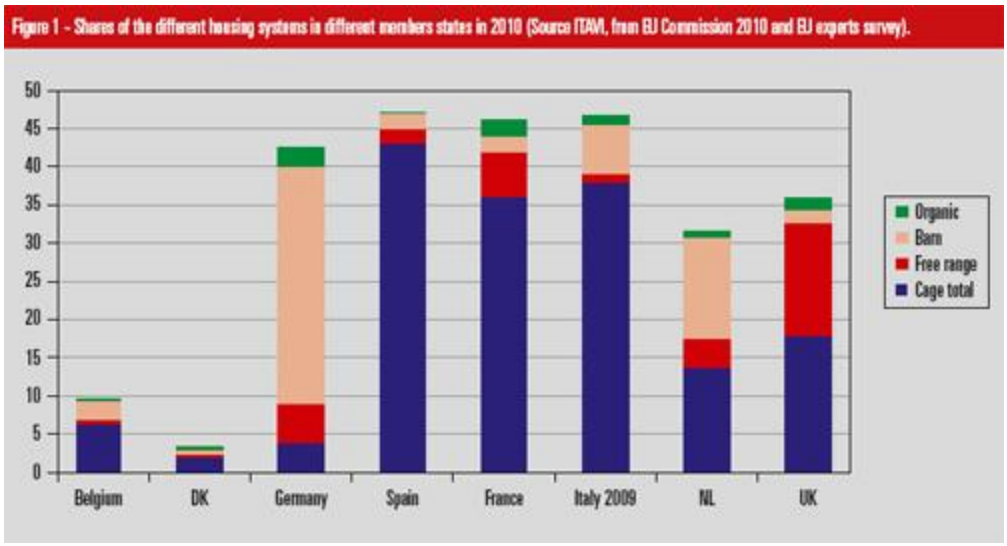
//09 May 2011

From 2012, egg producers in the EU must comply with new standards for layer housing. A survey in eight important member states makes clear that considerable differences between countries exist. Prediction scenarios indicate what long term production will look like.

By Pascale Magdelaine, ITAVI and Véronique Gonnier CNPO , France*

For ten years and more, production systems within the EU have registered a strong diversification, with a switch from cages to alternative housing systems, due first to the new consumers' expectations concerning animal welfare, and secondly to the European welfare regulation implementation. ITAVI and CNPO have carried out a short survey by questioning European experts in order to determine the changes in housing systems by 2012 and to provide some thoughts for the long term in order to enrich a French forecast driven by INRA, ITAVI and CNPO.

Seven countries with a total of 214 million laying hens in 2010 (60% of the European hens) have answered this survey. Within the EU, two thirds of the total number of laying hens were kept in cages in 2010, compared to 92% in 1996. Barn systems follow with 20% of the hens and free range with 10%. Organic production only represented 3% to 4% of the hens (*Figure 1*).



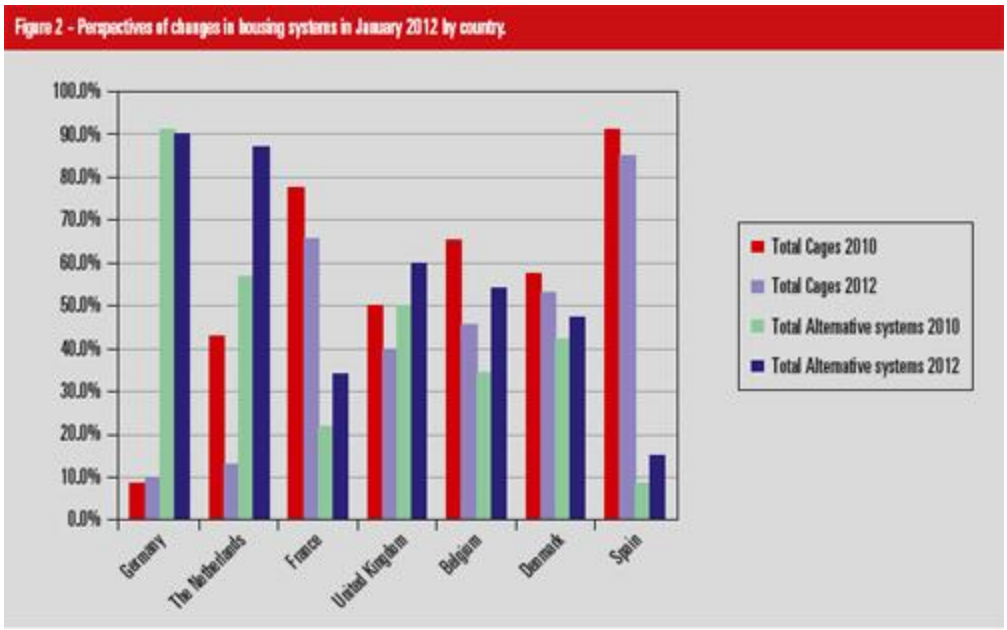
Specific national regulations

Regulatory backgrounds and consumer demands are quite different in the member states and explain the various national shares of the different production systems. Germany and the Netherlands have better anticipated the 2012 deadline, due to specific national regulations and under the pressure of the retailers who have banned all cage eggs (including enriched cages).

In 2010, German eggs were already produced for over 90% in alternative systems while these systems in 2008 only represented 40% of laying hens. The share of alternative systems is expected to grow in all the countries. Higher growths are expected in the United Kingdom for free-range productions, and in the Netherlands for barn production. The Netherlands follows the same trends as Germany, but with a two years delay.

The other countries, such as Denmark, France, the United Kingdom, Belgium and Spain are expecting a switch from conventional cages towards enriched cages rather than the barn system.

In 2012, the share of alternative systems (codes 0-1-2) will grow in all the surveyed countries, and the share of cage systems will decrease from 43% to 13% in the Netherlands, from 78% to 66% in France and from 50 to 40% in the United Kingdom *(Figure 2*).



Thoughts for 2025 scenarios

Several experts underlined the high level of investments needed in order to fulfil the 2012 regulation and, in consequence, think that few changes will occur between 2012 and 2025 or only after 2020. Long term egg consumption is expected to be slightly higher or stable in 2025 because of good health and nutritional assets and less concerns about cholesterol. Processed egg products should take an increasing part in the total egg consumption (up to 35-45%, depending on the country), due to a general trend towards convenience food. The egg processing industry is expected to develop its supply in alternative eggs (codes 0, 1 and 2) under the pressure of some users (food industry and catering industry) looking for a positive and animal welfare friendly image for their business and for their brand.

Import from third countries

Nevertheless, the most shared concern is the risk of increased imports from third countries (United States, India, Argentina, and perhaps Brazil, but also Ukraine, Turkey and North Africa) to provide eggs for the processing industry. The barn eggs price and the results of a WTO agreement or of some bilateral negotiations such as EU-Mercosur will also be crucial. Some experts anticipate that, by 2025, the egg processing industry could import the main part of its needs from non EU countries.

Aviary and free range systems are well accepted in countries like the Netherlands and Germany.

Although most of the experts questioned think the production units will keep concentrating, those production units will probably remain family farms and the growth of the average size will be limited by environmental constraints, in particular in the Netherlands and in Belgium.

The contractual relations between the producers and their downstream partners (industry and retailers) should tighten. In the United Kingdom, where the structures are already strongly concentrated and integrated, this trend could be more marked.

Scenarios for France in 2025

The agricultural research and technical institutes INRA and ITAVI conducted a scenario exercise for the poultry industry in 2025 called "Aviculture 2025". The French Egg Board used this analysis to work on a scenario-building for the egg sector in France in 2025. Three components gathered the main factors of the evolution for poultry sectors: public policies, consumption and distribution systems, and industrial strategies. From the results, we identified some hypothesis and built four scenarios at 2025.

Scenario 1: Egg sector caught up in globalisation

In 2025, the European market is fully open and direct subsidies to agriculture no longer exist. With this scenario, egg consumption is stable or slightly decreasing, egg products consumption increases to reach 40 to 50% of the total egg consumption, depending on the economic situation. However, due to less European barriers, egg products imports increase to provide 30% of egg products needs in France.

The French egg sector supplies mainly to the shell egg market. 50% of egg production comes from free range, 25% from enriched cages and 25% from aviaries indoor systems. But, the majority of egg imports come from cage eggs (85%).

Scenario 2: Egg sector looking for competitiveness

In 2025, the egg market is impacted by economic crisis, less purchasing power and health/nutrition development concerns. Egg consumption is increasing and egg products reach 40% of the egg market. European industry strategies have been developed and well-coordinated. Added to high tariff barriers, it has had a positive impact on the egg industry to be reorganised and modernised. The egg sector supplies a standardised market where price is the main purchase criteria. Egg farms are located where animal feed is cheap and near the consumption areas. Big farms directly linked with packing stations are the main way of production, with cage production (70% of egg production) or big aviaries in the case of a ban of cage eggs in retail. Egg products industries are organised at the European level with some major companies. But, they supply egg products at the regional level. Share of farms dedicated to producing eggs for egg processing are increasing.

Enriched, barn, free-range, or organic

Enriched cages - Cage area per hen should be at least 750 cm^2. Cages should be enriched with a nest, litter such that pecking and scratching are possible, as well as appropriate perches.

Barn production - Hens can be kept on the floor or in multi-tier systems. The stocking density must not exceed nine laying hens per m2usable area. If rearing systems are used where the laying hens can move freely between different levels, there must be no more than four levels.

Free-range production - The requirements are the same in the building as for barn production. Also, hens have continuous daytime access to open-air with maximum stocking density of one hen per 4 m2.

Organic production - Hens are kept free range and should follow specific rules such as using organic feed, and limiting the use of veterinary treatments.

Scenario 3: Egg sector boosted by sustainable development

In 2025, Europe has used its experience and history of sustainable development to counter international competition and raise the quality of its agricultural production by taking advantage of its technological skills and high consumer expectations. Meat consumption is decreasing when egg consumption is strongly increasing. Consumers prefer even more fresh, high-quality products because of concerns about health impacts, environmental protection and animal welfare. Egg products share decreases to 30%. Following 'consumers' and 'citizens' concerns, the retailers sell only non-cage eggs. 20% of production comes from cage farms to supply quasi exclusively egg processing industries.

Scenario 4: The egg sector joins the global food regulation

Major climate changes and global health epidemics have threatened world food supply and distribution. To manage a global risk of food shortage, the world community established an international organisation to help secure food supply, distribution and quality across the globe. The regulation of food production and supply is furthermore essential to protect natural resources via sustainable methods of food production. Intensive production systems are developing as it is the only way to optimise the utilisation of natural resources. The production needs to be located near consumption areas to optimise costs of transports and energy. Welfare concern is no more a priority, first of all humans needs to be fed. Alternative eggs in France are stabilised between 20 to 30% of the egg market. French egg production is strongly increasing to supply the world egg market, thanks to cage egg production being strongly rationalised and efficient.

Table 1 - Key data for the four French scenarios

	Egg consumption /inhabitant	Egg products market shares in consumption	Percentage of imports in consumption	Segmentation of egg production in France
Scenario to refer to 2008	230	30%	15%	80% code 3 20% codes 0, 1, 2
Scenario 1	230	40%- 50%	30 % (egg products)	25% code 3, 25% code 2 50% codes 0, 1
Scenario 2	240	40%	15%	70% codes 2, 3, 30% codes 0, 1
Scenario 3	260	30%	15%	20% code 3, 30% code 2, 50% codes 0, 1
Scenario 4	260	40%	15%	70-80% code 3, 20-30% codes 0, 1

** In cooperation with Peter Van Horne (NL), Hans-Wilhelm Windhorst (Germany), John Newton (UK), Maria del Mar Fernández (Spain), Johann Zoons (Belgium) and Jørgen Nyberg Larsen (Denmark)*