

# Economic benefits of standards

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## Abstract

In the European Union there are comprehensive legal requirements, especially in the field of animal processing. Standards therefore play a very important role. First and foremost, producers and suppliers try to position themselves on the market vis-à-vis competitors with stricter requirements than those of the statutory regulations. The EU criteria are the basis, whereby the scope for interpretation in the various countries proves to be very diverse. This results in a very difficult environment for consumers and market participants to evaluate the respective requirements objectively. The contribution to the economic benefit of standards is intended to filter out examples of this in the field of poultry meat production. In the course of the past years, numerous innovations have been made here. On the one hand, the EU Commission is trying to protect the common market against dumping prices from third countries, which have competitive advantages due to better location conditions, with customs duties and specifications. On the other hand, private standard setters with significantly higher standards, e.g. in the areas of animal welfare, ecological production and sustainability issues, have increasingly established themselves on the market. Ultimately, however, this is also about profit. The economic benefit plays an extraordinarily large role. However, there are restrictions for suppliers outside the EU due to numerous restrictions, customs regulations, requirements in the area of food hygiene, animal welfare and animal disease issues. The poultry sector continues to be a growth market as consumers' demands for high quality and low-calorie food are particularly met. The contribution is intended to highlight the economic benefits of standards and requirements that go beyond them. But also, restrictions on the basis of legal requirements and differentiations from other countries through customs duties and additional duties are to be explained.

*Competition, evaluation parameters, labelling, animal welfare, prices*

## The Situation

The trade in poultry meat has developed rapidly within the European Union. At the beginning of the 1960s, the production of poultry meat was insignificant. At that time, poultry meat was imported from Eastern European countries, but also from the USA. In the meantime, however, the situation has changed. The European Union is today one of the world's largest producers of poultry meat. Consumption is growing steadily, and self-sufficiency is well above 100%. While many years ago it was still necessary to meet the growing demand with imports, today poultry meat is exported to keep the market in balance. Despite increasing consumption, there is overproduction. World trade in poultry meat and products is therefore very important and new markets are being opened up.

Imports of poultry meat remained largely constant at just under one million tons. They concentrate on high-quality deboned chicken meat, as it makes little sense to transport whole animals because of the transport costs. The main export countries are Brazil and Thailand. But there is also trade in poultry meat within the EU, in particular turkeys, ducks and geese. The main producers are France, Hungary and Poland. (Plate VI, Fig. 1)

The European Union has created a large number of regulations and standards for regulation. These range from production requirements within the framework of marketing standards, hygiene standards, residue requirements, animal health regulations to traceability and traceability along the entire process chain. There are also trade barriers for sensitive products in the form of tariffs and additional duties.

The evaluation of standards and the resulting economic benefits have a high priority, especially in the area of animal welfare with farming projects play an important role in many countries. Especially in Germany there are numerous initiatives. Animal welfare,

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NGO's, legislation and the food retail trade all rely on specifications and standards. The food companies have agreed on a uniform seal for the labelling of the farming methods. Labelling requirements are gradually being introduced on the packaging of pork, poultry and beef products. The main interest is not so much ideological as economic aspects.

This common marking shall provide information on how the animals have been kept directly on the packaging of the products concerned. The consumer gets an orientation guide when buying these products. Animal welfare entails additional costs and therefore higher prices are the result. However, there is now an enormous variety of different seals that go into the thousands. The following overview is only a very small selection of the variety of seals available. (Plate VI, Fig. 2)

### **Methodology**

The Livestock Welfare Initiative (LWL) has developed standards for the assessment of animal welfare claims based on the Housing Condition Score (HCS). On the basis of an evaluation scheme, it is emphasised on a neutral basis how the respective standards of the system providers are to be assessed. This includes the entire animal processing. In addition, there are parameters for traceability along the process chain. The example of poultry meat will be used to examine the essential characteristics. The basis for this are scientific statements and evaluations of the so-called animal fairness index of Professor Bartussek, Austria. The specifications were further developed within the framework of the LWL initiative and adapted to current circumstances. The focus was on animal welfare, traceability, quality features, feed and controls along the process chain.

With the definition of clear evaluation criteria, according to the state of the art of research and science, which focus on animal behaviour, aspects of husbandry, management and animal health are equally taken into account. This includes the clarification of the added value for the consumer through a label with recognition value. The evaluation is based on an integrative approach. In order to achieve the necessary balance between science and practice, the correct selection and combination of different animal welfare indicators is of utmost importance. (Plate VII, Fig. 3)

### **Hypotheses**

On this basis, the following hypotheses are put forward:

H1: Seals offer consumers benefits for orientation and promote sales.

H2: Quality criteria are neglected with seals and special features.

H3: Animal protection and animal welfare are in the focus, actually it concerns however only marketing.

H4: Seals have a clear added value compared to unlabelled products.

### **Label diversity and its evaluation**

Food safety and transparency play a decisive role alongside origin and traceability. In addition, an evaluation of the respective standards within the process chain is carried out. In addition, the different marketing channels of the food retail trade, which also tries to stand out from the competition with special positioning, above all through animal welfare and sustainability issues on the market, are presented. In addition, the course of production costs and the revenue situation are presented. Benefit of labelling also means creating a profitability overview based on production costs and sales prices. Different structures on the customer side, prices and relations to the revenue situation are also approaches to the evaluation of seals. It is therefore only a foray into the field of poultry, as the subject

of labelling is very complex and can only be evaluated to a limited extent within the framework of this presentation. (Plate VII, Fig. 4)

The approaches range from standards and verbal statements to very demanding seals, which have consistent specifications, animal welfare and sustainability standards, but also include social aspects with specifications for employees, e.g. no child labor, exploitation of the disadvantaged, etc. Overall, the aim is to add value to the standard in order to signal to consumers that they are buying something special.

In principle, the marketing of seals and quality marks is subject to trademark law, which applies throughout the EU. The aim is to ensure that the signs in question are capable of being protected. This also creates a degree of legal certainty for the consumer. However, no statement is made about the quality of the products bearing the seal; this is the responsibility of the respective distributor.

The “Assessment of Standards/Welfare” overview shows the effects of how standard and quality programs can be recorded and defined. This is about transparent and credible labelling of products that trigger a positive cycle. Consumer confidence is an essential feature. It creates demand for products that meet certain quality characteristics and/or higher animal welfare requirements. As a result, this in turn means demanding the justification of higher prices. This, in turn, offers producers incentives to expand production to higher standards or animal-friendly or animal welfare-oriented standards. The result is a positive cycle for evaluating standards and animal welfare requirements. The chart also shows that it is quite possible to establish oneself in the market with higher targets. (Plate VIII, Fig. 5)

### **Production costs, prices**

The following overview is based on our own surveys. The standard, legal requirements for the broiler mast were rated with the index 100. In the area of barn management, slowly growing breeds with additional run up into the so-called winter garden and lower stocking density, higher costs arise. This applies especially to the additional provision of an outlet in the open. The organic production has significantly longer fattening times, slow growing breeds and sets additional standards for the standard and the feed, which comes from organic production and is free of genetic engineering and contains no residues such as pesticides. (Plate VIII, Fig. 6)

Animal welfare has less strict requirements with regard to feed, here additional criteria apply for animal welfare, in particular more free space and significantly fewer animals per square meter. The costs for the rearing of male animals are extremely high due to the high feed consumption during the long rearing period. The feed evaluation is very bad in comparison to the broilers. In addition, the animals come from ecological breeding. (Plate IX, Fig. 7)

The price development of poultry meat is illustrated using the example of consumer prices for chicken breast (fresh). It is interesting to note that the discount with low prices differs considerably from the other sales channels. Particularly high prices are achieved on weekly markets, as consumers apparently expect higher standards and regionality here. However, if you look at sales, the largest share of sales is accounted for by the discount segment.

### **Distribution channels for poultry**

The purchasing consumer behavior is of particular interest. Most poultry meat (whole animals and cuts, fresh, frozen) is sold in the discount area. Aldi and Co reach more than

70% in Germany, while the traditional food retail trade (REWE, EDEKA and Co.) accounts for around a quarter of the market. (Plate IX, Fig. 8)

### **Evaluation of label and standards**

The topic of animal welfare has become particularly important in many countries. In Germany, the food retail trade has come out in favour of uniform husbandry labelling. That's unique. With the Animal Welfare Initiative, an attempt was made for committed retail groups to agree on a uniform seal for the labelling of animal husbandry methods. It is intended to provide information on how the animals from which the meat originated were kept. On the basis of the four-stage categorisation, based on existing quality, animal welfare and organic standards, how the animals were kept is to be shown.

Stage 1 Stable housing

Stage 2 Stable housing plus

Stage 3 Outdoor climate

Level 4 Premium (this category also includes organic products).

Ultimately, however, it is also a question here of highlighting an added value compared with the standard. Only at first glance is the new labelling a good approach. Level one is merely the legal standard. Stages two and three also contain more or less only legal requirements with a little more space in the stables. This again makes it clear that it is actually only a matter of benefit, from which less the animals, but rather the producers and marketers' profit. Consumers thus fall by the wayside, because they have to spend more money on what is already regulated according to legal requirements.

### **Evaluation requirements**

Die Livestock-Welfare-Initiative (LWL) hat sich zum Ziel gesetzt, vorhandene Standards und Qualitätsprogramme vergleichbar zu machen und somit eine einfache, glaubhafte und leicht verständliche Bewertung von Produkten mit Tierschutzstandards zu bieten, letztendlich mit der Aussage „wieviel Tierschutz ist bei der Produktion eines Produktes berücksichtigt worden?“ In der Folge rechtfertigen höhere Standards und mehr Tierschutz höhere Preise für den Produzenten.

The specifications of the LWL initiative for the implementation and evaluation of systems, standards and labels are based on a so-called 3-pillar principle:

- postural parameters
- animal parameters
- Control and verification of specifications

The LWL-Initiative (Livestock-Welfare-Labeling) has developed parameters with participants from science, animal protection, producers, food trade and quality managers and evaluated standards in the field of animal production. It is a holistic procedure that requires the establishment of minimum space requirements for body movement, undisturbed eating, elimination, resting, drinking, exercise, etc. The first step is to check compliance with minimum standards and requirements. The provisions of the relevant EU directives and ordinances as well as the national specifications and animal protection regulations in their current version apply as a basic principle. The standards to be evaluated contain defined test systematics. In addition, independent external controls and corrective actions must be defined.

### **Evaluation of posture-related parameters**

The evaluation of posture-related parameters (indicators) is carried out in accordance with the specifications or holding criteria of the respective standards. These are defined in

the marketing standards or organic production. Any additional parameters of the respective standards are also taken into account.

### **Animal-related parameters**

The animal-related parameters focus on the animal welfare aspect. They illustrate the necessary balance between science and practice and are therefore fixed on a manageable number of practicable, transparent and unambiguous indicators.

### **Additional parameters**

In addition, feed and traceability parameters are assessed. In particular, the renunciation of genetic engineering in feed and antibiotic prophylaxis are KO criteria. In addition, the special requirements in the area of organic production must be taken into account, such as area-based production, regionality, use of animal feed and additional purchases. Traceability is regulated by law, but not a batch or at least quantity-based traceability or traceability along the entire process chain.

### **Presentation about the sign**

The label is intended to present to the consumer the results of the evaluation of how much animal welfare the quality program has taken into account when producing the product. The presentation is based on a point system from 0 to 100 and can therefore be easily and comprehensibly traced. The higher the score, the better the standard. Based on the color scheme from red to light green, analogous to the traffic light system in the food sector, a clear statement is made. Green means that a higher standard of animal welfare is achieved, while red merely represents the commercial attitude required by law. (Plate X, Fig. 9)

### **Hypotheses**

H1: Seals offer consumers benefits for orientation and promote sales.

The offer of a product indicates the special feature of the offered product and increases the number of buyers. In fact, special markings can lead to higher sales. However, it must be ensured that the statements are actually correct.

H2: Quality criteria are neglected with seals and special features.

It can be, but it doesn't have to be. If the specifications do not meet the expected criteria, the advertised products lose acceptance. Because higher prices have to justify themselves on the market.

H3: Animal protection and animal welfare are in the focus, actually it concerns however only marketing.

Consistent animal protection is transparent. This also includes marketing, but only to show the differences between the respective standards.

H4: Seals have a clear added value compared to unlabeled products.

That's 100% true.

### **Conclusions**

Benefit of Labelling is a very complex area. Evaluating standards in different areas is a challenge that only works if certain parameters are set. These are determined on the one hand by the respective requirements of the standard setters and on the other hand by the additional bases of the valuation principles.

The results determined by the LWL-Initiative illustrate the significance of the respective labels and standards very clearly by means of the scores achieved in the graphic

representation. This is not only about animal protection and sustainability aspects, but also about contents that are set by the legislator at national and EU level, but also about more far-reaching specifications of the respective standard setters.

The production costs and thus also the economic aspect are difficult to classify in the evaluation. This also applies to competition, demand, wages, regions, social aspects and infrastructure. In addition, additional specifications are cost-intensive, because the provision of open land, the renunciation of genetic engineering, no killing of male animals in the area of laying hen husbandry, low stocking density, etc. mean more effort and higher costs. In this respect, the comparison of different seals can only be made with regard to specifications and content. Uniform parameters for evaluation, which enable comparability of contents and awards, are decisive for this.

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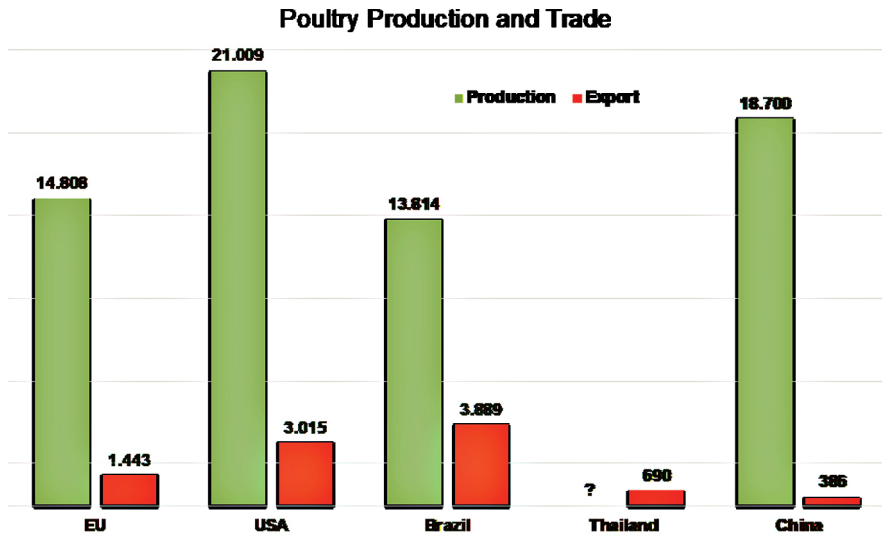


Fig. 1. Poultry production and trade, 2017  
Source: MEG Market balance for eggs and poultry 2018, own survey



Fig. 2: Example of different Labels  
Source: LWL-Labeling, Caspar von der Crone, CD Consulting gUG



Plate VII

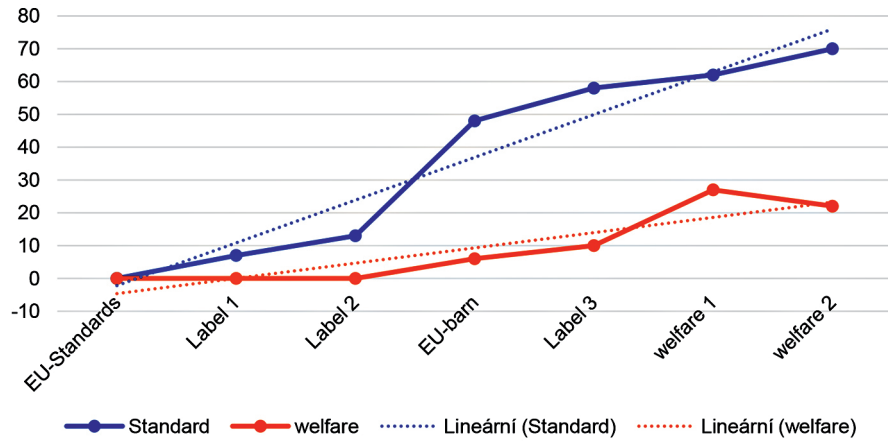


Fig. 3: Welfare Standards of Broiler, %  
Source: LWL-Labeling, Caspar von der Crone, CD Consulting gUG

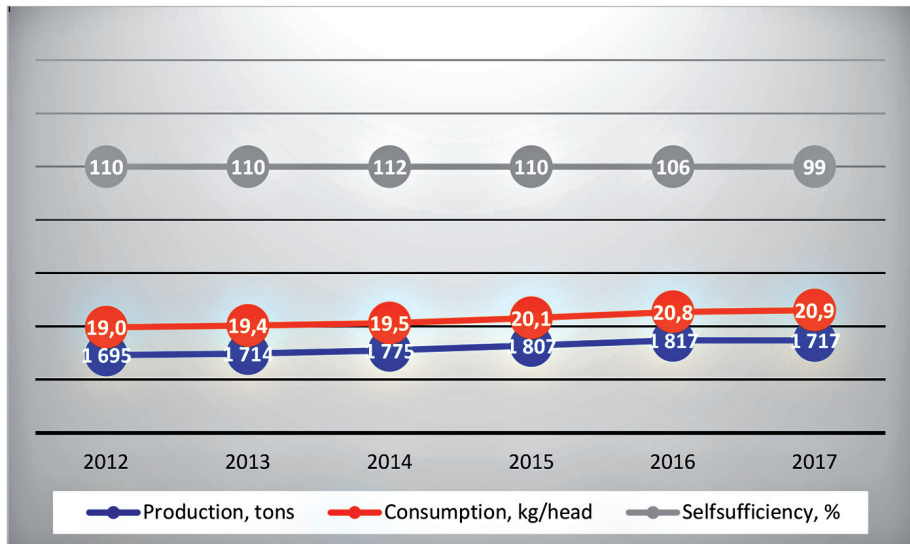


Fig. 4: Consumption and supply data  
Source: MEG Market balance for eggs and poultry 2018, own survey



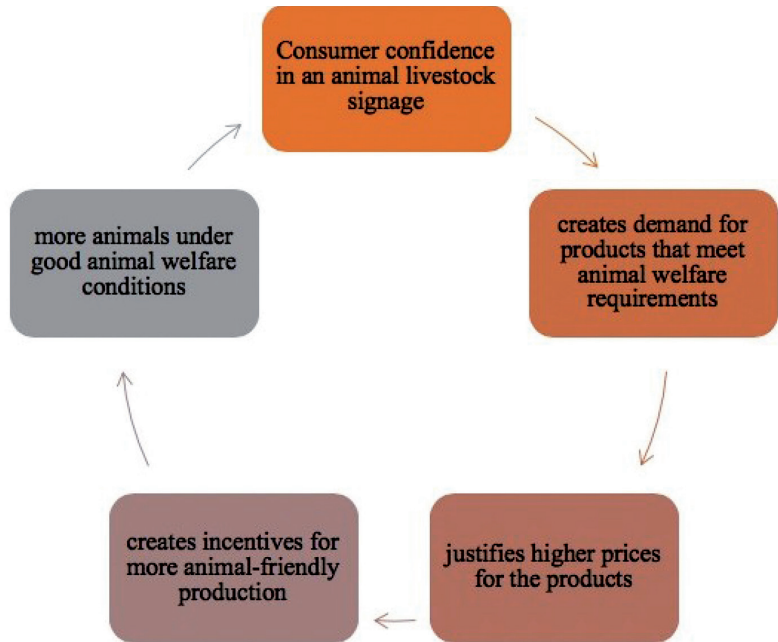


Fig. 5: Assessment of Standards/Welfare  
Source: Own survey

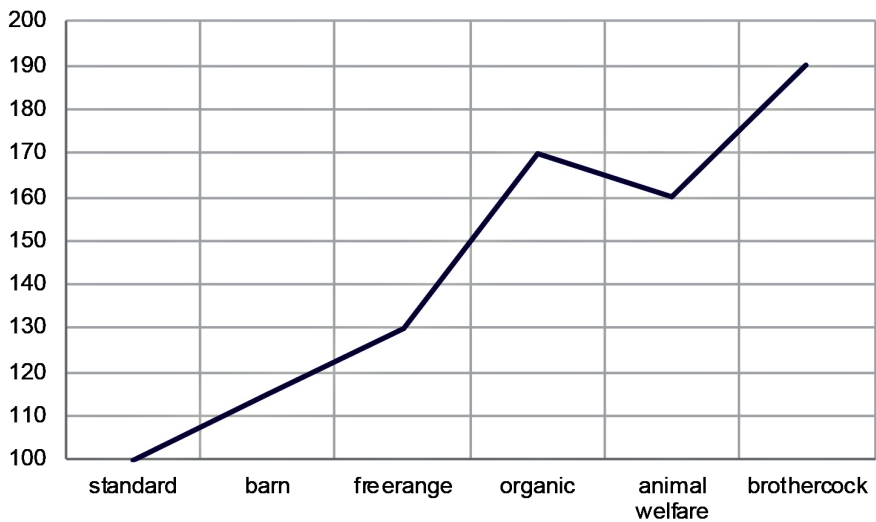


Fig. 6: Theoretical cost analysis  
Source: Own survey

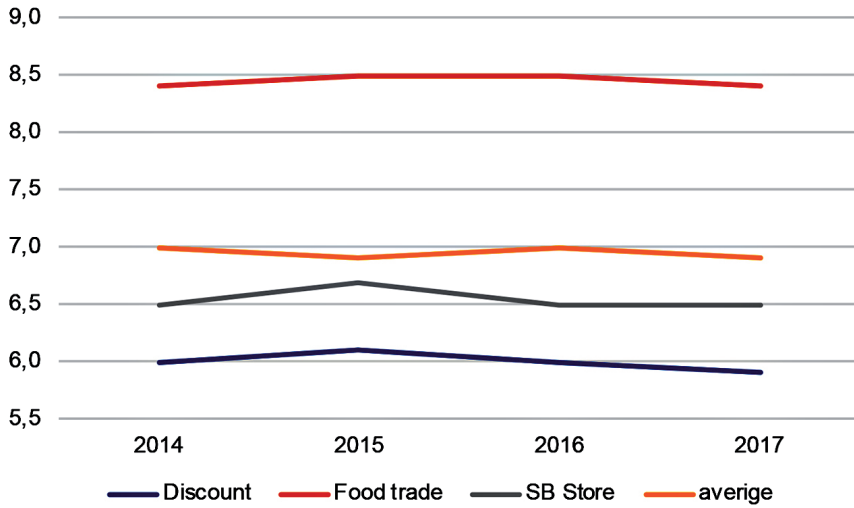


Fig. 7: Consumerprices for Chicken breast, fresh, €/kg in different Market areas  
Source: MEG-Market balance for eggs and poultry 2018, GfK, Ulmer Verlag

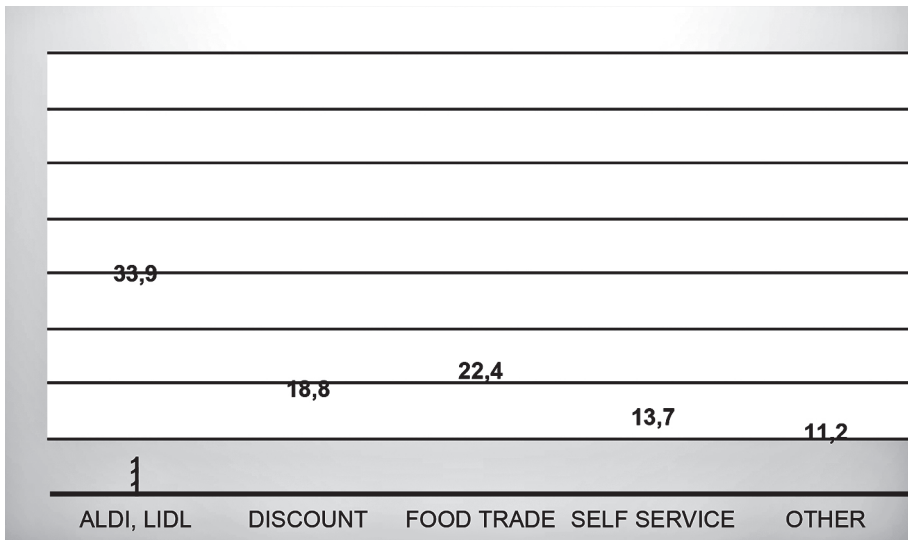


Fig. 8: Household purchase food trade, poultry  
Source: MEG-Market balance for eggs and poultry 2018, GfK, Ulmer Verlag

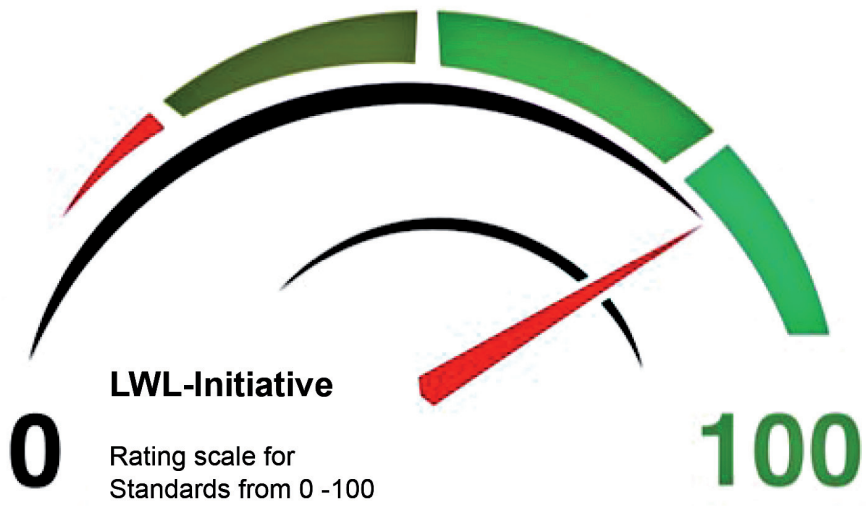


Fig. 9: Example LWL-Labeling  
Source: LWL-Initiative