

## POSITION PAPER

# Paradigm shift in livestock farming

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## 1 Problem: The market is leading livestock farming in the wrong direction

Most countries globally have made the decision to allow agriculture and food production to be managed within the context of private ownership and a market economy. Markets are interwoven globally. This has sent out important signals: Farmers are competing on a global scale, and those who do not succeed in increasing their farm's productivity in the future will sooner or later be replaced, whether by a competitor from their own village or from a foreign country.

This competition has driven livestock farmers to continuously strive for productivity increases. The performance of their animals is constantly on the rise, and ever fewer resources (feed, work hours, capital) are allocated per kilo of meat, milk or egg. On the one hand, high resource efficiency helps to alleviate pressure on the natural environment. While on the other hand, it leads to lower prices for the consumer, which increases consumption and has an additional impact on the environment. Over the last 50 years (1967–2017), this has led to worldwide meat consumption increasing by 262 %, while the global population grew by 117 % during the same period (FAOSTAT, [www.fao.org/faostat/en](http://www.fao.org/faostat/en); own calculations).

This is a conclusive development within the market economy. It makes animal protein a cost-effective food source for the world's population. However, more and more people are speaking up about the negative external effects of this trend. Their concerns are primarily around environmental and animal protection issues.

On the one hand, negative environmental effects exist on a regional level, since livestock farming is known to have a high local concentration in many countries. In these regions, more excrement and nutrients occur than the locally grown crops can absorb. Transporting slurry to other areas is uneconomical, because they have access to inexpensive mineral nitrogen. On the other hand, many are questioning whether, on a global level, the combination of high population growth and high individual consumption of animal food products necessarily leads to a failure to reach the Sustainable Development Goals. Currently, livestock farming is responsible for 14.5 % of global anthropogenic greenhouse gas emissions (Gerber et al., 2013).

Negative consequences for animal welfare exist for two reasons: Firstly, focussing on a singular breeding goal of 'high production performance' cause impairments in animal health. Secondly, housing systems that are optimised purely on the basis of cost have a negative effect on animal welfare and health (Fleischer et al., 2001; Brade and Brade, 2015; Oberländer, 2015; Swaby and Gregory, 2012; Sandilands, 2011; WBA, 2015). Such erroneous trends will not be eradicated by directing political appeals at breeding organisations and companies constructing animal houses. As long as farmers continue to demand low-cost housing systems and high-performance livestock as a result of economic pressure, genetics companies and building firms hardly have any choice but to tailor their offering to the farmers' demands.

These issues are not only discussed among academics, but have been dragged into the public sphere over the last

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few years by countless environmental and animal welfare organisations. This is where they have the most resonance. A survey of EU citizens, for example, showed that 82% of citizens felt that animal protection was currently insufficient (European Commission, 2015). The SocialLab research consortium was interested to find out if this differed according to the type of animal, and discovered that in Germany, the majority of the population felt that the way in which all the major livestock groups were housed required improvement. Where conflicts of interest exist between animal welfare and other sustainability goals, the population voted to give animal welfare the highest priority (SocialLab, 2019).

The default ethical standpoint for the majority of the population can be summarised by the following statement: "As long as animals must die for our food, we should grant them a good life beforehand" (Zühlsdorf et al., 2016). The analysis by Luy (2018) shows that the German Animal Welfare Act has strayed from this default position since its last amendment in 1972: Instead of taking the approach of evaluating animal suffering and animal well being (in the sense of a 'fair deal' as the population seems to want), the German Animal Welfare Act emphasises the human advantage by stating that 'No one may cause an animal pain, suffering or harm without good reason'.

Citizens could fulfil their own desire to improve livestock farming conditions by choosing more expensive animal welfare approved products when shopping. If there is sufficient private-sector demand for animal welfare, the market economy essentially provides the potential to muster up a healthy competition for the best possible solution to this requirement. During scientific analyses, around 80% of consumers revealed a certain willingness to pay more for animal welfare approved meat (Zühlsdorf et al., 2016). However, in a real life experiment in 18 consumer markets, it was found that even with a moderate price supplement, only around 16% of consumers who shopped at independent retailers actually chose animal welfare approved pork produce. A further 11% bought the significantly more expensive organic produce, whereas 73% bought the lower-priced, standard product (Enneking, 2019). The egg production industry has also had its fair share of experience: After the introduction of compulsory egg labelling in 2004, the market share of the cheapest product group (barn eggs/floor husbandry) was still at 58% in 2017 (BMEL, 2018).

It cannot be concluded from the actual buying habits of the population that the majority of Germans agree with the current state of livestock farming. The goals the majority of society wish to pursue are determined in parliament, rather than in shops. We don't do without a climate change policy because only a few people choose to buy "green energy", and we don't get rid of our development policy because only a small proportion of the population act upon fundraising appeals. People founded states in order to establish common goals and to achieve them efficiently. It is the core purpose of politics to establish compulsory ground rules for the economy, in order to meet the state aims (e.g. animal protection). Politicians cannot simply shed this responsibility by referring it back to individual consumers.

## 2 Proposed solution: National livestock strategy with three core elements

If society is not satisfied with the results of the market economy, then politicians are required to change the economic ground rules. In Germany, however, the economy has progressed independently by establishing the 'ITW' animal welfare initiative, which is essentially a political concept. The key companies and associations along the food chain have joined forces and agreed that the food corporations voluntarily contribute a total of 130 million Euro per year into a fund (ITW, 2018). Farmers are paid an animal welfare premium (per pig or hen) from this fund for introducing certain measures to improve animal welfare. This premium covers the additional costs of increased animal welfare requirements incurred by the farmers.

The concept corresponds to the policy measures that are normally established to improve animal and environmental protection as part of the second pillar of the common agricultural policy, except that the ITW is financed de facto by the consumer and not by the taxpayer.

The food retail industry is currently in the process of developing the ITW concept even further and introducing a label for the type of housing used. Tier 1 indicates the legal standard, tier 2 the ITW standard and tiers 3 and 4 the higher standards. Representatives from large retailers intimate that they intend to drop the legal standard in the foreseeable future. By revealing this publicly, they are putting pressure on themselves, at least in terms of easily identifiable products, but less so for mixed products such as pizza. They will have to pay a price supplement when buying tier 2 products, which is sufficiently high enough for the farmers to cover the cost differential between tiers 1 and 2. During negotiations, the farmers have successfully negotiated for the financial compensation to be paid as a separate animal welfare premium, which they can calculate with assurance, rather than in the form of higher prices.

In parallel, the German Federal Government has come up with a national animal welfare labelling system. This system also has a tiered structure, although with different tier descriptions and criteria. It is intended to be optional for businesses to adopt this system or not. At this point, it is almost impossible to predict how the two concepts will coexist.

In terms of animal welfare politics, it is important that in both systems, the market will lead the majority of production to be established just above the legal standards (tier 2) and that many businesses still remain in tier 1. In this case, consumers above all will feel good about mainly buying "animal welfare approved" products, but the population as a whole will be disappointed to realise after a few years that animal welfare has only gradually improved, rather than fundamentally. The goal of social acceptance in livestock farming will not be achieved in this way (Isermeyer, 2019).

Egg production is an instructive example of this: In 2004, an EU-wide labelling system was introduced for egg production. This led to so-called 'eggs from caged hens' disappearing from the supermarkets. Furthermore, the market became dominated by the next cheapest alternative: barn

eggs. Meanwhile, under the constant price pressure, no suitable housing solution had yet been successful in satisfactorily meeting the animal welfare standards (Thobe and Isermeyer, 2019).

These findings do not contradict the need for a labelling system. They highlight the need for politics and business to be clear that labelling is above all a means to protect the consumer: It enables interested consumers to understand how the animals were kept while they were alive. The fact that animal welfare approved products now form a lucrative market segment is merely a positive side effect and no more. If society wants the whole livestock sector rather than just a 'leading segment' to operate at a higher level of animal welfare, then its goal will not be achieved by a labelling system (Isermeyer, 2019).

In this case, it would be necessary to offer an animal welfare premium for all livestock farms achieving a higher animal welfare standard. According to the estimations of the German Scientific Advisory Board on Agricultural Policy, Food and Consumer Health Protection (WBA, 2015), 3 to 5 billion Euro per year need to be paid for the transformation of the German livestock sector. A sum of this magnitude cannot be made available as a 'voluntary contribution' by the food retailers as with the ITW principle, but requires a legal basis and funding from the government. During the actual implementation (operational auditing, etc.) of a government-funded scheme, it would make sense to incorporate the experience and organisational requirements set up by the ITW.

Various concepts are being discussed for reciprocal financing of the animal welfare premium. One approach could be to impose an 'animal welfare tax' on all animal products. From the farmers' point of view, this option has the advantage that the average revenue would need to be implemented specifically for animal welfare policy purposes, enabling more reliable planning. From an administrative standpoint, it would be easier to incorporate it into VAT regulations. Until now, consumers have paid a lower VAT rate of 7% on all food. If it were decided to increase the VAT on animal food products to the standard rate of 19% in future, an additional 6 billion Euro per year approximately would be generated for public funds (Isermeyer, 2019). However, a financial concept is only one of the three main areas of work required to set the – still market-driven – livestock sector on a new course towards higher levels of animal welfare.

The second area of work is around developing housing systems for all types of animal, which (a) work in practice, (b) have moderate additional costs, and (c) achieve good results in terms of animal welfare and emissions. This will not be achievable through the usual research funding and tender invitation procedures. An 'orchestrated' integrated concept is required, which will enable a few dozen test housing systems to be erected on farms, accompanied by the work of scientific institutions. During the design phase, both national and state-level as well as scientific, economic and civil society representatives should be involved from the beginning (DAFA, 2019).

The third area of work relates to amendments to building and environmental regulations. Under the current legal

framework, many redevelopment measures (e.g. redeveloping warm housing for pigs into an open-front shed) would not receive approval. The challenge lies in amending approvals regulations to (a) improve regional distribution of livestock farms over time and (b) provide evidence of acceptable emissions ratings in the sheds that have been built.

Regulatory law will undoubtedly also need to be amended in area of animal welfare. Due care must be taken, however according to the way grants are currently handled in the EU. An animal welfare premium may only be paid for animal welfare performance which lies above the legal standard. Making the national standard stricter would lead to lower premiums, and livestock farming being moved abroad as a result. Germany should therefore campaign for a change to the regulation on an EU level: A national animal welfare premium should compensate the total cost difference between (a) a production system that achieves the desired animal welfare performance and (b) a production system that fulfils the European Union minimum standard. As long as this is not yet achieved, the only way out for the German political system would be to only threaten to make animal protection provisions stricter at a later point in time (Isermeyer, 2019).

Above all, two fundamental questions remain to be answered by politicians: Shall we lead the entire national livestock sector away from cost minimisation paths, which are induced by the global market economy? And if yes, what target levels do we want to work towards? Unless the German Bundestag decides to clearly address these two questions, the livestock policy will remain fragmented. The goal of achieving social acceptance in livestock farming will thus remain out of reach.

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