## Introduction

## Consumer acceptance of livestock farming around the globe

Gesa Busch<sup>†</sup> and Achim Spiller<sup>‡</sup>

<sup>†</sup>Free University of Bozen, Bolzano, Italy <sup>‡</sup>Georg-August-University Goettingen, Göttingen, Germany

Livestock farming around the globe faces several challenges with one being to achieve acceptability for production methods by its customers. In recent years, public and consumer awareness about the way food is produced has highly increased with animal production being surrounded by many concerns from a public and consumer point of view. Thereby, the topics and art of discussions about animal husbandry are very diverse around the globe, not only between continents, but also between neighboring countries on the same continent. Discussions in North-Western Europe are characterized by the probably highest social pressure including active nongovernmental organizations (NGOs), undercover videos that are shot in stables, very critical media reports about contentious issues, public demonstrations against farming structures and practices, boycotts of firms, increasing legal requirements, and many more. In Southern Europe, concerns are also observable but on a lower level and merely focused on product quality. Looking overseas to North America or Oceania, the debates seem to be similar compared to Northern Europe, but on a lower level and at least partly focused on different issues or with a certain time lag following European discussions. The situation in developing countries, however, is rather unclear. Comparably little research is done on such topics in these countries.

For the animal science and farming community, the public pressure on the sector is an unpleasant topic. Farmers and veterinarians often "consider public concerns to reflect an ignorance of modern farming" (Sumner et al., this issue). The critiques are perceived to contest the achievements of some decades of research in animal husbandry and breeding with the main objective of an efficient, low-cost animal production sector that feeds the world. The preference of some parts of the society for more extensive husbandry systems questions these previous research priorities and successes. It is further not easy for scientists to cope with ethical questions and consumer preferences that are, due to their limited knowledge and information, partially ignoring the various trade-offs in a complex system such as the livestock sector.

This has led the agricultural sector to communicate actively with the public in recent years in order to correct existing misconceptions about animal husbandry. The main aim in many of such communication campaigns has been the provision of information and the transfer of knowledge from one side to the other, namely from the farming sector to the public. This approach, also called the "information deficit-approach" assumes that better knowledge within the public about farming realities will increase the acceptance of husbandry systems. Although such strategies may increase transparency with regard to animal farming, they have largely failed to increase acceptance for existing systems. In some cases, such strategies provoke the opposite reactions: better informed people are getting even more critical toward livestock farming due to the new information they received. Reasons may lie in differing frames of reference used by experts and lay-people when it comes to judging information and situations on farms but also in diverging values between the individual actors. In their paper, Sumner et al. (this issue) single out the different perspectives of farmers and veterinarians concerning dairy cattle welfare based on existing literature. Already on this intrasector level there are quite different believes and frames of understanding animal welfare. This underpins the difficulties that arise when communicating with external stakeholders such as the public. Nonetheless, there are also shared concerns that build common ground for the development of improved welfare levels and thereby better meeting public expectations toward animal husbandry.

All authors in this issue describe an "ongoing tension between production systems hesitant (in aggregate at least) to change and growing end-user desires for transparency and/or adjustment" (Tonsor, this issue). This friction is only partly moderated through market mechanisms. Market premiums for animal welfare products exist at different levels and vary by country but "concerns about the livestock industries are not the major drivers of consumer purchasing decisions" (Coleman, this issue) although such concerns are very prominent in the public. This consumer-citizen gap or the "unfunded mandate"

<sup>©</sup> Busch, and Spiller

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (http://creativecommons. org/licenses/by-nc/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited. For commercial re-use, please contact journals.permissions@oup.com

doi: 10.1093/af/vfx005

(Tonsor, this issue) of the consumer seems to be the most obvious obstacle to the improvement of the lives of farm animals. In other words, what the public wants is not (always) expressed in the consumers' buying behavior. Anyhow, this consumercitizen gap can be very different depending on countries. Tonsor (this issue) cites the U.S. example of cage-free eggs enforced by the voters but only accounting for 5% of market share. Contrastingly, in Germany the market share of free-range and organic eggs is above 30%. In the Netherlands, pasture access for dairy cows during summer is the most common system also represented with an outstanding position in the retail shelves. However, up to now it has not been fully understood which factors may lead to a reduction of the consumer-citizen gap and which innovations may be useful to promote market behavior that is socially desirable. There is some evidence that the increasingly concentrated food retail trade and NGOs play a central role.

Due to the difficulties in transferring social wants into buying behavior, sector initiatives that are trying to improve the welfare on a broader level and mostly detached from product differentiation are emerging. Bos et al. (this issue) analyze an approach of the Dutch poultry sector to introduce a sector-wide standard for chicken meat with requirements that surpass EU and Dutch regulations. The "Chicken of tomorrow" concept is described as a way to reduce the consumer-citizen gap in animal welfare debates. This gap is at least partly caused by high transaction costs, the problem of marketing only the more valuable parts of the animal as an animal welfare product in common labeling approaches, and the growing importance of convenience-food and the out-of-home market, both characterized by a low level of product differentiation.

However, the Dutch competition authority has evaluated this initiative as a violation of the EU-competition rules and thereby conflicts desirable improvement in animal welfare. Fortunately, in the Netherlands the leading retailers were able to enforce the new standard even without legal contracts. This development was supported by high pressure from animal welfare organizations, using a 'name and shame'-strategy to attach the most prominent retailers as gatekeepers in the supply chain. A similar innovative strategy is currently discussed in Germany. The "Initiative Tierwohl" (initiative for animal welfare) is a sector-wide attempt to increase consumer prices for meat and meat products on the retail level in all leading retail chains (about 6 eurocents/kg). The resulting budget of approximately 100 million euros per year is used to finance animal welfare improvements on the farm level. In economic terms, this agreement acts as a product tax for consumers that is used for supporting animal welfare improvements. The German national competition authority reacts in a similar way as its Dutch counterpart. In the fall of 2017, the authority declared that the system must ensure product traceability and labeling at least from 2020 onward-destroying the original approach of nonsegregation and nonlabeling and the possibility of keeping animal protection out of market competition.

In order to achieve a livestock sector that is more in line with values hold by many people from the public, husbandry systems need to be re-evaluated and adjusted in the long-run. It seems to be very clear that "ongoing research is needed to (...) provide grounded information to guide industry decisions" (Tonsor, this issue). Busch and Spiller (this issue) reveal a high preference for animals having outdoor access or the other way round: a strong rejection of pictures of indoor housing systems indicating a high value of naturalness from a public point of view. Sumner et al. (this issue) state that "public concerns about welfare are often related to natural living". Pointing into the same direction, Bos et al. (this issue) reveal that outdoor access is of central importance to Dutch consumers leading to a significantly higher willingness-to-pay for products deriving from such systems compared to indoor improvements. Nonetheless, such systems are far away from production realities on a larger scale. Nevertheless, it seems highly unlikely that a simple information strategy will lead to a change of these perceptions within the public making actions from the sector toward increased naturalness inevitable. Sumner et al. (this issue) as well as Busch and Spiller (this issue) criticize that farmers are often not sufficiently involved in the discourse about the future of animal welfare and farming systems. The comparably low level of willingness to cooperate in the entire sector as well as with stakeholders from society is certainly one of the main barriers to successful innovation.

In summary, all authors of this issue agree that farmers and the livestock industry should accept the animal welfare discussion as an opportunity. The livestock sector should act in a more proactive way in order not just to maintain markets, but also to improve the situation for farmers, to protect the license to farm, and to allow consumers to further consume animal

## About the Authors

Dr Gesa Busch is currently working as a post-doctoral researcher at the Free University of Bozen in the Italian Alps. She is passionate about working at the interface of social and animal sciences. Her research focuses on consumer demands and public debates surrounding livestock farming. Thereby, particularly



bates surroundby, particularly analyzing the role and effects of pictures in such debates forms part of her work. **Corresponding** author: gesa. busch@unibz.it.

**Professor Dr. Achim Spiller** is Full Professor for "Marketing of Food and Agricultural Products" at Georg-August-University Goettingen in Germany since 2000. His research focuses on food consumption be-

havior, organic food products, animal welfare from a marketing perspective, and management in agribusiness as well as food safety and security. He is a member of the advisory board of the German Federal Ministry for Food and Agriculture.



products that are produced according to values they share. Nevertheless, appropriate ways to achieve these goals are anything but clear. Traditional labeling initiatives are confronted with high transaction costs which lead to a stimulation of new sector-wide approaches (horizontal standards and stakeholder agreements). It will be interesting to see how animal protection and economic success will be achieved through innovative instruments of self-regulation and how this will influence public perception and consumer decisions in the future.

With our issue of *Animal Frontiers*, we would like to stimulate discussion about these topics and hope that you appreciate reading the diverse contributions included. Enjoy!

## **Literature Cited**

- Bos, J.M., H. van den Belt, and P.H. Feindt. 2018. Animal Welfare, Consumer Welfare, and Competition Law: The Dutch debate on the chicken of tomorrow. Animal Front. 8:20–26.
- Busch, G., and A. Spiller. 2018. Pictures in public communications about livestock farming. Animal Front. 8:27–33.
- Tonsor, G.T. 2018. Public animal welfare discussions in the U.S.—perspectives from a Missouri farm boy turned economist. Animal Front. 8: 4–7.
- Sumner, C.L., M.A.G. von Keyserlingk, and D.M. Weary. 2018. Perspectives of farmers and veterinarians concerning dairy cattle welfare. Animal Front. 8:8–13.
- Coleman, G. 2018. Public animal welfare discussions and outlooks in Australia. Animal Front. 8:14–19.