# Transformation towards animal welfare improved livestock farming - Consumer attitudes and financing approaches

Sarah Kühl and Gesa Busch

Abstract - Society increasingly questions the animal welfare levels in conventional husbandry systems. However, a comprehensive transformation of animal farming, which is needed to increase animal welfare and gain social acceptance, is linked to high costs. Therefore, this study aims to investigate 1) how significant the changes in livestock husbandry need to be from the consumers' point of view, 2) which financing approaches consumers prefer, and 3) whether these preferences correlate with the perception of the need for change in current livestock farming. An online survey with 919 German meat consumers was conducted to answer these questions. The results reveal that the majority of consumers agree that fundamental changes in livestock farming are needed (62%) and most plead for financing through the purchase of animal welfare products (58%) followed by general taxes (46%) and additional taxes on animal products (36%). The approach that farmers pay for changes on their own reaches a lower approval (11%). However, this agreement positively correlates with the perception that no or only small changes are necessary whereas consumers who see the need for major changes agree more with the usage of taxes to finance animal welfare improvements.

# Introduction

A recent report on how the public evaluates animal welfare in European agriculture found that an overwhelming majority (92%) perceive the current legislation as inadequate to protect and guarantee animals' needs (European Commission, 2022). This is just one study of many showing that consumers and citizens rate the current legislation for conventional livestock farming and therewith the prevailing conditions for farm animals as unacceptable. From a citizen's point of view more space, straw bedding, and outdoor access, preferably pasture access is needed for good animal welfare (e.g. Busch and Spiller, 2018). Currently, the majority of conventional agricultural husbandry systems are far from this idea. Thus, it can be assumed that the animal industry is at risk of losing the "social license to operate" unless a comprehensive transformation of the sector takes place. However, such a comprehensive restructuring of husbandry systems towards more welfare-friendly systems is linked to high costs. In Germany, experts of the Scientific Advisory Council for Agricultural Policy at the Federal Ministry of Food and Agriculture estimated that around 3 billion euros per annum are needed until 2040 to increase animal welfare in farming to an adequate degree. Within these discussions, several approaches for financing are discussed (WBA, 2015). It seems unlikely that market mechanisms are able to generate the needed amounts as well as that farmers will (be able to) bear these costs out of their own pockets. Additionally, due to high uncertainty about what a planned federal animal welfare label in Germany could look like, many farmers currently hesitate to invest in new husbandry systems. Apart from these transformation efforts, there are also some options to improve animal welfare right away with much smaller investments such as some more space or the provision of roughage or other manipulable material in conventional stables. However, it is known that most of these measures will not increase consumer acceptance of conventional husbandry systems significantly (Schütz et al., 2021). A real leap in acceptance and proper animal welfare improvements can only be achieved with systems including e.g. far more space, access to outdoor climate stimuli, or straw bedding.

Against this background, this study aims to investigate how large the animal welfare improvements in German animal farming should be from a consumer's point of view and how consumers assess different financing approaches for transforming the sector. It will be determined whether the attitudes regarding the changes needed in livestock farming correlate with the preferences for different financing approaches.

### **M**ETHODOLOGY

In order to answer the research questions, an online survey with 919 meat consumers living in Germany was conducted in March 2022. Quotas were set for gender, age, education, and income to generate an approximately representative sample for Germany concerning these aspects. In the first part of the survey, sociodemographic questions and food consumption behavior were asked. In the second part, statements regarding the participants' attitudes towards livestock farming in Germany and the perceptions of needed changes including proposals for their financing. In a subsequent third part, the participants' evaluation of small and large improvements in conventional pig stables was assessed. Next to descriptive analyses, two-sided Pearson correlations were applied. Data analyses were executed using IBM SPSS Version 27.

#### **RESULTS**

Only 5% of respondents agree that no changes in current livestock farming are needed to achieve good animal welfare (Fig. 1). Furthermore, only 36% state that small changes are sufficient whereas 62% see the need for a comprehensive transformation of livestock farming. Additionally, 8% state that animal farming should be fully abandoned in Germany (Fig. 1).

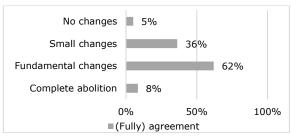


Figure 1. Participants' agreement (in %) on different levels of changes needed to achieve high animal welfare in livestock farming, n=919.

Concerning approaches for financing more animal welfare, most consumers prefer that consumers for whom animal welfare is important should buy corresponding products and therefore pay for it (58%), followed by the use of general taxes (46%) and taxes for all animal products (36%). The majority rejects that farmers should pay for transformation on their own – only 11% opt for this approach (Fig. 2).

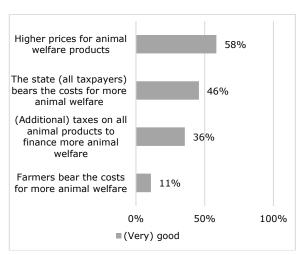


Figure 2. Consumers' assessment of different financing approaches for the transformation of livestock farming (in % of respondents), n=919.

Table 1 shows that the perceived need for change correlates with the assessment of financing approaches. If consumers see no need for changes in livestock farming, they evaluate the approach that farmers pay for animal welfare improvements more positively. The perception that large changes are necessary correlates positively with the approach to use taxes for financing.

**Table 1.** Correlations between the need for change in livestock farming and the assessment of financing approaches.

	Financing approach			
Change	AWF	Taxpayer	AP tax	Farmers
None	-0,052 <sup>n.s.</sup>	-0,189**	-0,071*	0,330**
Small	0,016 <sup>n.s.</sup>	-0,098**	0,02n.s.	0,203**
Large	0,093**	0,303**	0,191**	-0,128**
Abolition	-0,013 <sup>n.s.</sup>	0,305**	-0,112**	0,144**

Pearson's chi-squared test,  $^{\text{n.s.}}$ not significant, \*P<0.05, \*\*P<0.01.

#### **DISCUSSION AND CONCLUSION**

The results support the recent findings that current livestock farming in Germany seems unacceptable for the majority of consumers and that a comprehensive sector transformation is needed (Busch and Spiller, 2018). The slightly higher preference for market solutions through labels compared to taxes might be due to perceived responsibilities that especially consumers of animal products should pay for animal welfare improvements (Zühlsdorf et al., 2016). Additionally, labels offer the possibility of informed buying according to the consumers' needs (Lusk and Norwood, 2011). However, more analyses are needed to gain an understanding of why using general taxes is assessed more positively compared to levy taxes for animal products only.

The results further reveal that consumers' attitudes towards financing approaches correlate with the perceived need for how far-reaching a transformation of livestock farming should be. Consumers seem to be aware of the fact that a comprehensive transformation cannot be financed by farmers alone. How large support for different financing solutions in the population might be, should be analysed through further studies using information treatments.

## **A**CKNOWLEDGEMENT

We are grateful to the Lower Saxony Ministry of Food, Agriculture and Consumer Protection for financing this study in the project: "Analysis of marketing channels for products of sustainable livestock farming on the example of southern Lower Saxony".

# REFERENCES

Busch, G. and Spiller, A. (2018). Consumer acceptance of livestock farming around the globe. *Animal Frontiers* 8(1):1–3.

European Commission (2022). Factual summary report of the online public consultation in support of the fitness check and revision of the EU animal welfare legislation.

https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12950-Animal-welfare-revision-of-EU-legislation/public-consultation\_de

Lusk, J.L. and Norwood, F.B. (2011). Animal Welfare Economics. *Applied Economic Perspectives and Policy* 33(4):463 – 483.

Schütz, A., Busch, G., Sonntag, W. (2020): Environmental enrichment in pig husbandry – Citizens' ratings of pictures showing housing elements using an online-survey. *Livestock Sciences* 240:104218.

Wissenschaftlicher Beirat Agrarpolitik beim BMEL [WBA] (2015): Wege zu einer gesellschaftlich akzeptierten Nutztierhaltung. Gutachten. Berlin

Zühlsdorf, A., Kühl, S., Gauly, S., Spiller, A. (2016): Wie wichtig ist Verbrauchern das Thema Tierschutz? Kommentiertes Chartbook zur repräsentativen Umfrage, Göttingen.