# Trust no One? Citizens' Concerns regarding the Pork and Dairy Supply Chain

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## ABSTRACT

Latest studies show that a responsible treatment of farm animals is important to many citizens. Furthermore, societal expectations towards animal husbandry and present husbandry systems mismatch more and more. Thereby, pig production is criticized more than dairy farming. This paper gives insights into citizens' main points of criticism among the pork and dairy cattle supply chain. It also intends to show several aspects of distrust.

To capture a variety of opinions and expectations among the population, focus groups with citizens were carried out. For each topic (pig and dairy cattle husbandry) six focus groups took place in three German cities. Participants discussed about their perception of actual animal husbandry with respect to housing systems, animal health and well-being. Using content analysis with a mixed inductive and deductive category system, three sources of concerns were identified: role of farmers, legal framework and food retail.

First, participants reflect the role of farmers and discuss that farmers only comply with the minimum of statutory requirements. Accordingly, participants think that farmers accept fines in order to avoid changes in their animal husbandry. Second, participants doubt the legal framework. In their view the standards are very low, especially regarding animal welfare. So, for instance, it enables farmers to circumvent the regulations. To improve the situation, participants emphasize a major revision of the legal framework for animal husbandry. Another critical focus is on legal controls. Participants remark that controls are often announced previously. The third point of criticism affects food retail. It is complicated for consumers to understand the complete supply chain. According to this, animal production takes more and more place behind closed doors without transparency. Altogether these aspects lead to an increasing rejection of animal products. The concerns were stronger in case of pork than in case of dairy cattle. As a consequence, some participants state to consume less or no pork or change to meat alternatives.

Results suggest different possibilities among the complete supply chain, to understand citizens' points of concerns better and to improve the situation of farm animal husbandry. Doing so, citizens' concerns might be reduced resulting in more trust into the whole system again. Hence, more consumers of meat will be kept and will not consume more and more meat substitutes.

## **1** Introduction

Agriculture and food production are recent topics of public interest and media coverage (WEIBLE et al., 2016). Primarily livestock production systems are in the centre of attention in consumption debates (VANHONACKER et al., 2008). Thereby a mismatch emerges between current husbandry systems and societal perceptions (KAYSER et al., 2012). Studies show consistently, that public concerns about farm animal welfare are rising and especially many modern animal husbandry systems lose their acceptability more and more (EUROPEAN COMMISSION, 2005 and 2016). Overall, citizens of many European countries have preferences for a species-appropriate husbandry, because it can be seen as solution of many problems (KAYSER et al., 2012; ZANDER et al., 2013). A range of EU-wide studies point out the relevance of animal welfare at the buying decision (e.g. POUTA

et al., 2010) and confirm consumers' willingness to pay a small till middle surcharge for animal food produced under better husbandry conditions (KEHLBACHER et al., 2012; RISIUS and HAMM, 2017).

After several years of on-going discussion about how farm animals shall be treated (OHL and VAN DER STAAY, 2012), comparisons of livestock species show that pig and poultry husbandry is mainly criticized and described as in need of improvement (EUROPEAN COMMISSION, 2007; KAYSER et al., 2012). It is known, that lack of outdoor access, increasing stocking density as well as light and airquality are the main aspects of public concerns (TE VELDE et al., 2002, BOOGAARD et al., 2008, VANHONACKER et al., 2009). In contrast, dairy cattle husbandry is seen as much better (EUROPEAN COMMISSION, 2005; EVANS and MIELE, 2008; BOOGAARD et al., 2011). Nonetheless, for dairy farming systems also a drop of public's trust and more criticism can be reported (BOOGAARD et al., 2011, CHRISTOPH-SCHULZ et al., 2015).

Studies mention different factors influencing public criticism of modern animal production systems: Many citizens do not have precise perceptions of today's agriculture (ZANDER et al., 2013). Media contributions, often the only way to get information, can be disturbing and deliver a negative image (BOEHM et al., 2010). Simultaneously, an ethical view of animal husbandry with focus on animals' feelings and rights become important for many consumers in the EU (VERBEKE and VIAENE, 2000). Applicable for the EU, information about animal welfare criteria or information on husbandry systems is appreciated (e.g. VAN LOO et al., 2014; RISIUS and HAMM, 2017). Thereby, however, consumers' and farmers' understanding of animal welfare differs (VANHONACKER et al., 2008).

Regarding Germany, the Scientific Advisory Board on Agricultural Policy, Food and Consumer Health Protection at the Federal Ministry of Food and Agriculture established nine guidelines to ensure prospective animal husbandry practices, accepted by the majority of society.

But is societies' decreasing acceptance of animal husbandry only based on farmers' roles? In recent literature, other influencing factors of trust along the supply chain are discussed. DE JONGE et al. (2008) argue, that trust in food manufacturers play a great role in consumer confidence regarding the safety of food – much more than in the government, farmers or retailers. An earlier German study by ZANDER et al. (2013), dealing with societal perceptions on agriculture, points out that respondents would not only mention farmers if asked about the responsibility on animal husbandry. The state, consumers itself and the retail sector are also important drivers.

Hence, the aim of this paper is to give insights into citizens' main points of criticism among the pork and dairy supply chain. It also intends to show how distrust exists. To get a variety of opinions, an explorative research approach was chosen. The goal is to identify better citizens' main points of criticism on animal husbandry. Furthermore, it should be investigated, if other drivers, not only farmers, can contribute to more societal-accepted animal husbandry.

## 2 Methods

To capture a variety of opinions and expectations among the population, focus groups with citizens were carried out. In focus group discussions the moderation guides the discussion process by using a guideline with questions. The whole group of participants is asked. The aim is to ascertain perceptions and opinions as well as deeper structures of consciousness (LAMNEK, 2005). Single opinions do not have priority, but reveal the range of views. The interactions between the participants and their changes of view are important (MAYRING, 2002). Focus group discussions are not representative, but their advantage is to need only few repetitions and many of the results occur in a dynamic process. Thus, in contrast to standardised surveys, unexpected issues outcrop (HALKIER, 2010).

For each topic – pig and dairy husbandry – six focus groups took place in three German cities, two at each location. For the selection of the locations several criteria were appointed. The chosen cities were in different federal states, considering North, South as well as East and West Germany. The concentration of farms per region was considered for the two animal species (referring to STATISTISCHE ÄMTER DES BUNDES UND DER LÄNDER,

2011), including various forms of animal husbandry (more intensive or more extensive). Differences in stocking densities per region were also considered. The locations are given in Tab. 1.

Topic pig husbandry	Topic dairy cattle husbandry
Oldenburg (Lower-Saxony)	Schwerin (Mecklenburg Western-Pomerania)
Fulda (Hessia)	Essen (North Rhine-Westphalia)
Halle/Saale (Saxony-Anhalt)	Kempten (Bavaria)

#### Table 1: Locations of focus group discussions

Participants were acquired by a market research company. Quotas regarded age (18 till 70 years old), gender (at least 50% female) and employment (at least 33% employed) were specified in order to achieve heterogeneous groups. The discussions with up to eleven participants also included persons with vegetarian or vegan diets because today's conditions of animal breeding could affect individual's decision to consume or avoid the consumption of animal products. To get the consumers' true perception, discussions' topics were not mentioned in advance. Hence, participants couldn't inform themselves and had to answer spontaneously without any stimuli. The common guideline for capturing consumers' perception consisted of two open main questions: "What's your perception of the recent pig/dairy cattle husbandry?" and "What do you think, how does an animal feel itself in that kind of recent husbandry you talk about?". So participants discussed about their perception of actual animal husbandry with respect to housing systems, animal health and well-being. Depending on the plenty of answers, more specific requests about the perception space, flooring type or medication were proposed. In addition, they were asked to describe their purchase criteria for pork and dairy products.

All discussions took till 120 minutes, were recorded and transcribed afterwards. A content analysis following a category system was used to structure the main results (based on MAYRING 2002). Referring to guidelines of qualitative methods, the categories were discussed together within the project team in close coordination.

## **3** Results

During the analysis of the focus group discussions, three sources of concerns were identified: First, there is a suspicion above the farmers and their behaviour. Second, there is doubt in the legal framework and the inspection systems. Third and least, participants' criticism affects food retail.

#### 1. Suspicion above the farmers

Participants express their suspicion above farmers. They mention, that farmers only comply with the minimum of statutory requirements. Some participants argue that this behaviour is comprehensible, because the statutory requirements are farmers' point of reference. Furthermore, farmers have to be economically. Some participants underline, that prices for food lead to tense situations for the farmers and make it difficult for them to earn profits. Consumers have to think about that when buying cheap food. In contrast, some participants claim, that earning profits has priority for the majority of farmers and that they are not willing to do something more for animal welfare than the statutory requirements prescribe. They are only acting profit-maximising. Improving animal welfare is not important for the farmers, because this could be often in line with additional costs and reduces their profit.

In this context, concerns were mentioned especially in the pig discussions. Some participants argued that a widespread use of medications in pig husbandry is used for profit-maximising. According to that, they explained their concerns about residues in pork. Additionally, it was mentioned that the intensive pig rearing requires a prophylactic treatment with medications. Thus, following a few participants, farmers even try to find "loopholes", both within the statutory requirements and their controls.

Furthermore, participants discuss over farmers' behaviour in case of controls. They remark, that only controls may lead to improvements of husbandry systems. But these controls are often announced previously, so that farmers conduct improvements only temporary without a willingness to change their husbandry systems long-range. So, participants comment as well, that it is possible for farmers to produce without improving animal welfare even within the inspection system. Some participants underline, that they can image, the farmers even accept fines in order to avoid changes in their farming system.

### 2. Doubt in the legal framework

The second main point of citizens' concerns is linked with farmers' behaviour in case of controls. Participants emphasize that legal controls of husbandry systems are mostly announced previously. So they are less effective and open the gaps to circumvent the inspection system. It allows farmers to conduct improvements of animal welfare only temporary and after the controls are carried out, deficiencies are present, again. Participants argue, that such ways of controls and inspection systems do not lead to long-range improvements of animal welfare and do not cause trust for consumers.

Beyond, they talk about staff that carry out the control and argue, that staff is – as well as in other sectors – always rare. This may lead to a very wide time period between controls. So, long-range improvements in the animal husbandry systems do not have to be strictly realized, what is in turn with the impression of farmers' behaviour by some participants. Only temporary improvements are sufficient to pass inspections within the legal controls and framework. As a consequence the control systems need to be revised.

A few participants have more trust in the legal framework: They remark, that standards, for example about the space per animal in pig husbandry, are not adequate and very old. They are often very low, especially regarding animal welfare. Additionally, some participants pronounce distinctly, that the legal framework of animal husbandry needs to be revised. Only a major revision of the legal framework can improve the situation in pork as well as in dairy cattle husbandry.

Another mentioned point regarding the legal framework are penalties. If farmers do not pass the inspections and penalties are imposed, these penalties mostly turn out lenient. So, again, farmers get away without improving animal welfare and that's fully in line with the legal framework and the standards of the state. A few participants point out to understand the farmers and discuss about the role of the state.

## 3. Criticism affects food retail

Participants discuss about the situation at the point of sale. They remark, that it is complicated for consumers to understand the complete supply chain. Of course, there are several labels and possibilities to inform about the origin of animal food. But these information is mostly not easy to understand or even confusing. Many products do not have any information about animal husbandry. Moreover, animal production takes more and more place behind closed doors without transparency. Thereby, media reports are often the one and only way to get information.

Some respondents mention that consumers get nice pictures of lucky animals via commercials, but on the other hand, some media reports shock with the opposite. Participants discuss about their own perception and knowledge of animal husbandry. They admit not having enough information and, as a consequence, a wrong impression of the reality is given. Media reports sometimes cause worries about changed or faked labels. This does not only affect animal husbandry, but also the dates of expiry. This leads to distrust on food retails in general.

That permanent distrust in animal products is also regarding higher-priced meat and milk, as participants point out. Media reports include sometimes deception in the organic sector.

Some participants mention, as a consequence of distrust in the complete animal food sector, they occasionally buy substitutes for meat, especially for pork.

## 4 Summary and discussion

This paper has investigated citizens' concerns regarding pig and dairy cattle husbandry as well as the pork and dairy supply chain. The results of the focus group discussions suggest different possibilities among the complete supply chain, to understand citizens' points of concerns in a better way and to improve the situation of farm animal husbandry. It could be shown, that participants' concerns affect farmers, which is in line with previous studies, especially regarding pig husbandry (e.g. ZANDER et al. 2013).

Furthermore, the doubt in the legal framework plays a central role in participants' perception. This finding is consistent with finding of WEIBLE et al. (2016) in the case of pig husbandry and CHRISTOPH-SCHULZ et.al. (2015) in the case of dairy farming. Based on the impression, that inspection systems and the complete legal framework do not lead to long-range improvements of animal welfare, participants discuss about the role of the state. Results show, that accusation regarding missing improvements of animal welfare by the participants are not only based on the farmers and their behaviour. Rather, it will be comprehensible that farmers have to be economical and stay within the limits. So, following participants' discussions, a revision of the legal framework can be helpful to improve animal welfare. That means a revision of the standards in husbandry on the one hand, and tighter controls on the other hand. Thereby, it seems to be clear, that farmers could be relieved of societies' pressure to improve animal welfare. This could be very important; especially for mainly criticised pig farmers.

Additionally, a comprehensible communication of all improvements, established by law, can also be helpful. As the results show, participants admit not having a very well perception of animal husbandry, but want to get more information, also at the point of sale. Following RISIUS and HAMM (2017) for the case of beef, this can lead to a willingness to pay for labelled products. Thus, critical media reports mostly will not be the only possibility to inform about animal husbandry anymore.

With discussed statutory improvements and their purposeful communication, more consumers will be kept and go on eating meat and fewer will deviate to substitutes for animal products.

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