HOW – AND HOW MUCH? AN ANALYSIS OF OPTIONS FOR A TRANSFORMATION OF GERMAN ANIMAL FARMING TOWARDS SUSTAINABILITY

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How – and how much? An analysis of options for a transformation of German animal farming towards sustainability

Summary

Political and scientific actors express the need to transform current agrifood systems into more socially, environmentally and ethically just ones. Animal farming plays a central role in the transformation because the sector is, like no other agrifood sector, responsible for resource inefficiencies, climate issues and ethical disputes. This analysis contributes to the so far scarcely investigated field of the acceptance of different future pathways for animal faming by important stakeholder groups.

Embedded into a transdisciplinary approach of a 'Future Workshop' ('Zukunftswerkstatt'), stakeholders of the most relevant interest groups (agriculture and food processing sector, animal/environmental/climate protection) were asked to express and discuss their visions for the future development of animal farming in Germany. These perspectives were summarised into three major future scenarios, which we labelled 'Higher Standards' (S1), 'System Change in Animal Farming' (S2) and 'Alternatives to Animal Farming' (S3). They all differ in terms of the farming methods as well as the scale, e.g. animal numbers.

S1 seeks adjustments towards improved animal welfare and climate friendliness. Farmers should be able to modify their management and stables at tolerable costs. Changes in the system ultimately depend on consumer behaviour but are supported by public subsidies. The aim is to keep the scale of the sector similar to the current situation. S2 seeks a comprehensive change of the whole sector, making change ideally dependent on ethical or scientific norms of animal and environmental protection rather than consumer preferences, and at the same time guaranteeing a decent income for animal farmers. The raising of standards is accompanied by a significant reduction of animal numbers in Germany (40–60%). S3 seeks to replace animal farming (partly or totally) by plant-based and other protein alternatives, while in the transition phase standards for animal farming should increase with a full commitment to animal and environmental protection. This means animal farming is – over a long-term transition phase – transformed from a norm to an exception.

Our findings suggest that S2 might represent the most acceptable perspective in the wider array of interest groups, as S1 and S3 proponents might regard S2 to pursue at least some of their essential goals in the nearer future. However, the question of overall acceptance and feasibility of this scenario needs further research.

Keywords

Agricultural transformation, animal farming, social acceptance, stakeholder dialogue

1 Introduction: dialogue formats on the future of animal farming in Germany

The public debate about animal farming has been ongoing for decades but has become increasingly heated in Germany over the last years. During the rise of intensive animal farming between the 1960s and 1980s, the main question in agricultural politics was how it could be organised more effectively, centred more on the design of stables and farm management. The focus was on economic aspects, with minimum animal health and protection standards as a side constraint. In the last decade, however, sustainability has become more and more important. Ehical requirements in human-animal relationships have put more and more pressure on farming practices (EUROPEAN COMMISSION, 2007, 2016; HÖLKER ET AL., 2019; DEUTSCHER ETHIKRAT, 2020), even more so since affordable plant-protein alternatives have emerged. Moreover, environment, climate and global development increasingly determine society's expectations towards animal farming (EUROPEAN COMMISSION, 2007, 2016; JANSSEN et al., 2016; BUSCH and SPILLER, 2018). Prior to the environmental pressure, the issue of replacing animal farming by alternatives was mostly discussed in animal rights debates (LADWIG, 2021). However, due to the environmental and climate problems caused by intensive animal farming, public and scientific awareness has increased on the urgency of the matter whether and, if so, to what quantitative extent, animals should be kept for food purposes (STEINFELD et al., 2006; WEIS, 2013; KEMMERER, 2014; TWINE, 2021). This is why the political design of a sustainable future of animal farming will have to consider a combination of different factors, including the question to what extent plant-based or other alternatives to animal products might also be suitable to reach societal goals. This also requires a revaluation of interest groups and industries which are considered to be 'stakeholders' of the dialogue about the future of animal farming (VON GALL & VON MEYER-HÖFER, 2021).

Even though several changes of legal minimum requirements in animal farming have taken place, a social consensus on animal farming still seems elusive, and conflicts are increasing rather than decreasing (WBA, 2015; BUSCH and SPILLER, 2018; LUY, 2018; ZKL, 2021).

In order to settle the conflicts and reach agreements, policymakers have made numerous efforts to explore the public view on animal farming and seek areas of consensus, e.g. through representative surveys, but also through establishing expert and stakeholder committees (see figure 1: external findings). The 'Zukunftskommission Landwirtschaft' (ZKL) (Future Commission of Agriculture), initiated by Chancellor Angela Merkel in 2020 and the 'Kompetenznetzwerk Nutztierhaltung' (KNH) (Competency Network of Animal Farming), appointed by the Federal Ministry of Agriculture in 2019, have both been regulated and run by the Federal Ministry of Agriculture. While the ZKL addresses the whole agricultural sector including animal farming, the KNH explicitly focuses on animal farming but with an emphasis on pig farming. In its final report, the ZKL builds on and mostly supports the recommendations of KNH regarding animal farming (ZKL, 2021). Additionally, the DAFA (German Agricultural Research Alliance) developed a future scenario of what agriculture should look like by 2049. The government-funded project Future Agri-Systems develops both innovations and alternatives for conventional animal agriculture. However, none of the approaches has investigated the public and/or stakeholder acceptance of their visions.

As part of a government-funded research project on the acceptance of animal farming, called SocialLab Nutztierhaltung (SocialLab Animal Farming), the transdisciplinary 'Future Workshop on Animal Farming' ('Zukunftswerkstatt Landwirtschaftlich Tierhaltung') was initiated in 2019. It collects and structures stakeholder views on the future of animal farming, seeks to find areas of consensus and explores ways to implement pathways. Representatives of stakeholder groups of the animal farming sector (agriculture and food processing, animal/environmental/climate protection) were asked to express and discuss their visions for the future development of animal farming in Germany.

2 Aim and approach

This paper presents central findings of the Future Workshop on Animal Farming, specifying and clustering the position of stakeholders into three main visions for the future of animal farming.

The findings were generated in several workshops and face-to-face online meetings with representatives of interest groups and were completed by a review of position papers and other publications of these groups.

Special emphasis was given to the participant selection process. More than 60 persons representing important interest groups in the debate about the future of animal farming were invited to nominate NGOs and experts that should participate in the following project phases, representing involved interests including animal farming (conventional, extensive, organic), animal welfare, meat and dairy, as well as plant-based processors and distributors, environmental and climate protection. The nominees were contacted, and 20 agreed to participate in the Future Workshop on Animal Farming by presenting and discussing their future scenarios for animal farming in Germany.

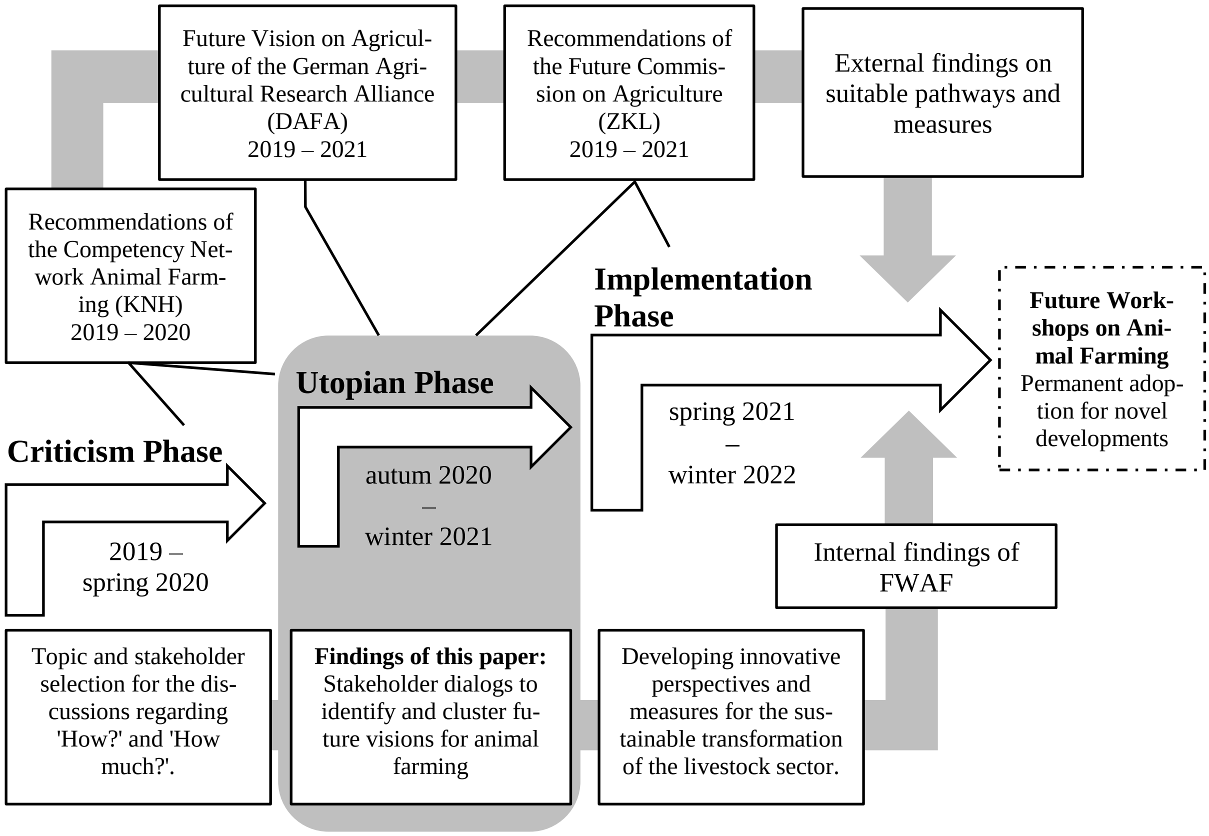
Agriculture was represented by various interest groups, which differed mostly in their appeal to social and ecological values. The perspective on animals was likewise represented by different NGOs. Additionally, views from industry representatives of the value chains linked to animal- and plant-based products were considered.

Future Workshops are usually run in different phases (JUNGK and MÜLLERT, 1997). Our internal findings (see figure 1) started with the first phase of the Future Workshop – the 'criticism phase' – aimed to determine the topics that should be discussed with the participants. Both the questions of 'how?' and 'how much?' with regard to future animal farming in Germany were deemed necessary by stakeholders during the first phase of the Future Workshop. The next step of the project – the so-called 'utopian phase' – presented in this paper collected and clustered positions on the 'how' and 'how much' into future visions for animal farming in Germany. These visions were utopian in the sense that they were not meant to be immediately realisable or in line with mainstream policies. The challenge of implementation will be tackled in the following project step and is not presented in this paper (figure 1).

The future scenarios were analysed by using the following criteria: timeframe, motives of change, animal farming approach, overall size of animal farming, associated diets and suggested instruments to implement the scenario. In order to categorise the different perspectives and positions, content thresholds were identified that clearly distinguished one group of visions from another.

The results were compared and adjusted with position papers and contributions to the debate during summer and autumn 2021. Following this approach, three main clusters of future scenarios were identified and labelled. The scenarios are similar within their group and heterogenous compared to each other. In one-on-one interviews and a feedback workshop with participants during winter 2021/22, comments and positions were collected among stakeholders to confirm the results. The process of the whole Future Workshop and the embedded utopian phase of discussions are presented in the following picture.

Figure 1: Methodological and chronological procedure of the Future Workshop on Animal Farming (FWAF)



Source: Own representation 2022

3 Results

Based on a set of criteria shown in table 1, three core future scenarios have been clustered. Table 1 provides an overview over the three identified clusters of future scenarios on what animal farming should ideally look like, as well as its size. Each scenario is described in more detail below.

The key distinctive features that led to the design of the three main scenarios were: a) the way animal and environmental protection should be maintained or increased; b) the way the conventional animal farming practices – aimed at high quantities at low costs – are kept competitive at world commodity markets; c) the way the market shares of plant-based or cultured protein alternatives are increased; d) the way animal farming is seen as an integral and valuable part of agriculture even in the distant future; e) the way the number of farmed animals in Germany is reduced.

Table 1: Overview of core future scenarios for animal farming

	Scenario 1 (S1)	Scenario 2 (S2)	Scenario 3 (S3)
Name	**'Higher Standards'** *('Höhere Standards')*	**'System Change in Animal Farming'** *('Systemwechsel in der Tierhaltung')*	**'Alternatives to Animal Farming'** *('Alternativen zur Tierhaltung')*
Key supporters	***Conventional*** *animal farming sector (incl. feed and breeding industry and processing)*	***Extensive, organic*** *and other* ***alternative*** *farmers, animal welfare groups, environmental and climate protection groups*	*Animal* ***protection/rights*** *groups, climate and environmental protection groups,* ***alternative*** *farmers;* ***plant-based*** *food processors*
Envisioned time frame	***Timely*** *realisation of changes, then no further changes*	***Timely*** *realisation of transformation,* ***phased*** *reduction scenarios*	***Long-term*** *transition with a strategic transition phase*
Main motives for change	***Maintain economical structures by*** *guaranteeing economic security and gains for the conventional animal farm sector in the future; scepticism about high ethical expectations towards animal welfare;* ***Maintain social acceptance*** *of current conventional, intensive production systems*	***New perspectives for animal farming*** *by embracing extensive forms of animal farming with fewer animals and in more circular systems; building respective value chains (local and fair);* ***Public appreciation of public goods*** *linked to alternative animal farming compared to conventional farming*	***Ethical and climate innovations*** *by striving for alternatives to animal farming and acting as ethically as possible; respecting planetary boundaries for planetary and human health;* ***Public appreciation of public goods linked to plant-based*** *products – image of plant-based or alternative protein foods*
Farming approach ('how?')	***Adjustments regarding animal welfare*** *(technical and managerial) for more animal welfare and climate protection*	***Holistic change of animal farming*** *towards more animal, ecological, climate-friendly, fair and local systems*	***Transition towards replacement*** *of animal farming. High animal and climate protection standards during the transition phase*
Envisioned size and animal numbers ('how much?')	*Depending on species:* ***maintaining and/or increasing*** *size of the sector and number of animals*	***Significant reduction*** *of approx. 50% by 2040 (varies by species)* ***and clear linkage between number of animals/hectare.*** *No or only minor imports of feed and exports of animals*	*Most or all* ***animal food products*** *that are not necessary to ensure a healthy diet* ***are replaced by alternatives***
Envisioned consumption patterns	***Maintain high consumption and export****-orientated meat industry*	***Reduction of the consumption*** *of animal-based foods (flexitarian/vegetarian diets)*	***Mostly plant-based or alternative protein*** *foods*
Associated political measures	*Mostly* ***world market-oriented*** *with competitive consumer prices; financial support for both lower and higher production standards*	*Stricter legal minimum standards* ***and market protection from global competition****, higher product prices, fewer exports and public financial support only for high standards*	***Competitive market environment for plant-based*** *and alternative protein products und subsidies for protein plants*

Source: Own representation 2022

Scenario 1 (S1) 'Higher Standards':

S1 is the least 'utopian' of the three presented scenarios, since it represents the interest in maintaining the status quo of profitability and world market competitiveness of conventional animal farming, and subordinates the necessary changes in animal welfare and climate or environmental standards to this goal. It seeks long-term economic planning security for conventional farmers and downstream industry by implementing technical changes and adjusting stable management to meet higher animal welfare and climate protection demands of the society. The number of animals and their production shall be kept at the current high levels. A key role for planning security is social acceptance of the conventional farming sector, which in this scenario is to be improved mainly by a better communication of its economic and efficiency benefits. The changes towards S1 shall be paid by higher consumer prices and/or by public financial support.

The German conventional meat sector, especially the pig meat industry, is an important player on the world market, and in S1 exports would remain high or increase even further. An increase in animal numbers is not considered realistic under the current conditions, or only for some production systems such as poultry. However, a reduction of the overall quantity of farm animals is strictly rejected. Consequently, S1 does not necessarily rely on changing consumption patterns, at least in terms of quantity. But S1 requires that consumers are willing to pay the price for the higher standards.

Stereotypical proponents of scenario 1 are conventional, intensive animal farming groups. The motivation for S1 lies mainly in the improvement and/or maintenance of the economic situation of intensive, conventional animal farmers and the respective industry. Maximisation of profit and efficiency is a central aim of S1. The use of animals is not ethically questioned. There is a pronounced mistrust in society's demand for sustainability, which is perceived as a temporary trend and as misguided by too high expectations of consumers. From the perspective of S1 supporters, more understanding and appreciation for the benefits of resource-efficient mass production of animals at low consumer prices is called upon to meet future challenges.

Scenario 2 (S2) 'System Change in Animal Farming':

S2 shares with S1 a commitment to animal farming as an integral part of agriculture and as such shares a value or at least a valuable income to protect. Next to the organic sector and alternative farming groups, NGOs like animal welfare, environmental and consumer protection groups demand a wholistic system change of animal agriculture. They call for a new, more sustainable system that guarantees both animal ethics and environmental principles and goals. But ethical and environmental motives go hand in hand with the economics of the sector. The new system is to give farmers a better income than today, and an innovative outlook shall serve as a guarantee for also meeting the expectations of the next generation. Supporters see that there are conflicts between animal and economic needs, especially when it comes to animal needs, but they strive for a fair balance. In this scenario the quality competition on globalised markets presents an alternative to the currently prevailing cost competition.

S2 explicitly envisages a reduction in the consumption of animal products by the way of flexitarian or vegetarian diets. Exports and the use of imported protein feeds from overseas should be reduced drastically or abandoned to enable more regional cycles of production. Accordingly, there is a range of reduction targets within the scenario. Some call for a reduction of all farm animals by at least half by 2050, while others want to see even greater reductions achieved earlier. It is not clear whether the reduction of animal farming affects all animal species or only the less accepted types of farming, such as pig fattening or poultry farming. However, grassland-based cattle farming is mostly still considered as acceptable and meaningful. Stereotypical proponents of scenario 2 are organic farming and environmental groups.

The costs for the transformation should be covered by higher prices of the products and by public support. The entire society as well as the market and politics are involved in the change, for which far-reaching structural adjustments are implemented. These affect all actors in the value chain. A central element for a system change certainly is a changed consumption pattern of animal products, both in terms of quantity and appreciation of a higher value of the products.

Scenario 3 'Alternatives to Animal Farming':

In the third category of visions for the future of animal farming, the latter is replaced – with perhaps minor exceptions – by alternative ways of producing proteins and food, mainly plant-based, but to some extent also cultured meat, although this issue is more controversial even among S3 proponents.

This does not mean, however, that these groups are indifferent towards the way animals are being kept. On the contrary: They opt to improve the standards of animal farming as much as possible, both in terms of the condition of the animals and climate protection. There is a strong conviction among the proponents of S3 that the transition to a plant-based agrifood system would be the most just option, not only globally and towards animals but also towards future generations.

The ultimate goal of replacement in S3 is explicitly utopian in the sense that hardly any proponent believes that it may realistically be implemented in the near future. All proponents therefore foresee a reduction phase for animal numbers in the upcoming decades, with a minimum of 50% for all species by 2030, while the reduction targets go up to 90% depending on the species. S3 would require the greatest change in consumption patterns, especially in terms of quantity. This required reduction shall at least be oriented at the so-called planetary health diet (WILLET et al., 2019). Like for the other scenarios, the perspectives presented here do not include practical strategies of how exactly consumption will effectively be influenced or guided. Some proponents of S3, however, argue that if the Animal Protection Act in Germany was taken seriously, e.g. ethical values used as a basis for its interpretation, the ban of all or parts of current animal farming practices would be the immediate logical consequence.

S3 borrows much of its normative character from animal ethics, with emphasis on either animal rights in the deontological sense or a utilitarian weighing of interests where vital animal interests outweigh non-vital interests of humans. This is why vegan or vegetarian groups and enterprises are the stereotypical proponents of S3. But in the light of the climate crisis, also environmental groups support S3. And since this scenario represents an ideal rather than a mirror of current behaviour, also groups that currently opt for flexitarian or meat-based diets may still support the goal of substituting animal farming with alternatives. While the motives are said to be mainly ethical and environmental, large plant-based or cultured meat processors and retailers have growing economic interests in S3. The fact that agriculture itself can benefit economically from the processing of plant-based proteins is mentioned by proponents of S3 but not as a main motive.

4 Synthesis of the scenarios

To analyse the acceptance of the scenarios, one-on-one interviews and a workshop with participants during winter 2021/22 were held to collect comments and feedback on the scenarios presented above.

The three scenarios are linked to different visions for transformation: Ethical and environmental motives dominate S2 und S3, while public acceptance and economical motivations seem to dominate S1. S1 and S2 are allies in their cultural and economic commitment to maintain animal agriculture even in the distant future. But since many S3 proponents commit to transition plans with a drastically reduced or even abandoned animal farming sector, there is room for bringing together S2 and S3 proponents. This basic constellation of interests makes S2 a potential candidate for compromise for future animal farming politics.

While S1 has a persistent character and shows the least momentum for change, S2 and S3 present a wide range of concepts that would trigger holistic changes and transformation processes not only in the production and along the value chains but also in the consumption.

Stakeholders describe the envisioned states in terms of material outcomes for humans, animals and the planet rather than subjective states, such as fears or compassion. An exception is the concept of appreciation that especially agricultural groups demand for their work.

In many ways, the different ideal scenarios for the future of animal farming stem from different conclusions drawn from facts, such as the impacts on the animals or on climate change. Furthermore, the groups seem to have different views on what exactly such relevant facts are.

As the ideal future scenarios have been defined, it is now important to move on to their realisation. For this reason, it is important to know more about their immanent problems. The biggest problem associated with S1 is the low intrinsic motivation to substantially improve the sustainability and solve the existing ethical problems. Solutions shall mainly improve public acceptance. S2 is criticised for its resource-intense animal farming practices, especially grazing and larger stables. It is doubtful whether there is enough land available to keep even a halved number of current farm animals, as envisioned by S2 proponents, in quasi-natural, animal welfare conditions, especially at a global scale. The question is also whether consumers are willing to pay premium prices. A reduction of animal numbers in Germany could be outweighed by imports from other countries; however, this would only export the problems of lacking sustainability, not solve them. S3 is perceived as too demanding. Moreover, some critics stress that parts of the agricultural land can only be used for feed crops, and without animals this land would be lost for food production.

All in all, the transformation of the German animal farming sector has different motives: It is about increasing the acceptability for the sector, guaranteeing good economic outcomes, seeking ethical solutions for animals and supporting sustainability and climate goals. Positions differ as to which tasks should be in the focus of transformation. However, there is one clear consensus: The size of the future animal farming sector is seen as highly relevant and, therefore, should urgently be put on the political agenda.

5 Conclusion and way forward

Embedded into a transdisciplinary approach of a ‘Future Workshop’ (‘Zukunftswerkstatt’), representatives of stakeholder groups of the animal farming sector (agriculture and food processing sector, animal/environmental/climate protection) were asked to express and discuss their visions for the ‘how’ and the ‘how much’ of animal farming in Germany. Three future scenarios were identified that summarise the variety of positions of stakeholder groups as clusters: ‘Higher Standards’ (S1), ‘System Change in Animal Farming’ (S2) and ‘Alternatives to Animal Farming’ (S3). They all differ in terms of the farming methods as well as the scale, e.g. animal numbers.

How and where can consensus on the future of animal farming be reached? First of all, within what we identified in the three core future scenarios, there is room for consensus for at least some of the involved stakeholder groups. The first future scenario (‘Higher Standards’) brings together interests in a solid economic performance and intensifies outputs of the conventional animal farming sector while maintaining high animal quantities in consumption and production in Germany. But the resistance against this scenario by animal and environmental protection as well as some farmer groups is already big and likely to increase with more ambitious climate and animal protection goals to come. The second scenario ('System Change in Animal Farming') represents a common ground for groups with a commitment to systematic change of animal farming towards more ethical and environmental, local and smaller scale forms, and reduced animal numbers to around 50% by 2040 or even earlier. Threatened by a loss of societal reputation, conventional farmer groups might eventually opt for this scenario. The third scenario ('Alternatives to Animal Farming') is attractive for all those who refrain from a commitment to animal farming as a central part of agriculture and seek alternatives in plant-based or cultured meat processing. The overall popularity of the scenario will, inter alia, depend on the attractiveness and availability of the food alternatives, and on the extent to which the agrifood sector can compensate the losses of animal 'production' with gains from alternatives.

Is there room for overlapping aims between those core future scenarios? S1 and S3 stand in the sharpest contrast to each other. Actors of both groups will hardly reach a consensus in the near future, mainly because of different views on the quantitative development of animal farming in Germany. This might change when conventional processors or farmers invest more in plant-based alternatives. Supporters of S3 may treat S2 as an interim and transition phase and support measures to reach it. Proponents of S1 may see S2 as the alliance scenario, given its commitment to animal farming per se. This supports the hypothesis that S2 may currently act as a consensus path that both proponents of S1 and of S3 may follow together for some time before they split in the more distant future.

Furthermore, there may be more room for consensus when stakeholders explicate their motives. Motives relate to values, and they cannot be understood properly if emotions are ignored (DEONNA AND TERONI, 2021). The stakeholder workshops showed that the conflict is not only about interests but also about emotions, e.g. the fear of losing reputation, the compassion for animals, or the sense of tradition. Therefore, solutions should at least to some extent be treated as ways to develop answers to emotional distress. In this regard, consensus could be facilitated when stakeholder groups – as individuals – understand and express the emotional basis for their (cognitive) positions, e.g. the fear of losing what is important to them, a sense of justice related to a certain treatment, or the attitude towards innovation. While dealing with emotions is common in mediation practices, it would be a novum to political stakeholder dialogues where talk of emotions is often seen as unprofessional.

Another finding is that even the sphere of the 'factual' seems contested in the field of animal farming: Different understandings of factual bases, e.g. on climate consequences or animal suffering, make any effort of a harmonisation of interests obsolete. Factual and conceptual assumptions, e.g. about what animal suffering or welfare consists of, or what external costs are associated with animal farming, need to be accepted by all groups prior to negotiating interests.

Way forward

As our findings suggest that S2 might represent the most acceptable perspective in the wider array of interest groups, the question of overall acceptance and feasibility of this scenario still needs further research.

Independent of which scenario is currently the most accepted, it is unclear to what extent it can be put into practice, e.g. by political measures, technological advances or other framework conditions such as international commitments on climate protection. These questions are tackled in the last part of the Future Workshop, but any answer on this will need constant adaptations to current developments.

To reach consensus of at least some groups on some issues, the currently all too often separated positions regarding the 'how' and the 'how much' of animal farming need to be integrated into single positions. Both quality and quantity cannot be viewed independently from one another. The way both are intertwined has hardly been investigated.

Animal protection measures may not automatically lead to reduced animal numbers. Similarly, the extent of animal farming in total numbers may be stabilised by measures that officially serve the goal of animal protection, e.g. through better public acceptance. If this interconnection is not transparent, achieving consensus on pathways for animal farming will be difficult.

At this stage it is hard to predict future consumption patterns concerning animal products. The current uncertainty about these issues makes agricultural stakeholders very hesitant in their decisions and investments. Future politics and policy recommendations have to bring the goals and measures on the 'how' and 'how much' of animal farming in line with the goals and measures for the development of food consumption. This outcome of the Future Workshop can help to make solutions for the future of animal farming more convincing.

Furthermore, the exact wording is crucial when investigating the public acceptance of different scenarios, e.g. via representative surveys. To demand *a reduction* or *depletion* of something, e.g. *reduced* consumption, seems, altogether, less popular compared to an *increase*, e.g. *more* animal welfare, a *growing* sector or *diversified* consumption. It is therefore important to develop for each scenario a comparable communication of positive aims. A reduction of the animal farming sector, for instance, may be compensated at least partly by growth of the plant-based food sector and should then be communicated in this way. If and to what extent *less* animal farming means *more* animal welfare is an issue of communication with ethical presuppositions.

To conclude, policymakers should refrain from quick decisions that determine the future of animal farming over the next decades. Currently, there are at least three fundamentally different long-term perspectives that enjoy societal support. Yet especially the S3 scenario runs mostly under the radar of mainstream political debate. Based on our findings we presume that there are short-term solutions that can be accepted by the supporters of all three scenarios presented. But this requires reframing the debate from 'protecting the future of animal farming' to 'guiding the future of animal farming', with the possibility that this means the – at least partly – replacement of animal farming by suitable alternatives.

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