



Towards a social licence to farm: broadening farmers' engagement with nonfarming people

Summary of research findings and
recommendations for policy and practice

Catherine Broomfield



University
of Exeter

Centre for Rural
Policy Research



10 minute read – pages 1-6

1. Twenty Years of Reconnection: time for a review?	1
2. Key Findings	2
3. Summary of recommended actions for farming industry bodies	5
4. Next Steps?	6

More detail – pages 7-25

5. Research problem, purpose and approach	7
6. Overview of main findings	11
7. Overview of enabling actions at the industry level	20

This report summarises the findings of my PhD research study carried out between 2020-2023, at the Centre for Rural Policy Research (CRPR) University of Exeter.

I would like to acknowledge and thank all the farming and nonfarming people who generously gave their time to engage so thoughtfully and honestly with my research and to share their invaluable stories, knowledges and insights.

Catherine Broomfield

May, 2024

Report designed by Veronica White

To cite this report: Broomfield, C. (2024) *Towards a social licence to farm: Broadening farmers' engagement with nonfarming people. Summary of research findings and recommendations for policy and practice.* ISBN: 978-0-902746-95-4

© 2024 Catherine Broomfield

1. Twenty Years of Reconnection: time for a review?

During much of the latter half of the 20th century, British livestock farming's relationship with wider society has generally been considered defective – described as a gap, a divide, a disconnect – arguably reaching its nadir at the end of the century following a series of animal welfare and food production safety crises. Since the turn of the century, farming has attempted to address the disconnect through a concerted effort to engage with the nonfarming public, spurred in large part by the seminal 'Curry Report' published in 2002 (PCFFF, 2002) the central theme of which its authors described as that of reconnection. While providing a catalyst for action, the Curry Report's narrow conception of engagement as a marketplace reconnection (hereafter referred to as 'engagement-as-reconnection') has been influential in shaping farming's focus on engagement with the food consumer within a market paradigm.

As the Curry Report presciently noted, addressing the disconnect through engagement was central to farming maintaining its 'licence to farm'. This reference to a 'social licence to operate' (SLO) – a term originating in mining and since deployed across a range of natural resource based (NRB) industries – refers to the tacit authority wider society holds in deciding whether an NRB business – in this case a beef and sheep farming operation – has sufficient public support to continue its primary activity of red meat production. How a business or industry engages with wider society is understood as being central to maintaining its social licence.

Yet despite farming's efforts, the disconnect stubbornly persists and has, arguably, increased over the last decade in concert with growing public awareness of the impacts of agriculture on climate, nature and health, particularly in relation to the production and consumption of red meat.

The imperative to transition to a sustainable food and farming system in the UK has created a critical inflection point for the future role of its ruminant livestock farmers. How farmers engage with nonfarming people is, then, central to their long-term viability, yet paradoxically, since Curry, the topic has not been subject to radical nor strategic review by academia or industry.

In summarising the findings of my doctoral research, this report provides a constructive critique, rather than criticism, of the last 20+ years of farming's 'engagement-as-reconnection' approach to engagement with adult nonfarming people. By integrating fieldwork findings with a range of relevant existing empirical and theoretical literatures, I believe my research findings provide useful and timely insights for the sector and farming industry at large.

I hope this report will stimulate a much-needed discussion about how the industry might broaden its understanding of purpose and practice of engagement as a necessary first step to developing policy at the industry level to support farmers in moving their engagement practice with nonfarming people towards building intrinsically-valuable relationships that are, ultimately, the bedrock of farmers' social licence to farm.

2. Key Findings

1. Most farmers interviewed expressed the primary purpose of their engagement with adult nonfarming people as that of **education** in order to gain the public's understanding and support. This was delivered mainly through one-way information giving. This finding was consistent with findings from a limited extant body of research of farmer-nonfarmer engagement, primarily in North American and Northern European geographic contexts (eg, Holloway, 2004; Ventura *et al*, 2016; Weary & Keyerslingk, 2017 and Ritter *et al*, 2021).
2. This purpose of education underpinned the two most prevalent practices of farmers' engagement with nonfarming people; '**education of the public**' and '**market-building**'. The former was practiced almost exclusively through one-way information giving in which the farmer assumed the asymmetric role of educator of a (presumed) uninformed or misinformed nonfarming learner. While the practice of two-way conversation was more prevalent in the market-building approach, it tended to be a more persuasive 'strategic dialogue' practiced by the farmer as part of their sales craft rather than as a more open and authentic two-way exchange for mutual learning. Both 'education of the public' and 'market-building' are consistent with the **deficit model of communication**.
3. Originating in the 'Public Understanding of Science' movement of the 1980s, the deficit model of communication posits that public concern and lack of support for the activities of a particular expert community is, in fact, simply a lack of understanding on the part of the lay public, arising from a deficit of information. *Ergo*, giving people sufficient information results in public understanding and support. Even though the deficit model has been widely critiqued and de-bunked, it remains a common but ineffective approach deployed by experts in many expert-lay engagement scenarios, including those in which maintaining the social licence to operate of a business or industry is a key driver of engagement.
4. My study found a '**community-building**' approach to engagement was a significant, but much less frequently, expressed approach to engagement where farmers expressed the purpose of their engagement in terms of its intrinsic value; to make life more enjoyable and to become part of the community. This was delivered mainly through friendly interactions and more authentic two-way dialogic communication. Importantly farmers taking this approach tended to see their role as co-learner with nonfarming people and brought their multi-dimensional selves to engagement. Rather than engaging farmer *qua* farmer on only farming-related topics, they tended to engage farmer *qua* person-in-community on a range of topics including but not limited to farming.
5. **The more relational 'community-building' approach to engagement was found to be most conducive to co-creating a resilient social licence to farm (SLF)**. I suggest it represents a broader conception of farmers' engagement with fellow persons-in-community, hereafter referred to as '**engagement-as-integration**'. As depicted in Figure 2.1 (p.4), this 'engagement-as-integration' includes and prioritises the social dimension of farmers' relationship with nonfarming people that has tended to be marginalised by farming's interpretation of engagement-as-reconnection with consumers in the marketplace, in part influenced by the 2002 Curry Report's call for reconnection.

6. 'Education of the public', 'market-building' and 'community-building' describe the three main approaches to engagement. However, in all three cases, purposes and practices were found to be multi-faceted and suggest a move towards an engagement-as-integration approach conducive to co-creating a social licence to farm can be achieved through evolution rather than revolution.
7. My study identified a vicious cycle of interrelated and mutually reinforcing factors (depicted in Figure 6.1, p.16) which are acting as barriers to farmers developing their engagement towards an engagement-as-integration approach.
8. The (social) media-led public discourse left many farmers in 'fighting mode rather than engaging mode'. This had a reinforcing effect on the farming community's tendency towards insularity, tipping some farmers' engagement from a desire to educate to a more dogmatic and self-interested desire to defend.
9. Lack of know-how and confidence emerged as key interrelated factors acting as a barrier to farmers developing their engagement practice. Most of the farmers and farming leaders interviewed said they lacked the know-how to develop their engagement beyond the once-a-year Open Farm Sunday type of interaction. The tendency within the farming community to frame the disconnect between farming and nonfarming people as a rural-urban divide has a reinforcing effect of farmers' sense that they lacked the know-how to connect with what many saw as a geographically distant urban other.
10. Without exception, all the farmers and farming leaders interviewed showed remarkable self-awareness and openness in talking about factors which act as barriers to them developing their engagement practices. Such honest self-reflection suggests a desire and readiness of many in farming to find ways forward which can turn the vicious cycle into a virtuous cycle. Facilitation of collaboration between farmers, and also between farmers and nonfarming people in the community, is key in this regard.
11. Wherever individual farmers find themselves on the spectrum of engagement approaches, **farming industry bodies (FIBs) have a key leadership and support role to play** to enable farmers to overcome the vicious cycle of barriers and create an industry-wide transition of farmer engagement practice towards an engagement-as-integration approach.

Engagement-as-Integration

Farmer's approach	Engagement-as-Reconnection	
Self	as Farmer (1D)	<u>And</u> as person-in-community (3D)
Nonfarming person	as Consumer	<u>And</u> as fellow person-in-community
Self-perceived role	Educator	<u>But primarily</u> co-learner with nonfarming person(s)
Value orientation	Primarily Instrumental	Primarily Intrinsic
Purpose	Telling/selling better	<u>But primarily</u> building relationships
Communication style	Information-giving	<u>But primarily</u> dialogue & friendly interactions
Topic	Farming-related	<u>And</u> hobbies, interests, local issues/events...
Goal	"Getting people to understand" Support farming	"Getting to understand each other better" Support farming through mutual exchange, mutual learning, and adaption

Figure 2.1 Engagement-as-Integration: Broadening the conception of engagement to include the social dimension

3. Summary of recommended actions for farming industry bodies

1. In-person engagement at the farmer-level has a depth of impact that cannot be easily replicated by farming industry bodies (FIB). However, while the quality of engagement between farmer and nonfarming people is uniquely effective at scaling deep, achieving sustained and systematic change – scaling out – requires enabling interventions to happen at the industry level, both to support and facilitate farmers and to influence and inform government's understanding of how to support farmers' engagement with nonfarming people as part of the new era of Environmental Land Management (ELM) schemes.

The role of FIBs in relation to developing farmers' engagement with nonfarming people is better understood as one of leadership and support.

In relation to leadership:

2. At a conceptual level FIBs need to bring about their own cognitive and cultural reorientation away from the industry's narrow conception of engagement as reconnection with consumers, to the broader conception of engagement as integration with fellow persons-in-community. By fulfilling its leadership role, FIBs can return the social dimension to farming's relationship with wider society which is key to farming and nonfarming people co-creating a resilient social licence to farm.
3. At a practical level, FIBs leadership role will result in changes to policy making in 4 key areas:
 - Recognise and elevate the importance of farmers as persons-in-community engaging with fellow nonfarming persons-in-community on a wide range of topics beyond only those which are farming-related.
 - In relation to farmers engaging as farmers with nonfarming people on matters relating to farming, prioritise dialogic communication and correctly re-position information-giving in its supportive but subordinate role. Critically, policy will reframe the farmer's role from one of educator to co-learner.
 - Utilise a farming-nonfarming framing to accurately describe the disconnect between farming and wider society as a socio-cultural rather than unbridgeable geographical divide. This subtle change reveals the opportunity to bridge the gap through 'everyday' friendly interactions.
 - Develop a broader portfolio of communication training for farmers which gives at least equal priority to developing dialogic communication skills alongside the industry's established provision of strategic communication skills such as media training.

In relation to support:

4. FIBs have been successful in developing a comprehensive **blueprint of know-how to support farmers** engagement with schools. It now needs to develop an equivalent blueprint of know-how to provide wrap-around support to enable farmers to develop their in-person engagement with adult nonfarming people.
5. FIBs to implement the blueprint including the deployment of trained facilitators with access to funding to 1) facilitate learning and collaboration towards engagement-as-integration within farmer communities of practice and 2) support the horizontal scaling out of know-how and best practice to achieve a transformation at an industry scale.

4. Next Steps?

I hope you have found this quick 10 minute summary of interest and relevance.

If you have, there are some possible next steps you may like to take:

Read on . . . the following pages provide a little more detail on the findings from my research – although it is always difficult to convey the depth and nuance of 3 year’s research into 20 pages.

Go a little deeper . . . I would be very happy to present my research to you and your colleagues to help you assess its relevance to your organisation’s development of policy and practical support of the farming community’s engagement with nonfarming people.

Think about ways to collaborate . . . I would welcome the opportunity to discuss ways in which we can work together at the research-policy-practice interface and to help identify funding opportunities to support such work.

Whatever you feel is the right next step, I welcome the opportunity to have a conversation.

Please do contact me by email or mobile:

c.broomfield@exeter.ac.uk | mobile 07702 233931



5. Research problem, purpose and approach

5.1 The research problem

The negative impact of red meat production – in particular beef – on human and planetary health has become a matter of significant public concern in developing countries including in the UK (Godfray *et al*, 2018 and Willets *et al*, 2019). The climate crisis has necessarily prioritised a global-scale scientific and policy response. While this has brought clarity at the global scale, it has sometimes fed into the simplistic ‘lose-lose’ (social) media-led public discourse around red meat in which the cow has come to be viewed by some as the symbolic *bête-noire* of our food and farming system.

The dominance of social media as the main platform for engagement is widely recognised as contributing to a coarsening and general decline in the quality of public discourse which many commentators now consider defective. While social media can function as a pluralist space for exposure to alternative views and reasoned exchange, more frequently its predominant effect has been to drive partisan and polarising narratives (Wang *et al*, 2020 and Stewart, 2022). This can be seen in societal debates about ruminant livestock farming which rarely allows for respectful accommodation of different viewpoints or meaningful discussion of the effects of different methods of production given the particularities of the local context.

The problematic nature of public discourse risks the erosion, or loss, of farmers’ social licence to farm (SLF) with serious consequences for farmers, particularly those in England’s grassland farming regions, like the SWE, where pasture-based beef and sheep (and dairy) farming is the predominant and traditional farming activity (Maye *et al*, 2021). But the erosion of farmers’ SLF also represents a risk for society at large. At a time when society is striving to work out how we can collectively live good lives well within a flourishing biosphere, beef and sheep farming in these regions has the potential to contribute to sustaining rural communities, providing social and environmental public goods, while also producing relatively low-emission red meat (Carruthers *et al*, 2013; RSA FFCC, 2019; Salmon *et al*, 2020 and Norton *et al*, 2022) which a growing body of research suggests has a better nutritional profile than grain-fed counterparts (Butler *et al*, 2021).

How farmers’ approach engagement with nonfarming people is, then, central to their futures and long-term viability, and to the ability of society at large to address some of the greatest challenges presented by the triple climate-nature-health crisis.

5.2 A bit of theory – Social Licence to Operate and the Deficit Model

The term ‘social licence to operate’ (SLO) refers to the tacit authority wider society holds in deciding whether a natural resource-based (NRB) business has public support to continue its primary activity (Boutilier, 2014). In this case, a beef and sheep farming operation being the NRB, and red meat production its primary activity.

While the presence of trust between a business operation – in this case a farm – and the wider community is one component of a SLO, trust is not itself a sufficient measure of SLO; trust in a farmer or the quality of what they produce is not the same as acceptance or support for what they do. Hence, SLO is best measured by the extent to which a gap exists between a farming activity – the production of red meat – and society’s evolving values and expectation. Although there is some correlation between trust and SLF, surveys of public trust in farming cannot be considered a reliable *de facto* measure of the presence of a social licence to farm.

How a business or industry engages with wider society is understood as being central to maintaining its social licence. SLO theory posits that NRBs who approach engagement with their wider communities as a process of authentic dialogue involving mutual exchange and learning of knowledges and perspectives that are potentially acted upon, are more likely to be successful in co-creating a resilient SLO (Mercer-Mapstone *et al*, 2017). In-person engagement is recognised as being particularly conducive to fostering the relationships that facilitate more empathetic and open dialogue (Bohm, 1996; Fuchs, 2019; Lee *et al*, 2011 and van Burgsteden *et al*, 2022), such that can lead to the dissolution of ‘us-them’ boundary, and integration of the NRB business (the farm/farmer) into the social structure of the wider nonfarming community (Thomson & Boutilier, 2011). **It is this process of integration that results in the most resilient social licence to operate.**

Despite awareness of the importance of authentic dialogue to achieving a resilient SLO, in practice the approach taken by NRBs continues to be dominated by one-way transmission of information or a strategic (inauthentic) form of dialogue designed to help NRBs tell or sell their argument more effectively rather than to facilitate their own learning and potential adaption of business activities (Johnston & Lane, 2018 and Mercer-Mapstone *et al*, 2018).

In relation to farming, the long view of farming’s engagement in the public discourse on issues to do with farming’s impacts on people and planet, reveals an approach which has tended to create a public perception of farmers as defensive and self-interested, exacerbating the us-them disconnect between farming and wider society which, despite the efforts of many in farming, remains stubbornly present. In 2002, the seminal ‘*Farming & Food. A sustainable future*’ report by the Policy Commission on the Future of Farming and Food (PCFFF), commonly referred to as the ‘Curry Report’ (PCFFF, 2002), called for farming to reconnect with the public. The report was prescient in raising the issue of farmers’ ‘licence to operate’ as an emerging issue of strategic importance for the farming industry. However, the report’s call to reconnect was narrowly framed as a consumer-market reconnection consistent with a free-market recasting of citizens as consumers which prevailed then (as now). For example, the word ‘consumer(s)’ appeared throughout the report (133 times), while the word ‘society’ or ‘citizen(s)’ appeared only 39 times and once, respectively. While the Curry Report provided the stimulus for a concerted effort by the farming community to engage with nonfarming people, its narrow conception of ‘engagement-as-reconnection’ with consumers, has been influential in shaping the strongly goal-oriented approach farming has taken to engagement as reconnection within a market paradigm.

Understanding what 20+ years of ‘engagement-as-reconnection’ has achieved, and the extent to which practice has been conducive to facilitating the co-creation of farmers’ social licence, is not well understood.

The topic of engagement between farmers and nonfarming people has attracted very little research attention and amounts to a research blind spot, particularly in the UK context. The limited body of research that does exist (mainly relating to North American and North European geographic contexts) finds farming’s approach can be characterised as one-way transmission or a strategic form of dialogue deployed by the farmer-as-educator to inform or persuade an uninformed or misinformed nonfarming public (Ventura *et al*, 2016; Benard & de Cock Buning, 2013 and van Wessel, 2018). Both one-way transmission and strategic one-way ‘dialogue’ are consistent with the deficit model of communication.

Deficit model of communication

Originating in the Public Understanding of Science movement of the 1980s, the deficit model of communication posits that public concern and lack of support for the activities of a particular expert community is, in fact, simply a lack of understanding on the part of the lay public, arising from a deficit of information. Ergo, giving people sufficient information results in public understanding and support.

Although now de-bunked as flawed theory, ineffective in practice, it is still present as a communication approach in many expert-lay spheres (Hansen et al, 2003). This may serve in part to explain why, despite the farming community's attempts over the past two decades to establish a 'public understanding of farming', the social licence to farm of beef and sheep (and dairy) farmers is coming under increasing scrutiny and pressure.

5.3: Research purpose and approach

The purpose of the research study was two-fold. First, to contribute to addressing the research blind spot of the motivations, practices and experiences of farmers' engagement with nonfarming people in the UK context, with the focus on in-person (face-to-face) interactions. Second, to understand the extent to which farmers' in-person engagement practices are conducive to facilitating the relationships with nonfarming people that underpin the co-creation of a resilient social licence to farm.

The study takes the south-west of England (SWE) as its area of research because of the significance of this grassland farming region to beef and sheep farming in the UK context (DEFRA, 2022). Research findings are the result of fieldwork which involved qualitative in-depth interviews with 30 SWE beef and/or sheep farmers, 6 senior representatives of SWE regional (3) and national (3) farming organisations working within the beef & sheep sector. This was followed by an on-farm group workshop which brought together the researcher and 10 co-participants (5 x farming people, 5 x nonfarming people) to engage in dialogue about experiences of farmer-nonfarmer engagement, and barriers and enablers to developing farmers' engagement practice.

My research posed the following questions:

1. Why and how do farmers engage in-person with nonfarming people and to what extent are their practices conducive to the co-creation of a resilient social licence to farm?
2. What are the barriers farmers face in developing their engagement practice in support of their social licence to farm and what enabling actions can be taken at the industry level?

Limitations

The use of in-depth qualitative research methods produced a wealth of information-rich data and allowed participants space to talk around and through the unfamiliar and somewhat slippery topic of 'engagement'. Many of the interview participants commented on the fact that they were 'thinking aloud' about their motivations and practice for the first time and welcomed the opportunity to do so. However, certain limitations must be noted.

First, the participant sample is illustrative rather than representative of beef and sheep farmers. Second, the findings, while providing depth and nuance, are derived from a small sample. While I trust my research makes a useful contribution, understanding of the topic will undoubtedly benefit from further research.

Nevertheless, my research study makes one – of hopefully many – important contributions to our collective understanding of how farmers can engage to maintain their social licence to farm, and more generally, to building the healthy, functioning relationships with nonfarming people that are essential to our collective ability to address many of the grand challenges of our times.

6. Overview of main findings

In respect of the first research question:

Why and how do farmers engage in-person with nonfarming people and to what extent are their practices conducive to the co-creation of a resilient SLF?

Three clear thematic categories emerged in relation to farmers' *primary* purpose and practice of engagement. The use of the modifier *primary* serves to emphasise the way in which those interviewed often described their primary purpose and practice alongside one or more secondary motivations and goals. The three thematic categories are shown in Table 6.1.

Table 6.1: Farmers' primary purposes and practices of engagement, listed in order of prominence (starting with most prominent).

Primary Purpose	Education of the public
Primary Practice(s)	Information giving
Primary Goal(s)	To defend and promote-to-defend farming To increase publics' understanding and support
Primary Purpose	Market building
Primary Practice(s)	Information giving and with some two-way dialogue (mainly to facilitate transaction)
Primary Goal(s)	To grow customer-base for farm produce To improve economic viability of farm To increase publics' understanding and support
Primary Purpose	Community building
Primary Practice(s)	Friendly interactions – generally not farming specific or with any objective in mind and with some dialogue (mainly for mutual learning)
Primary Goal(s)	To make farmers' life more enjoyable To be more integrated in the wider community To build goodwill toward farmer and farm To share pleasures of farm To tap into knowledge, expertise, help within wider nonfarming community

EDUCATION OF THE PUBLIC: This was the most frequently expressed purpose, primarily practiced through one-way information giving, as illustrated by the following extract, variations of which were expressed by most of the farmers interviewed:

We need to sell it [farming]. We have to *tell* people. We have to *make people understand* . . . for me, it is the most important thing we can do, actually. Farmer F24 (original emphasis).

Education of the public follows a deficit model approach which has been found to be the farming community's normative approach to engagement by other empirical studies of farmer-nonfarmer engagement.

MARKET BUILDING: This was the second most frequently expressed purpose. Unsurprisingly many of the farmers in this category sold some or all of their meat direct to consumers. Engagement was primarily practiced through one-way information giving and a strategic dialogue, i.e. dialogue practiced as part of sales craft rather than as a more open and authentic two-way exchange for mutual learning. Engaging with consumers was an essential part of building the customer-base and improving the economic viability of the farm.

The purpose? Well, we engaged with them to encourage them to come back again. And the more times they came back the better we sold to them. Farmer F6.

While the primary practice of market-building engagement was transactional, several farmers also talked about secondary outcomes such as getting to know people in their community better. As one farmer put it:

I'm no longer the grumpy farmer shouting out my dogs. I'm then a person to talk to and pick your hand up to (waves hand). Farmer 14.

Many of the farmers whose approach to engagement is best described by the Education of the Public or Market-building thematic categories expressed strongly – and honestly – held views of the rightness of their way of farming and the positive benefits to society their approach to farming delivers. Their motivation to engage was driven by an understandable desire to *“get people to understand”*.

However, it must be kept in mind that the purpose of this research was not to consider approaches to engagement dependent on any judgment about the merits or otherwise of the farming approach. The purpose was to understand how farmers engage with nonfarming people, and the extent to which their practices are conducive to co-creating a resilient SLF.

COMMUNITY BUILDING: This was the least frequently expressed approach to engagement.

The most important thing with the whole public engagement is, I think, the community aspect of it ... Farmers use to be part of the community and I think this is where we have lost it a little bit and why people aren't involved. Farmer F20.

Compared to the other two forms of engagement, several unique features of the community-building approach to engagement emerged from interviews:

First, farmers in this category viewed engagement as **intrinsically valuable**; they engaged for its own sake, to make life more fulfilling. This led to the second unique feature; rather than engaging one dimensionally 'farmer *qua* farmer' exclusively on farming-related topics, farmers in this category brought their **multi-dimensional selves to engagement, and had relationships with nonfarming people more broadly as 'farmer *qua* person in the community'**:

I'd like to make life as fulfilling and interesting as possible . . . so meeting all these people who have got interesting lives or views on everything from nutrition to birds, to fungi...its personally fulfilling. Farmer F26.

Third, the community-building approach to engagement comprised a **mix of everyday friendly interactions and more two-way dialogic communication**.

Fourth, farmers who took a community-building approach to engagement tended to view themselves as **co-learners** with nonfarming people rather than as **educators**.

In summary: The two approaches to engagement found to be most prevalent among the farmers interviewed – education of the public and market-building – tended to describe a predominantly instrumental approach to engagement for the purpose of 'telling better' and 'selling better'. This was practiced mainly through one-way information-giving consistent with a deficit model approach.

While two-way communication was present in these two approaches, dialogue was seen as a strategic tool; part of the farmer's sales craft or to understand where nonfarming people "were coming from" in order to counter alternative views:

I think it's a critical part of it [engagement] because you need to try to keep one step ahead so that either you've got arguments ready to counter what is being said, or rather than arguments, you've got facts. Farmer F10

Notably, and consistent with findings from prior studies, virtually all the farmers in who expressed the purpose of engagement as education of the public or market-building, talked about the role as that of educator, rather than co-learner.

By contrast, the community building approach to engagement was much more focused on intrinsically-valuable relational goals; to be integrated within the community, to make life more enjoyable, to have a mutual support and knowledge-exchange network. They tended to see

themselves more as co-learners with – rather than educators of – nonfarming people. When talking about matters to do with farming and food, they described a two-way process of mutual exchange and mutual learning.

They were also more likely to engage not only as farmers about farming but more broadly as persons-in-community across a wide range of topics some of which were to do with farming, others about hobbies, matters of the day, or seemingly nothing in particular. This approach to engagement led to them fostering a wider community of interest spiraling out from the farm. While driven by in-person engagement, farmers also deployed other forms of communication, including online newsletters and social media posts, to sustain and ‘stretch out’ their community of interest.

You just get like a huge network of people that you can do stuff for, and they can do stuff for you ... it gives you, your family and your farm a bit of resilience. Farmer F26

Although the least frequently expressed approach to engagement, the qualities of the community-building approach was most likely to foster relationships with nonfarming people as the foundation for co-creating a resilience social licence to farm.

Qualities of the community-building approach to engagement

- ✓ Focused on relational goals.
- ✓ Primary purpose strongly oriented towards intrinsic value; to make life more enjoyable, to be part of the community, to tap into knowledge and support of others around you.
- ✓ Farmers engaged in friendly interactions across a range of topics and interests including but not limited to farming.
- ✓ Farmers’ engagement was more dialogic when talking to nonfarming people about farming. They approached engagement as co-learners rather than as educators.

Outcomes unique to the community-building approach to engagement

- ✓ The emergence of a diverse community of interest spiralling out from the farm fostering friendly relations, mutual exchange and mutual learning.
- ✓ The farmer engages both as a farmer and more broadly as a person-in-community.
- ✓ Farmers in this category all described times when nonfarming people in their wider community acted autonomously in support of them and their farming practices. **SLO scholarship finds this behaviour a key indicator of the presence of a resilient SLO.**

The community-building approach to engagement suggests a broader definition of SLO is needed in the farming context; one that gives priority to the relational and intrinsically valuable purposes of engagement. The findings of my research suggest Social Licence to Farm (SLF) can be better understood as:

the manifestation of a healthy, functioning relationship between farmers and fellow nonfarming people in their communities based on conviviality, mutual exchange and mutual learning.

An important insight emerges from interrogation of my first research question. The education of the public and (to a lesser extent) the market-building approaches are likely to be ineffective in achieving the understanding and support of the wider public. A strong base of evidence shows that giving people information – even as part of an immersive experience such as a farm visit – does not necessarily change peoples’ minds (Ventura *et al*, 2016).

Information-giving has its place, but if it is the dominant approach to engagement, it will be ineffective in building or maintaining a SLF.

Furthermore, the findings from interviews suggest that the wider public discourse around red meat can cause farmers’ well-intentioned desire to inform, to tip towards a more dogmatic and self-serving desire to defend their own and the wider industry’s interests. The critical public discourse has left many beef and sheep farmers feeling under attack, leaving many farmers – as one farming leader so clearly expressed – “in fighting mode rather than engaging mode”.

A key finding of this study is that the community-building approach represents a broader conception of engagement-as-integration with fellow persons-in-community, which is distinctly different from the education of the public and market-building approaches which are predicated on a narrow conception of engagement-as-reconnection with consumers. Engagement-as-Integration broadens engagement to include and prioritise the social dimension, as depicted in Figure 2.1 (p.4).

Evolution not revolution – pathways to integration

Moving towards an Engagement-as-Integration approach begins from where each individual farmer finds themselves. While education of the public and market-building approaches are unlikely to be conducive to co-creating a resilient SLF, there are aspects within them that suggest a pathway towards that goal.

Returning to a key point of clarification made at the start of this section (p.11), farmers’ engagement was found to be multi-faceted, hence the use of the modifier *primary* in describing purpose, practice and goals. Education of the public and market-building also comprised some of the purposes, practices and goals of community-building. For example, information-giving has its role; a role which can be made more effective by practising it in support of a primarily dialogic approach. Market-building engagement opens up pathways to building relationships for their own sake and to facilitate conditions for dialogue.

A key insight to draw for the research is that the multi-faceted nature of the three approaches to engagement suggests change can be achieved through evolution rather than revolution of many farmers’ engagement practices to bring about a move towards Engagement-as-Integration at a significant scale.

It further suggests a role for farming’s representative bodies to provide leadership and support to move the industry’s conception of engagement from reconnection to one of integration.

Turning to my second research question:

What are the barriers farmers face in developing their engagement practice in support of their social licence to farm and what enabling actions can be taken at the industry level?

A key finding of this study is that a **vicious cycle** of interrelated and mutually reinforcing factors act as barriers or disincentives to farmers developing their engagement with nonfarming people. The

depiction in Figure 6.1 of the vicious cycle serves to illustrate the relationship between prevalent factors that *tend* to act as barriers or disincentives to farmers engaging with nonfarming people in ways that are conducive to co-creating a resilient SLF. It does not aim or purport to describe a universal and exact psychological and situational profile of 'The Farmer', which would, of course, be a crass simplification.

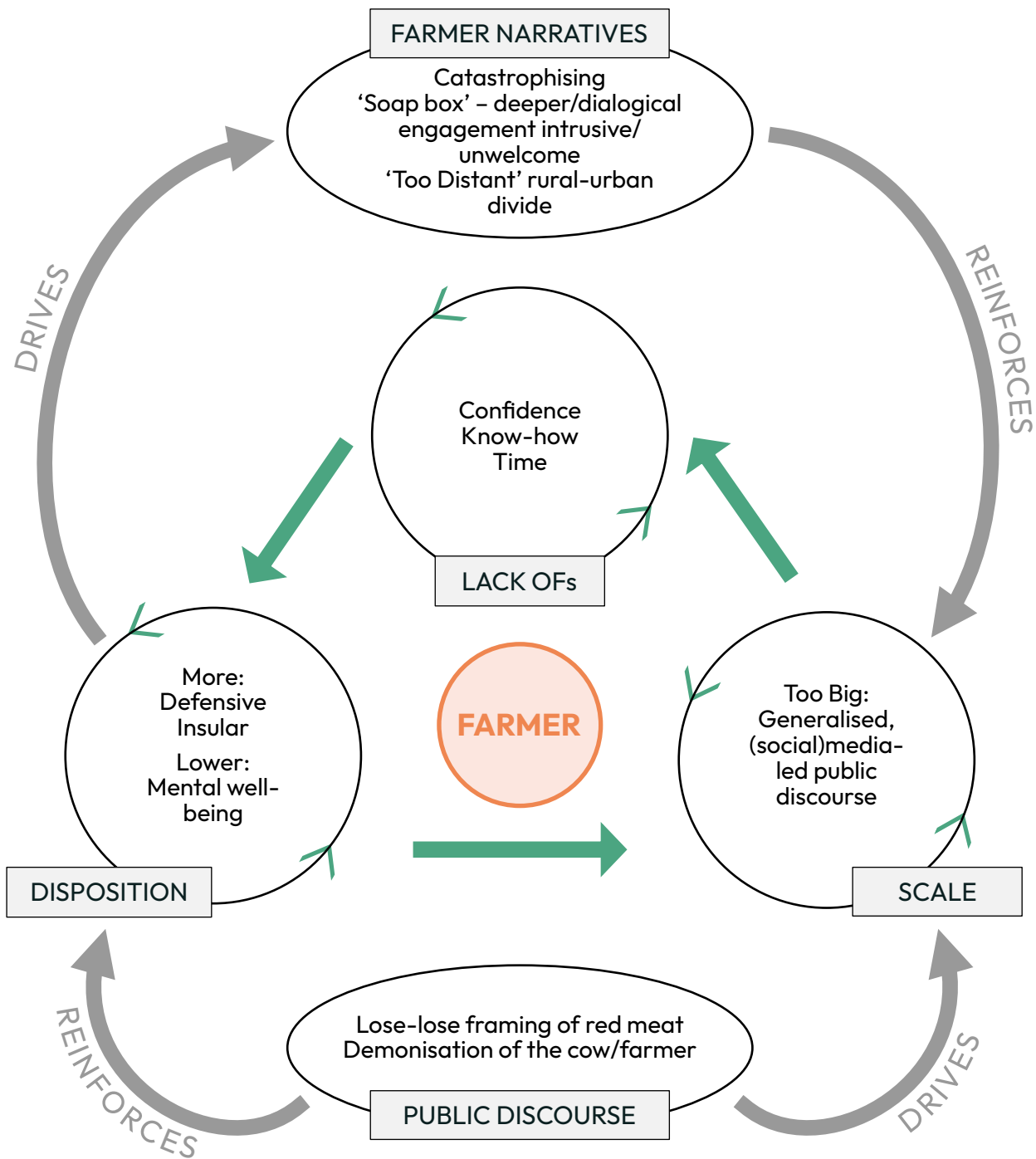


Figure 6.1: The vicious cycle of factors acting as barriers to developing farmers' in-person engagement with nonfarming people.

The following discussion picks out the most prevalent and influential factors that emerged from my study.

1. A tendency towards defensiveness and insularity

A tendency to engage from a defensive position was evident in several interviews with farmers talking about their own engagement practices. The current public discourse around farming in general – and red meat in particular – was found to reinforce and stimulate many farmers’ defensive reflex, tipping some towards a more dogmatic and trenchant defensive approach.

A majority of those interviewed – farmers and industry leaders – commented on the farming community’s long-standing issue regards its generally defensive and insular posture.

The farming community in general gets very, very defensive very, very quickly about any sort of criticism at all. Its desperate. Farmer F5.

Farming has a huge weakness and that is its insularity. They don’t tend to go into the general public sphere. And the general public want to move into the farming sphere but are actually rebuffed. Quite a lot. Farmer F5.

There is a mindset, you know, this hunkering down mindset has been passed on to generations. Farming Leader L5.

Such honest reflection suggests a desire and readiness of many in farming to find an approach to engagement which can help to break the vicious cycle.

2. ‘Lack of’s’ – confidence and know-how

In relation to developing engagement beyond the typical once-a-year ‘Open Farm Sunday-type’ of event, farmers interviewed talked about lacking confidence, know-how and time. Interestingly time, was the least frequently mentioned of the three factors, and may be indicative of the fact that farmers themselves do not consider time to be the *primary* nor insurmountable barrier to developing their engagement with nonfarming people. Rather, lack of time may act as a secondary or reinforcing factor, working in combination with the more prevalently expressed lack of know-how or confidence to tip a farmer into deciding against allocating time for engaging with nonfarming people:

we haven’t all got time to go out and talk to people, or the wherewithal to go and talk to people, or the experience to talk to people. Yes you can talk to them, but how do you actually engage with them? Farmer F6.

Lack of confidence was frequently brought up as a barrier to developing engagement:

I suppose one of the things I lack is confidence, in putting stuff out there. And that's a big thing for any farmer I think, becoming public facing. Farmer F8

The vicious cycle also predicts that low levels of mental wellbeing which a recent survey for Royal Agricultural Benevolent Institution (RABI) found is prevalent within the farming community (RABI, 2021), may act as a further compounding disincentive to engage (Wheeler *et al*, 2023).

The most prevalent 'lack of' was know-how. This was a recurring theme in interviews with both farmers and farming leaders, as illustrated by these interview extracts. In the first extract, Farming Leader 10 uses the term 'wider interest group' to mean adults groups rather than groups of school children.

How do you serve a wider interest group? How do you have a relationship with a wider interest group? What are the differences in communication [compared to schoolchildren] and how do you get them interested to come back because, of course, they are a law unto themselves. Farming Leader 10.

I think engagement with nonfarming people has got a bit more sophisticated, but I must admit there is a frustration in me that it hasn't moved on as much as I would like it to [...] I don't know how to move it on to another level. I would love to do that . . . we haven't quite come up with that. Farmer F11.

Lack of confidence and know-how were found to drive two common farmer narratives; labelled 'catastrophisation' and 'soap-box'. Catastrophisation is a term used in psychology to describe a tendency to jump to the worst possible conclusions based on very limited or no real objective reason to despair. The soap-box narrative refers to the frequent use of this idiom by those farmers interviewed for this study to express their concern that their attempts to engage in more of a two-way conversation around issues of the day concerning beef and sheep farming, would be considered by nonfarming people as intrusive or unwelcome. This was often combined with an imagining of nonfarming people as a geographically urban other, illustrating the mutually reinforcing effect of different elements within the vicious cycle which in combination serve to disincentivise farmers developing engagement with nonfarming people.

I'm not going to drive into a town centre and put a soap-box up and start talking about farming. Farmer F8.

How do you engage with people? Do you go and stand in the middle of town on a soapbox and start spouting? No. You'd soon have loads of veggies around you, you know, saying you're cruel. Farmer F6s

3. Scale – ‘too big’ and ‘too distant’

The disconnect between farming and nonfarming people is commonly referred to as a rural-urban divide (Wheeler *et al*, 2023). This framing was prevalent in interviews with both farming leaders and farmers and perpetuates the conception of a culturally but also geographically distant urban masse. This ‘too distant’ framing can cause farmers, and the farming organisations that support them, to lose sight of the opportunities to engage with nonfarming people living in the same rural localities, as noted by Farmer F25:

I think one of the major problems we’ve got is we are very focused on ensuring that urban centres are connected with agriculture . . . but actually if you talk to rural people, they are not rural. They are people in a rural setting . . . it is quite easy to have complete oversight of them and not appreciate that we need to engage. Farmer F25

The Public discourse on social, print and broadcast media platforms was perceived as being ‘too big’ – too generalised and not paying sufficient attention to the particularities of beef and sheep farming in specific local contexts. Several farmers interviewed felt overwhelmed and disheartened by the scale of the (social) media-led discourse around red meat production. One farmer likened it to “a juggernaut”.

The nature of the virtual, placeless social media dominated discourse both drives and reinforces farmers lack of confidence and catastrophising thoughts about developing their in-person engagement with nonfarming people.

7. Overview of enabling actions at the industry level

Before setting out recommendations for what farming industry bodies (FIBs) can do at the industry level to support farmers in moving towards an engagement-as-integration approach, it is important to understand the enabling actions farmers can themselves take.

At the farmer level, actually doing engagement emerged as the most effective way of transforming the vicious cycle into a virtuous cycle. Farmers' positive experience of doing in-person engagement emerged as a strong theme from interviews, dispelling worst (catastrophising) fears, building confidence, improving mental wellbeing, and generating a more open, less insular and defensive disposition.

I can't say anything other than engaging with members of the public is a drug. When people say that they like what you have done, you want to do it again. Farmer F12.

I would say it always results in farmers saying 'you know, that person wasn't like I thought he was going to be . . . he wasn't dismissive of what we do, as I thought he was going to be'. So it definitely builds bridges, it breaks down some of those barriers. Farming Leader N7.

A key insight to emerge from interviews was the value of written forms of information-giving in creating 'ways in' to more conversational or dialogic engagement. This can take the form of a regular 'newsy' piece in the parish magazine, or field signs (or QR codes) on path-side gateways.

We have some printed signs we move around with the cattle. And it just opens up conversations with people. Farmer F20.

We also did what you might consider silly thing, or less than relevant things – putting up signs on field gates. And that *simple* thing . . . people come up to me and go "Oh, I saw your sign when I went out walking . . . we never knew what was growing in there" and so on. Farming Leader L5.

These seemingly innocuous and simple practices of written information-giving represent a relatively easy way for farmers to create opportunities for friendly interactions and more dialogic communication. It gives nonfarming people the opportunity to find the information at a time and place convenient to them, and also creates conversation-openers which can give them confidence to engage with the farmer in a credible and relatable way.

What this in turn suggests is that for all farmers and particularly for those who perceive lack of time as a barrier, the limited time they have for in-person engagement can be most effectively focused on friendly interactions and/or more dialogic conversations, rather than on one-way information-giving.

Although in-person engagement may seem ‘too small’ to have any impact on the ‘too big’ social media-led public discourse, there is an established body of research that finds in-person engagement is uniquely good at fostering empathy, openness and building trust-based relationships that can accommodate a variety of views and perspectives. In other words, **in-person engagement is uniquely effective in countering overly simplistic and polarising discourses around red meat that tend to proliferate on social media**. Studies have also found that actually doing engagement is the most effective enabling intervention to increasing a person’s sense of optimism about their next engagement encounter (Sandstrom & Boothby, 2021).

And, as one farmer noted, in-person engagement tends to scale out to have greater impact:

You can engage with one person and actually, you are not engaging with one person. You are maybe engaging with 10, 20, 30 people because of the conversations they go on to have with other people. So I view every in-person conversation I can have in that way. Farmer F25.

In-person engagement at the farmer-level has a depth of impact that cannot be easily replicated by FIBs. However, while the quality of engagement between farmer and nonfarming people is uniquely effective at scaling deep, to achieve sustained and systematic change requires reinforcing enabling interventions at the industry level, both to support and facilitate farmers and to influence and inform public policy making.

A key finding of this study is that at the industry level, the role of FIBs is better understood as one of leadership and support. First to enable the horizontal scaling out of farmers’ transition towards an engagement-as-integration approach. Second, to influence and inform the government’s understanding of how to support farmers’ engagement with nonfarming people part of the new era of ELMS.

Findings from this study have led to the following recommendations for policy action by FIBs in these two key areas of leadership and support.

1. LEADERSHIP: changing mindsets and developing policy

Changing Mindsets:

The first leadership challenge for FIBs is to bring about its own cognitive and cultural reorientation away from the normative deficit model conception of engagement as reconnection with consumers, to one of engagement as integration with fellow persons-in-community. Such a reorientation will enable FIBs to promulgate a conception of engagement which prioritises the twin approach of friendly interactions and dialogic communication between farmers and nonfarming people.

By fulfilling its leadership role, FIBs can return the social dimension of farming’s relationship with wider society – marginalised within the prevailing narrow deficit model conception of engagement-as-reconnection with the consumer – to the forefront of farmers’ purpose and practice of engagement.

At a practical level, FIBs policy actions can help to create a virtuous cycle. First, by dispelling perceptions of scale as a barrier and building farmers' confidence by providing them practical support and know-how.

Second, by enabling and encouraging farmers to develop their engagement with nonfarming people, policy actions can contribute to creating a pro-social environment that supports farmers' mental wellbeing.

FIBs leadership challenge also involves shifting mindsets at the political level, particularly in relation to farmers' engagement with nonfarming people within the environmental land management schemes (ELMS). FIBs have a key role to play in first, ensuring Defra prioritises the integration of funded policies to support farmers to engage with nonfarming people across its new generation of agri-environment schemes. Second, to ensure that Defra do not simply design interventions based on the normative narrow conception of engagement as education of the consumer, but that it adopts the broader engagement-as-integration approach when developing policies to support and facilitate farmers' engagement with the wider public.

Development of policy:

A shift in FIBs mindset to engagement-as-integration will facilitate the development of policy in 4 main areas:

- I. Recognise and elevate the importance of farmers *qua* persons-in-community engaging with fellow nonfarming persons-in-community on a wide range of topics beyond only those which are farming-related.
- II. In relation to farmers *qua* farmers engaging with nonfarming people on matters relating to farming, prioritise dialogic communication and correctly re-position information-giving in its supportive but subordinate role. Critically, policy will (re)frame the farmer's role from one of educator to co-learner.
- III. Utilise a farming-nonfarming framing to describe more accurately the disconnect between farming and wider society as a socio-cultural rather than unbridgeable geographical divide. This will emphasize the opportunity to bridge the gap through 'everyday' friendly interactions while still recognising the challenges posed in the context of the UK's developed and urbanised society.
- IV. Develop a broader portfolio of communication training for farmers which gives at least equal priority to developing dialogic communication skills alongside the industry's established provision of strategic communication skills such as media training.

2. SUPPORT: Develop the blueprint.

A key insight of this study is that farmers and farming leaders identify their own and the industry's lack of know-how around engagement with (adult) nonfarming people. Since the Curry Report's call for reconnection, the industry has been successful in creating a blueprint – a framework of know-how and practical support – for farmers' engagement with schools which has given many farmers the opportunity to develop skills and confidence through access to training, resources, material, practical ideas and case studies. For example, several FIBs operate dedicated teams to support farmers' engagement with schools, as these extracts show:

You know it's not by chance that we have now got an education team of 3 full-time teachers and we've got a whole curriculum-based piece, and that's just growing and growing and we're training farmers. Farming Leader L1

AHDB do loads of literature. If you phone them up they will give you a load of stuff if you want to do a school visit. The NFU help with risk assessments for school visits. There is lots of help out there. Farmer F20

A key finding of this study is that FIBs need to provide the same comprehensive blueprint of know-how to support farmers to develop their in-person engagement with adult nonfarming people as they have successfully done for farmers' engagement with schools.

Another key finding of this study is the importance of farmer communities of practice (COP) as a site and social structure in which farmers interviewed tended to describe their engagement with each other in terms of friendly interactions and dialogic communication, i.e. consistent with an engagement-as-integration approach.

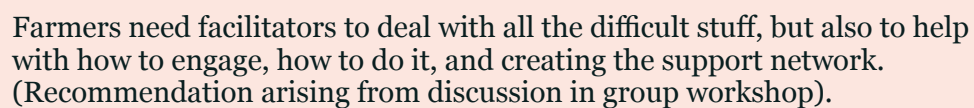
Farmer COPs are therefore an important place from which to develop and extend an engagement-as-integration approach beyond the boundaries of farmers' COPs to their engagement with nonfarming people. This finding accords with a wider body of research which finds farmer COPs as effective sites for peer-to-peer learning, for collaboration, as a safe and supportive space for farmers to share experiences, mistakes and also to develop and practice dialogic communication skills, as suggested by these farming leaders:

It might be a farmer who can *brigade* a group of farmers to be more effective in communicating because that particular set of skills are held with that particular farmer. Farming Leader L5.

I think farmers have got to collaborate like billy-o in the future. On all sorts of fronts . . . I think it is about peer-to-peer learning. We have got to find our own solutions and I am convinced that will be through collaboration . . . spreading the risk through collaboration is actually a key thing. Farmer Leader L1.

The challenge for FIBs is to fund, develop and deploy trained facilitators to support learning and collaboration towards engagement-as-integration within farmer COPs and to facilitate the horizontal scaling out of know-how and best practice to achieve a transformation at an industry scale.

Giving farmer COPs access to expert facilitators is an important part of the support structure the industry needs to wrap around farmers, especially during the initial stages of transition towards a more engagement-as-integration approach; a fact which members of the group workshop (comprising farming and nonfarming members) identified as a key enabling intervention:



Farmers need facilitators to deal with all the difficult stuff, but also to help with how to engage, how to do it, and creating the support network. (Recommendation arising from discussion in group workshop).

Finally, the totality of findings and recommendations to emerge from this study, is brought together in a visual depiction of a model for an engagement-as-integration approach (Figure 7.1, p.25)

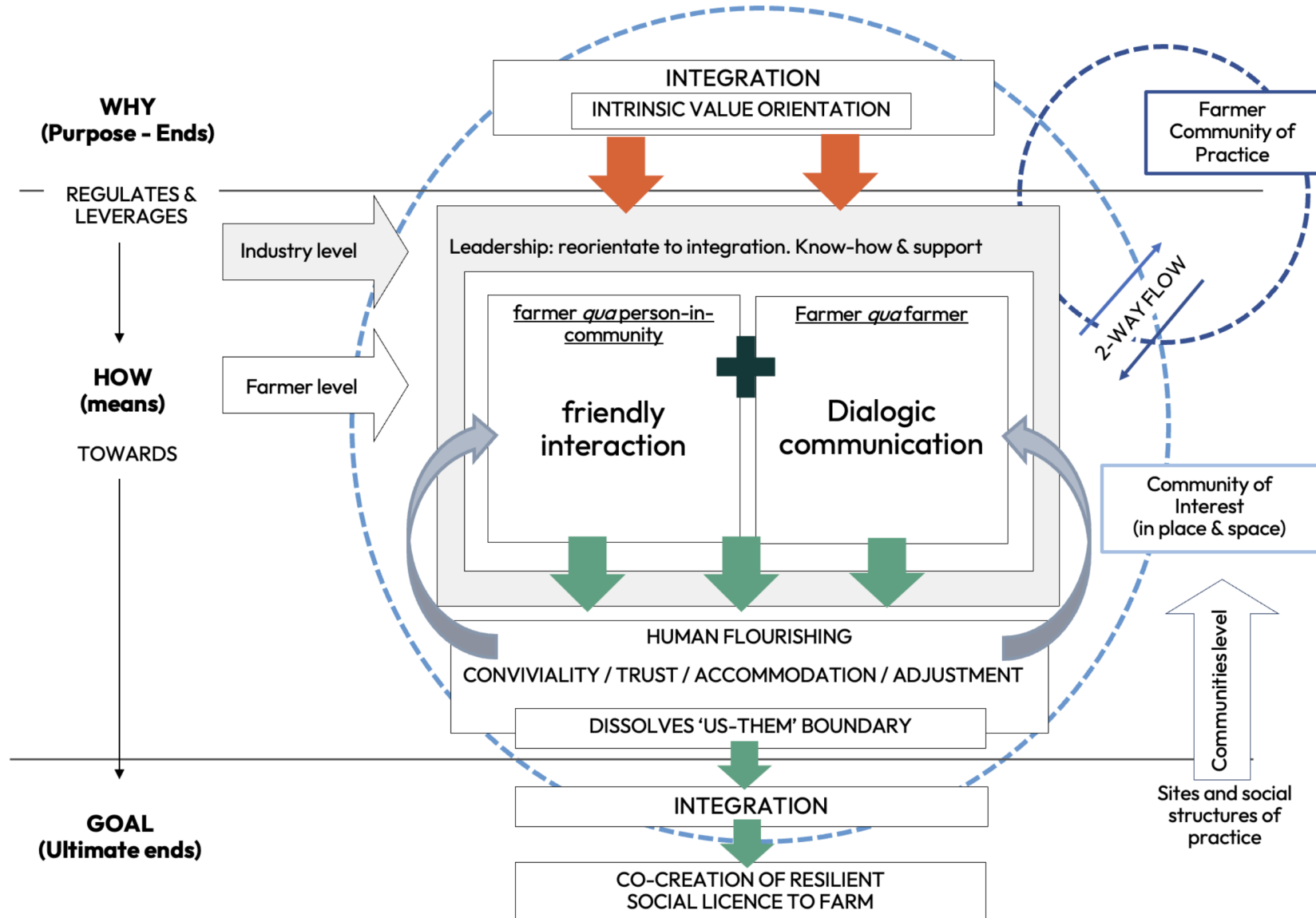


Figure 7.1. Engagement-as-Integration: A theoretically and empirically informed model for farmers' engagement with nonfarming people conducive to co-creating a resilient social licence to farm.

References

- Bohm, D. (1996) *On Dialogue*. London: Routledge.
- Boutilier, R.G. (2014) 'Frequently asked questions about the social licence to operate'. *Impact assessment and project appraisal* 32(4): 263-272.
- Butler, G. Ali Mohamed, A., Oladokun, S., Wang, J. and Davis, H. (2021) 'Forage-fed cattle point the way forward for beef?' *Future Foods* 3, article number 100012.
- Benard, M. and de Cock Buning, T. (2013) 'Exploring the Potential of Dutch Pig Farmers and Urban-Citizens to Learn Through Frame Reflection'. *Journal of Agricultural and Environmental Ethics* 26(5): 1015-1036.
- Carruthers, S.P., Winter, D.M. and Evans, N.J. (2013) *Farming's Value to Society: Realising the Opportunity*, Oxford Farming Conference (OFC) report [online]. Available at <https://www.ofc.org.uk/sites/ofc/files/uploads/2013.pdf>
- DEFRA (2022) *Structure of the agricultural industry in England and the UK at June, English geographical breakdowns* [online]. Available at structure-england-june21-regional-23jun22.ods (live.com).
- Fuchs, T. (2019) 'Empathy, Group Identity and the Mechanisms of Exclusion: An Investigation into the Limits of Empathy'. *Topoi* 38: 239–250.
- Godfray, H.C.J., Aveyard, P., Garnett, T., Hall, J.W., Key, T.J., Lorimer, J., Pierrehumbert, R.T., Scarborough, P., Springmann, M. and Jebb, S.A. (2018) 'Meat consumption, health and the environment'. *Science*, 361(6399), article number eaam5324.
- Hansen, J., Holm, L., Frewer, L., Robinson, P. and Sandøe, P. (2003) 'Beyond the knowledge deficit: recent research into lay and expert attitudes to food risks'. *Appetite* 41: 111-121.
- Holloway, L. (2004) 'Showing and telling farming: agricultural shows and re-imagining British agriculture'. *Journal of Rural Studies* 20: 319-330.
- Johnston, K.A. and Lane, A.B. (2018) 'Building relational capital: The contribution of episodic and relational community engagement'. *Public Relations Review* 44: 633-644.
- Lee, P.S.N., Leung, L., Lo, Venhwei, Xiong, C. and Wu, T. (2011) 'Internet communication Versus face-to-face interaction in Quality of Life'. *Social Indicators Research* 100: 375-389.
- Maye, D., Fellenor, J., Potter, C., Urquhart, J. and Barnett, J. (2021) 'What's the beef?: Debating, meat, matters of concern, and the emergence of online issue publics'. *Journal of Rural Studies* 84: 134-146.
- Mercer-Mapstone, L., Rifkin, W., Moffat, K. and Louis, W. (2017) 'Meaningful dialogue outcomes contribute to laying a foundation for social licence to operate'. *Resources Policy* 53: 347–355.
- Mercer-Mapstone, L., Rifkin, W., Moffat, K. and Louis, W. (2018) 'What makes stakeholder engagement in social licence 'meaningful'? Practitioners' conceptualisations of dialogue'. *Rural Society* 27(1): 1-17.
- Norton, L.R., Maskell, L.C., Wagner, M., Wood, C.M., Pinder, A.P. and Brentegani, M. (2022) 'Can pasture-fed livestock farming practices improve the ecological condition of grassland in Great Britain?' *Ecological Solutions and Evidence* 3(4), article number 812191.
- PCFFF (2002) *Farming & Food. A sustainable future*. A Report of the Policy Commission on the Future of Farming and Food. London: Cabinet Office. Available at https://dera.ioe.ac.uk/10178/1/Farming_and_food.pdf
- RABI (2021) *The Big Farming Survey. The health and wellbeing of the farming community in England and Wales in the 2020s*. Oxford: Royal Agricultural Benevolent Institution (RABI).
- Ritter, C., Russell, E.R., Weary, D.M. and von Keyserlingk, M.A.G. (2021) 'Views of American animal and dairy science students on the future of dairy farms and public expectations for dairy cattle care: A focus group study'. *Journal of Dairy Science* 104: 7984-7995.
- RSA FFCC (2019) *Devon Locally Led Inquiry: Grasslands and Livestock Production in Devon* [online]. Available at: <https://ffcc.co.uk/assets/downloads/FFCC-Devon-grasslands-and-livestock.pdf>

- Salmon, G.R., MacLeod, M., Claxton, J.R., Pica Ciamarra, U., Robinson, T., Duncan, A. and Peters, A.R. (2020) 'Exploring the landscape of livestock 'Facts''. *Global Food Security* 25, article number 100329.
- Sandstrom, G.M. and Boothby, E.J. (2021) 'Why do people avoid talking to strangers? A mini meta-analysis of predicted fears and actual experiences of talking to strangers'. *Self and Identity* 20(1): 47-71.
- Stewart, R (2022) *The Long History of Argument* (2022) BBC Radio 4, *Episode 2, "Antithesis"*, 26/07/2022, 21:30. Available at <https://www.bbc.co.uk/programmes/m0019jxn> (Accessed: 06/08/2022).
- Thomson, I. and Boutilier, R. G. (2011) 'Social license to operate', in Darling, P. (ed.) *SME mining engineering handbook*: 3rd ed. Society for Mining, Metallurgy, and Exploration [online]. Available at: <https://uoelibrary.idm.oclc.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=cat07716a&AN=pcl.992541933405136&site=eds-live&scope=site>. (Accessed: 02/10/20).
- Van Burgsteden, L., te Molder, H. and Raymond, G. (2022) 'The turn-by-turn unfolding of "dialogue": Examining participants' orientations to moments of transformative engagement'. *Language & Communication* 82: 64-81.
- Van Wessel., M. (2018) 'Depoliticisation in Livestock Farming Governance: Turning Citizen Concerns into Consumer Responsibilities'. *Sociologia Ruralis* 58(3): 522-542.
- Ventura, B-A., Keyserlingk, M.A.G., Wittman, H. and Weary, D.M. (2016) 'What Difference Does a Visit Make? Changes in Animal Welfare Perceptions after Interested Citizens Tour a Dairy Farm'. *PLoS One* 11(5), article number e0154733.
- Wang, X., Sirianni, A.D., Tang, S., Zheng, Z. and Fu., F. (2020) 'Public Discourse and Social Network Echo Chambers Driven by Socio-Cognitive Biases'. *Physical Review X* 10, article number 041042.
- Weary, D.M. and von Keyserlingk, M.A.G. (2017) 'Public concerns about dairy-cow welfare: how should the industry respond?'. *Animal Production Science* 57(7): 1201-1209.
- Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., Garnett, T., Tilman, D., DeClerck, F., Wood, A., Jonell, M., Clark, M., Gordon, L.J., Fanzo, J., Hawkes, C., Zurayk, R., Rivera, J.A., De Vries, W., Majele Sibanda, L., Afshin, A., Chaudhary, A., Herrero, M., Agustina, R., Branca, F., Lartey, A., Fan, S., Crona, B., Fox, E., Bignet, V., Troell, M., Lindahl, T., Singh, S., Cornell, S.E., Srinath Reddy, K., Narain, S., Nishtar, S. and Murray, C.J.L. (2019) 'Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems'. *The Lancet* 393(10170): 447-492.
- Wheeler, R., Lobley, M., McCann J. and Phillimore, A. (2023) "It's a lonely old world": Developing a multidimensional understanding of loneliness in farming'. *Sociologia Ruralis* 63(S1): 11-36.



University
of Exeter