

RESEARCH ARTICLE



From values to actions in agriculture: A web of actors shape Norwegian farmers' enactment of relational values

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Abstract

1. A sustainable transition in the agri-food system holds society-wide implications. Farmers play central roles in responding to climate change, environmental degradation and sustainable food production. Still, factors underlying how farmers make decisions and manage their farms are often marginalised in efforts to develop policies to tackle these issues.
2. The concept of relational values, defined as preferences, principles and virtues based on human–nature relationships, recently emerged to expand understandings of environmental decision-making in general and that of farmers specifically. As agricultural landscapes are dynamic and characterised by the interaction of various actors with diverse values and interests, how these interactions influence farmers' decisions remains underexplored.
3. This paper engages with these issues by using qualitative data on Norwegian horticultural farmers' motivations, opportunities and challenges in farming. We find that their relational values (a) are influential in shaping farmers' decisions about farm management and (b) are continually unfolding and embedded within a web of other actors, including grocers, retailers, consumers, farm advisors and policymakers, which shapes farmers' enactment of their relational values.
4. In the context of agriculture, this research underlines the utility of an in-depth understanding of relational values as embedded in wider social systems to enrich analyses of farmer decision-making. How farmers' relational values are shaped and realised through interactions with other actors holds important implications for policy and programming to navigate tensions between different interests and actors for sustainable and long-term change.

KEYWORDS

agriculture, agri-food system, farmer decision-making, farmers, relational values

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1 | INTRODUCTION

The sustainable transition of agriculture is climbing political agendas worldwide, with targets to cut greenhouse gas emissions, increase production and consumption of fruit and vegetables, and improve soil health (European Commission, 2020, 2021; Masson-Delmotte et al., 2019; Pörtner et al., 2021). To this end, farmers and their communities are key stakeholders as they manage large areas of land and carry out necessary change at the local level (Allen et al., 2018; Blackstock et al., 2010; Dang et al., 2019; Woods et al., 2017). Scholars and policymakers alike increasingly recognise that equitable and effective policy must support farmers in sustainable agricultural change and account for the various factors that influence farm management (Dessart et al., 2021; Feola et al., 2015; Ingram et al., 2016; Mills et al., 2017). This paper examines this issue through the lens of relational values. Relational values have recently gained traction in efforts to further understand the nuanced interplay between human–nature relationships, resource management and environmental policy. We aim to expand knowledge on farmers' relational values and decision-making, and their role in the agri-food value chain more broadly, by illuminating how these values are shaped by and enacted as a function of a complex system of actors.

Despite potential long-term benefits, many farmers have not adopted sustainable farming practices (Braitto et al., 2020; Byerly et al., 2021; Mase et al., 2017; Niles et al., 2016; Prokopy et al., 2015). Adoption decisions often have an opportunity cost for farmers: instead of farming land intensely for profits it may involve new tillage practices, reduced application of fertilisers or pesticides, or establishment of buffer zones for water ways. A growing body of research on processes underlying these decisions has identified relevant individual (internal) drivers and socioeconomic and market (external) drivers, and both dimensions are now recognised as important for farmers' decisions. Factors pertaining to the individual include farmers' personal attitudes, values and beliefs, whereas external drivers include farmer networks, advisors and governance structures (Dessart et al., 2019; Ingram et al., 2022; Mills et al., 2017). Moreover, farmers' behaviours are influenced by concern and experience with climate change (Arbuckle et al., 2013; Findlater et al., 2019) and the ways policy interventions are designed to support behaviour change (Barreiro-Hurle et al., 2023). Notably, the literature increasingly highlights farmers' social networks and perceptions of their social referents as important for decisions, to establish a sense of social norm and sustain behaviour change (BenYishay & Mobarak, 2019; Bijman et al., 2014; Rust et al., 2020; Wynne-Jones, 2017). Farmers consider successful peers as reliable experts, and participation in social networks can facilitate the uptake of new practices (Skaalsveen et al., 2020). Recent research often situates farmers in their wider socio-political context and networks, underlining a non-linear dynamic of people and their interactions with local communities, landscapes and policy environments (Brown et al., 2021). Considering the agri-food system as comprised of farming communities, policy and market contexts, and the way in which these interact is important

for understanding barriers or enablers of farmers' opportunities for action (Milford et al., 2022; Richards et al., 2013; Soubry et al., 2020).

1.1 | A relational values approach to understand farmers' decision-making

Recognising that farmers' decisions and actions are of society-wide importance, scholarly and policy interest in further understanding the conditions that influence their decisions and actions has risen markedly in recent years. Such efforts often focus on the values associated with human–nature relationships and their role in the management of natural landscapes and ecosystems (Chapman et al., 2019; IPBES, 2022; Ives & Kendal, 2014; Jones et al., 2016; Wensing et al., 2019). The concept of relational values emerged as a 'third kind' of values that expands on the dichotomy previously dominating the discourse: instrumental (valuing nature for people's sake) or intrinsic (valuing nature for its own sake) values (Chan et al., 2016; Deplazes-Zemp, 2023; Himes & Muraca, 2018). Relational values refer to values linked to human–nature relationships and can be defined as 'preferences, principles, and virtues associated with relationships, both interpersonal and as articulated by policies and social norms' (Chan et al., 2016, p. 1462). Rather than centring on the value of things or outcomes, relational values are based on the recognition that relationships are fundamental to people's sense of well-being and identity. They are embedded within the culture and (re)produced through behaviours (Allen et al., 2018), and thus more context-specific (in the sense that the entity of value cannot be substituted by another entity) than other types of values (Himes & Muraca, 2018). For example, a farmer can assign relational values of pride and respect to a specific plot of land that delivers rich yields and to which they tend carefully, or joy to a bird species that returns to their area at a given time each year that signals the arrival of spring and motivates their farming.

Empirical efforts to expand knowledge on relational values suggested close links with other concepts such as human–nature connectedness (Riechers, Balázs, García-Llorente, et al., 2021) and sense of place (Allen et al., 2018; Chan et al., 2016), and that they underlie motivations for environmental stewardship (West et al., 2018). In this sense, the concept of relational values offers an approach to examine diverse environmental values. Researchers and practitioners increasingly use the concept to communicate the importance of multiple, plural values and human–nature relationships for land management (Díaz et al., 2015; Pascual et al., 2017). The concept is thus particularly enticing for agriculture, an activity situated at the human–nature interface that produces society-wide economic and social prosperity as well as individual and local-level livelihoods and well-being.

1.2 | Expanding on relational values in farming landscapes

Recent empirical studies illustrate the relevance of relational values in the agricultural context by identifying their content and relationship

to other types of values (Allen et al., 2018; Chapman et al., 2019; Kreitzman et al., 2022; Tobin, 2022). Findings also specified features of relational values and how entities are valued in the relational sense, describing them as bidirectional and expressed by sentiments including care and respect on the one hand, and contributing to well-being on the other (Chapman & Deplazes-Zemp, 2022). While working with the land and producing food are costly activities in terms of time, effort and money, the way in which they allow experiential and experimental interactions with nature can stimulate the formation of relational values to influence priorities and decisions, as well as sustaining such work (Geissberger & Chapman, 2023; Jones & Tobin, 2018). These findings help illuminate how relational values develop in a context like agriculture, what they are, and their role in driving decisions.

With the growing understanding of farmers as embedded in complex systems consisting of various stakeholders, however, much is yet to be known regarding farmers' relational values as they pertain to decisions and the influence of other actors (Githinji et al., 2023). This is particularly so considering the multifaceted relationship between values and behaviour (Fish et al., 2016; Vatn, 2009). It is increasingly recognised that various actors and contexts can facilitate the expression of some values while restricting others (Bataille et al., 2021; Gould et al., 2023; Hoelle et al., 2022). As such, the utility of the concept in policy and practice could be furthered by elaborating on how different actors, policies and economic drivers influence the structures that constrain the relationships that people develop with nature in different contexts. Here, we expand and deliver on the idea that farm management could be better understood by accounting for farmers' relational values and the interactions with other actors by asking how farmers' relational values inform their experiences, priorities and farm management decisions, and how other actors influence this dynamic. We analyse the narrative accounts of Norwegian farmers and other stakeholders in the agri-food value chain focusing on relational values and farm management decisions. By doing so, we also shed light on interactions with system actors to inform enablers and barriers of farmers' enactment of relational values and how resulting narratives and tensions are navigated. Our results expand on relational values as a useful lens for understanding how farmers hold a web of relational values that interacts with a web of actors to help identify opportunities for change. Given the necessity to transform the agri-food system, this insight will be useful for decision-making at local and national levels.

2 | METHODS

2.1 | Context

The Norwegian horticulture sector is valued at around 19 billion NOK, corresponding to 17% of the total primary production value in Norwegian agriculture (Statistics Norway, 2023). Most horticultural producers are members of one of two producer cooperatives (Gartnerhallen and Nordgrønt) that each sell exclusively to two

grocers (BAMA and COOP), that in turn sell to three large super-market chains (for an in-depth description of the fruit and vegetable market value chain in Norway, see Milford et al. (2021)). The sector is uniquely exempt from national competition law, allowing producers to collaborate in planning production and determining price. This is coordinated by The Green Growers' Cooperative Council (GPS) that aims to maximise market share of Norwegian produce, ensure market balance and recommend retail price (OECD, 2021). This offers producers some predictability for production plans and deliveries and is considered important for producers' growing decisions. Due to high production costs including for agricultural inputs and workforce, Norway has implemented import tariffs for most vegetables that could be produced domestically during the main season for Norwegian produce, which increases consumer demand for domestic products. Yet, retailers can still import vegetables at lower prices and Norwegian producers continue to face significant competition from imports: currently, around 50% of vegetables consumed are imported (Norwegian Directorate of Health, 2022). The average Norwegian consumes 51.6 kg of vegetables per year which is lower than the European average and 60% of what is recommended by the health authorities (Mittenzwei et al., 2020; OFG, 2022). This suggests a large growth potential for Norwegian produce, in line with the strategy suggested by a public-private partnership representing the sector in 'Grøntsektoren mot 2035' (*The Horticultural Sector Towards 2035*) to increase the production volume, demand and market shares of Norwegian horticultural produce by 50% by 2035.

2.2 | Study areas

We conducted semi-structured interviews with horticultural farmers in three main and geographically distinct horticultural regions in Norway: Viken County, Rogaland County and Trøndelag County (Figure 1). Growing vegetables in Norway is demanding due to a cold climate, short growing season, mountainous topography and lack of optimal soil quality. These agricultural areas were chosen as they represent most of Norwegian horticultural production and hold both small- and larger scale farm operations. The areas are coastal with relatively flat terrain and mild temperatures, offering soils relatively well suited for vegetable production. The agricultural composition otherwise is mixed with animal husbandry and crop farming, and the areas are in proximity to three major cities in Norway: Oslo in Viken, Stavanger in Rogaland and Trondheim in Trøndelag. The three areas are hubs for vegetable production and offer similar opportunities for farmers to connect formally and informally via, for example, delivery points and social gatherings. The areas are part of the same value chain and market, and have changed over the last few decades due to agricultural intensification and face continued pressure from urban expansion and population growth. We did not find significant differences between participants that could be attributed to the geographic regions, likely due to their embeddedness in the same value chain and policy frameworks.



FIGURE 1 Farms in three areas that are hotspots for horticultural production in Norway participated in the study. Map source: N5000, Norwegian Mapping Authority.

2.3 | Data and analysis

The data were collected between August and October 2022 via semi-structured interviews consisting of open-ended questions that covered participants' motivations and priorities in their farming business, perceived challenges, risks and opportunities, use of and trust in different information sources, significant social relationships, and attitudes towards climate change and environmental issues. Access to participants was facilitated through a listing of all farmers who were registered to receive horticultural farming subsidies from the government. From this, we drew a purposive sample to ensure horticultural farms (producing vegetables in outdoor fields) of various sizes and regions were represented. Potential participants in the selected areas were phoned and invited to participate. The acceptance rate was high: only four out of the 29 farmers that were contacted declined (primarily due to time constraints). All interviews were conducted in Norwegian by the first author and recorded with the interviewees' consent. Interviews were conducted on farms where possible, in farmers' homes or offices, otherwise in cafes or over the phone. The interviewer would also do a farm tour if invited. To get different perspectives on the agri-food value chain we also interviewed farm advisors and other industry actors. The total sample consisted of 34 participants: 25 farmers, 3 farm advisors, and 6 industry actors from the GPS (four individuals) and 1 retail chain (two individuals). We stopped interviews at this point due to theoretical saturation. Two of the interviews were conducted with a father and son who were currently both involved in the farm operations, where in both cases, the father was close to retirement age and the son had

recently stepped in to inherit the farm business. One interview was conducted with a couple who managed their farm as a team. All participants were asked for oral consent in the study, as some participated via phone interviews. The research was approved by the University of Oxford's Central Research Ethics Committee and the Norwegian Centre for Research Ethics (Sikt).

The interviews were transcribed and coded by the first author using thematic analysis. A relational values framework was adopted for data collection and interpretation, a choice which was validated in the early stages of piloting and analysis. The coding followed a hybrid inductive–deductive approach aligned with the principles of qualitative data analysis (Punch, 2014). From an initial literature review, we identified possible relational values and codes to reflect motivations around management practices, priorities, and common challenges and opportunities that farmers face. These included care, joy and pride, respect, and relationships with time (Chapman et al., 2019; Chapman & Deplazes-Zemp, 2022; Kreitzman et al., 2022). The interview-based codes, chosen for their empirical salience, allowed for more nuanced topics to also be included. These included different values and priorities, such as intergenerational thinking, various risk perceptions, and concerns around the dynamics and structure of the agri-food value chain. We further drew on the work of Chapman et al. (2019), Knippenberg et al. (2018) and Kreitzman et al. (2022) in developing and interpreting our analysis. Using a relational approach means acknowledging that knowledge is context-dependent and situated within relationships between different entities. This helped bring forward farmers' perspectives and decision-making processes and their examination in terms of relationships to various entities in the farmers' environment, including on-farm and societal elements and actors.

3 | RESULTS

Our analysis revealed two interrelated main findings which together demonstrate how farmers' values and decisions are shaped by a complex system of actors. First, all participants expressed relational values predominantly rooted in three relationships: to farmland, to nature more broadly, and a connection to past, present and future farming communities. Farming communities at the local scale are diverse and consist of both farmers and non-farmers, which can provide a stable backbone for farmers to facilitate cooperation and learning (Schreiber et al., 2023; Skaalsveen et al., 2020). The relational values could be grouped into five categories: *care*, *respect*, *joy and pride*, *cooperation* and *intergenerational thinking*. Second, the relational values were entwined with a web of other actors that significantly influenced participants' capacity to enact their relational values (Figure 2). As such, farmers' values and decisions should be considered not just from an individual perspective but as embedded in a complex system of actors, the relationship with which brings to life certain values. While the profession of farming is defined by uncertainties (e.g., due to seasonal weather

and market fluctuations), the behaviours of these actors, combined with political shifts and economic turbulences, resulted in a suite of barriers and enablers for participants' enactment of values. We also observed that the relational values were closely interwoven and often mutually reinforcing one another. We structure the remainder of our results and discussion as follows: we first unpack the relational values (summarised in Table 1) in their respective sections to illustrate how they shape decisions and interact with the web of actors by highlighting the most salient connections. Figure 2 provides a visual summary. Finally, we discuss our findings' contributions and implications, and summarise enablers and barriers to farmers' relational values in Table 2.

3.1 | Care

The relational value of *care* was clearly anchored in all relationships, and participants expressed care both as affective concern and practical action (Jax et al., 2018). Moreover, these expressions intersected with the various other actors that farmers interact with, most notably grocers and policymakers. When speaking of their farming, participants often described practices of care as embedded in their farm operations, such as soil management and crop care, and in connection to the wider farming community. These were important for their own identity, place attachment and often for a sense of tradition. One farmer explained,

I learned from my father. He was one of the ones who was out in the field all the time, on his knees, studying the plants, to check how they were doing. Now I am like that too, kneeling, head down in the field to see how they really are doing. Because understanding that, and employing the right tools at the right time, is critical for the crop, the soil, and for the environment.

A3A

The farmer elaborated that following his father, and being known for it in the community, gave him a stronger sense of purpose. Along these lines, many farmers described their contributions to various community projects of waterway rehabilitation, forest management and habitat establishment for pollinators, expressing a sense of duty of care. Thus, they connected the importance of farm-specific practices with healthy crops and biodiversity more generally, blurring the line between their commitment to land stewardship and connection to nature.

These sentiments notably intersected with grocers and policymakers, which were consequential for participants' care. All participants stressed how influential grocers were for their farm management, including for production plans, future farming considerations, and personal levels of stress and well-being. Many voiced concerns over grocers' growing power and wealth in recent years which caused increased uncertainty for producers and often depreciated their practices. For example, two advisors underlined that

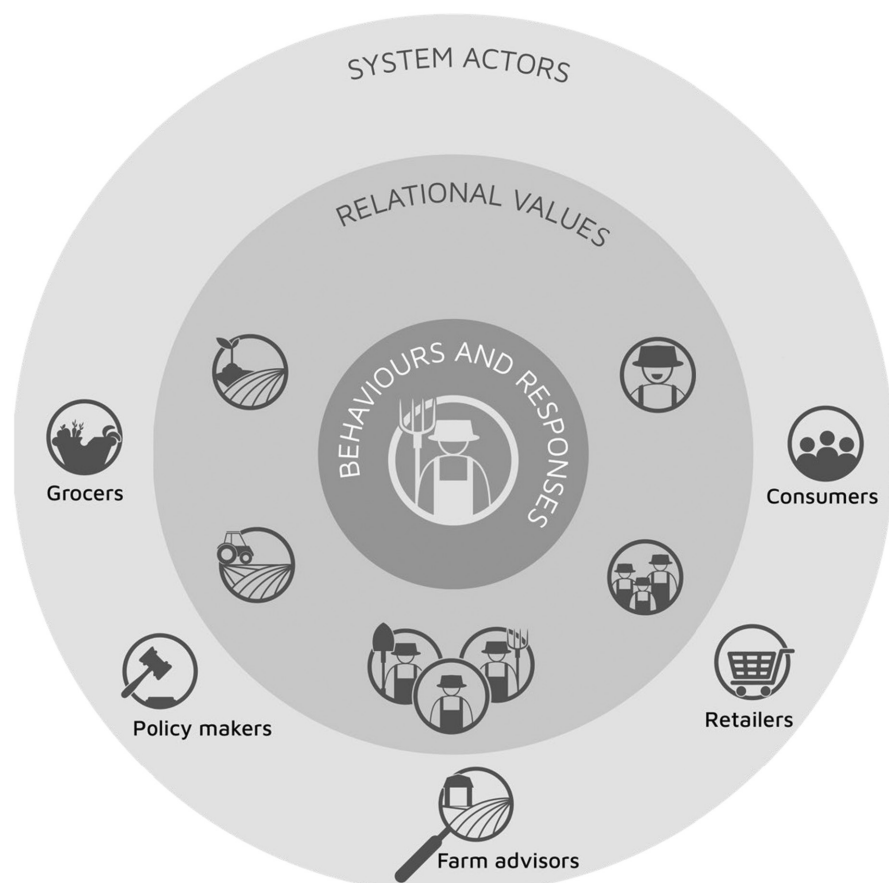


FIGURE 2 Farmers' relational values are entwined with a web of actors. The inner circle represents farmers' behaviours and responses, including farming-related behaviours as well as social and psychological responses. The middle circle captures the relational values held by farmers, namely care, respect, cooperation, joy and pride, and intergenerational thinking. The outer circle represents the web of actors that shapes farmers' opportunities for enacting their relational values. The circles are thus all connected and interact so that changes in one can influence changes in another.

TABLE 1 Definition and description of the five key relational values associated with the three relationships in this study. Example quotes are provided in the text, and further data can be found in Supporting Information (Table S1).

	Farmed land	Nature	Community
<i>Care</i> —An attitude of concern and principle of active care, seeking to tend for the needs of other human and non-human entities (Jax et al., 2018)	Close attention to farmland, crop conditions, for example, assure crops are provided with nutrients	Take steps to nurture nature, protect waterways, assist pollination, avoid unnecessary use of, for example, pesticides	Profound attention to other members of farming community, nurturing relationships and sharing experiences with other farmers
<i>Respect</i> —A sense of admiration and consideration of natural conditions on the farm and beyond and towards other farmers; seeking sufficiency rather than exploitation	Acceptance of (limitations to) capacities, needs and requirements of farmland, for example, irrigation measures	Acceptance and reverence of nature as it is, balance farming and nature stewardship	Consideration of other farmers' needs and production, treat other farmers as collaborators rather than competitors, sharing knowledge and experiences
<i>Joy, pride</i> —Sentiments of joy and pride tied to farming and farmland, to nature more broadly and to relationships with other farmers	Experience and emotions of land management, sentiments tied to their farm and plots of land, feels good to 'create'	Experiential and emotional bonds with nature more broadly, motivations to act accordingly in farming decisions	Sentiments from being part of a wider farming community; gives further purpose in farm operations; encouragement and motivation
<i>Cooperation</i> —Farming as an act of working together with soils and nature, embracing learning and a sense of close connection with other farmers	Attitude of cooperation and co-creation with crops and farmland	Expressions of partnership with nature, consciousness of being one of many actors that manage and depend on nature	Working with other farmers and building each other stronger as an integral part of farming; balance own production with that of other farmers
<i>Intergenerational thinking</i> —A value-laden relationship with past, present and future farming generations and time	Ensure soils are managed with a long-term perspective, actively considering past and coming generations in farm management	Nature should last forever; considering the long-term impacts of activities on nature	Active connection to past and future farming generations through farming practice, the next generation as an integral part of the farming community

farmers often had to limit their crop rotations and harvest times to respond to grocers. This relationship and increased uncertainty further interacted with policy. Participants expressed that policymakers did not understand the economic, climatic and social demands they faced. For example:

One of the strongest risks in Norwegian agriculture is the way it is politicised. We experience major differences between the blue government from last electoral cycle and the red-green government we have now. This creates significant uncertainty for someone who is trying to make a living of it.

C2

The short-termism of policy programming as it fluctuated with 4-year electoral cycles provided additional uncertainty. At the same time pressures from grocers, costs for farming equipment and inputs (e.g., fertiliser and seeds), and salary expenses increased so that many farmers experienced additional significant economic uncertainty. Taken together, this could erode their care as exemplified by their limited opportunities for crop rotations, increased tension in the farming community, and cutting expenses such as for advisory services.

Some participants underlined the opportunities that could come from more integration and strengthened relations with grocers and policymakers. In collaboration with a grocer one participant had significantly reduced the amount of imperfect produce going to waste by delivering to an industrial-sized kitchen. The strict aesthetic demands that grocers and retailers maintain for the produce (e.g., to reject produce that is too large, too small, too wonky) was a barrier for many participants. Instead, this farmer found a collaborative solution which in turn had a profound effect on their motivation and relational values, notably care and respect. Many shared the view that policies could be co-created and better tailored to their needs to facilitate such solutions at a larger scale.

3.2 | Respect

Like care, sentiments and acts of *respect* permeated all three relationships and were linked to farmers' experiences with other actors, most notably grocers and farm advisors. Respect was a main feature in how interviewees enacted their role as land stewards and food producers, and in descriptions of their influence on the environment.

Many participants expressed sentiments and acts of respect towards other human and non-human entities that were tied to their self-respect. These were often bound by the requirements set by actors such as grocers and consumers which ultimately determined what and how much to produce, surplus produce and use of agricultural inputs, with important implications for farmers' sentiments and enactment of respect. This was exemplified in a range of participants' reflections, decisions and activities, including measures taken on the farm and beyond. Participants expressed the importance of contributing to pollinator habitats and healthy waterways, respecting and carefully considering weather and climatic influences, and respecting their communities and the needs and wants of other farmers. Interviewees' realities and struggles of production were brought to the forefront in cases where grocers would not accept produce, for example, due to aesthetic reasons, or consumers' complaints over quality or price. For many, these held profound consequences such as diminished sense of purpose and self-respect that they otherwise derived from their farming.

For many of the farmers in our study, the sentiment of respect was thus a driving force that encouraged farming for sufficiency and to balance their production with nature stewardship and soil care. These sentiments were also reflected in how participants spoke about other farmers, closely linked to the notion of cooperation further described below. One farmer stated:

To work together and build each other stronger is essential for a good production here. [...] There are guidelines for production plans, the distribution of quotas and so on, and you have to respect these and cannot for example take the quotas from one producer [in one part of the country] and move it [to this part], there should be predictability for everyone.

C5

However, there were also farmers who were more 'productivist' (Barnes et al., 2011) or business-oriented. When prompted to talk about challenges, one such farmer noted:

The main ambition is to make money to make the factory go around. [...] for our main concerns, it is definitely the economic aspect—we have to make a living. In our sector, even though costs are going up for everyone, we can't just increase the prices of what we produce. When you open the newspaper and read about increasing food prices, that is not going to us.

A1

These farmers often expressed frustration over a lack of profitability and emphasised the economic aspect of developing their farm business. Still, they were often forward-leaning and innovation-oriented, focusing on developing their knowledge and win-wins between economic and environmental aspects. Here, influences from farm advisors were noteworthy in reinforcing

participants' relational values in general and that of respect in particular. Many described regular meetings, often weekly, with advisors as helping them deliver on tangible goals of food production and environmental outcomes (e.g., fertiliser, pesticide use) as well as intangible values of community and well-being. For our participants, these articulations were grounded in sentiments of respect for their own production as well as to nature and the broader farming community.

3.3 | Cooperation

Expressions demonstrating relational values around *cooperation* were particularly evident in the farmer-farmland and farmer-community relationships. These were also evident throughout interactions with other system actors, most notably with grocers, advisors and policymakers. Interviewees described parameters for their production by, for example, grocers and policy regulations and subsidies, and that cooperation-laden relationships with their farmland and peers helped drive and connect the practices, meanings and production outputs of individual farmers to the wider society. One farmer explained,

Community in agriculture is more important than many are aware of, that we can discuss challenges with other farmers is extremely important. [...] Everything we work with is alive. The experiences of one farmer are different from the experiences of another, and all [our experiences] can be discussed and shared between colleagues.

C2

Interviewees often voiced the importance of 'getting to know' and 'working with' their crops and soil for producing food. This value-laden cooperativeness with their crops and land as well as nature more generally permeated many of the motivations, skills and concerns that farmers expressed. For example,

To succeed in your production you have to understand the plant, and what it needs. [...] It is almost strange to say out loud but to place yourself in the position of the plant, to understand what it needs, to work together, I think is very exciting.

C4

Participants further described a profound sense of collectiveness with others in the farming community and often found cooperative ways of addressing challenges in their farm management via social ties and cooperation (Bijman et al., 2014; Wynne-Jones, 2017). While recognising that they were to varying extents competing with other farmers, often these reciprocal relationships represented a source of motivation and comfort for the farmers in our study. Such relationships were particularly prevalent for

farmers associated with the same delivery point, facilitating both processional and social bonds. Some of these relationships were also facilitated by farm advisors, which helped organise formal and informal gatherings. Advisors' efforts could thus strengthen farmers' relational connection to both farmland and the farming community.

Participants often stated that their abilities to cope with challenges including weather, climatic impacts and securing a skilled workforce on their farm were strengthened by being part of social farming environments. Some would also emphasise how sharing equipment with neighbours allow for less expenses and more efficient investments and resource use in their own farming, and the importance of farming communities for their resilience. Others would express negatively laden relationships within their communities, often in the context of competition and experienced stress linked to grocers and policymakers (similar to the dynamics of care). For example, due to low-profit margins and the amount of work necessary to secure income, farmers would strive for larger land areas to increase profits.

[In this area] there is a lot of competition to access land [...], I feel that is one of the largest challenges for us. It has gotten to the extent where people are not afraid to go out of their way to obtain something at the expense of others.

B4

Several participants shared the perception that farmers would increasingly negotiate privately and behind the backs of other farmers to secure larger land areas instead of cooperating openly as before. Some also strongly emphasised the increasing competitiveness as an element of stress, underlining the complex dynamic between their relational values, interactions with various actors and farming activities.

It should also be noted that three farmers underlined productive, direct and cooperation-loaded relationships with grocers and consumers, and some farmers did not express cooperation as important in their farm management. These farmers were often more isolated, in the sense that they did not have many farmers with comparable production nearby. They also often held a strong economic orientation and relied more on personal experiences and agricultural education.

3.4 | Joy and pride

A profound sense of *joy and pride* characterised most participants' articulations around farming and descriptions of their motivations and priorities. These sentiments often overlapped with other relational values, in particular care and intergenerational thinking, and permeated the links with the other actors. For example, doing what felt good, excitement and a sense of pride often coincided with measures to care for crops and promote soil health, contributions to ecosystem services

and maintaining biodiversity, and a connection with other farmers and generations. One farmer noted,

I calculated the amount we produce here, and there is of course something to it, pride in what we produce, it equals what [municipality] eats in a year—we supply our community with what we produce. And we are the only ones around here doing this [...]. There is nothing like walking in a [crop] field in spring, and watch [crop] mature once you remove the covering, it is beautiful, that is actually what is behind everything we do, you feel like you are doing an important job and that the landscape looks nice, that you are doing a good job.

C6

These sentiments of pride in the ability and act of living off the land and producing vital goods for the local community and beyond, in a way that participants felt is also good for the environment, were echoed by many participants. In this regard, the influence of retailers and consumers was particularly salient. Most participants noted that the utility of farming vegetables and any potential increase in production depended on consumer demand. Participants often suggested that consumers were distant to food production and ignored how work and resource-intensive it is, which reinforced farmers' low status in society and undermined their joy. In this context, many pointed to a key role for retailers in both boosting farmers' status and in stimulating market growth. Whereas some participants expressed that they had made efforts to connect with consumers, for example via farmer markets, direct sales or hosting school classes on their farms, given the limited scale they doubted any influence beyond their local communities. Instead, they considered retailers' market knowledge, store environments, promotions and policy as key for increased demand for Norwegian produce. Additionally, for many interviewees, the relationship with the wider farming community and feedback from consumers helped counteract these negative attitudes to strengthen sentiments of joy and pride in their farming. One farmer stated:

It is fun to watch [crops] grow, getting response on what you are doing, caring for the plants, that is fun. It is also fun to try out new crops, to learn something new, and maybe that will also bring economic benefits, to develop in that sense.

B5B

3.5 | Intergenerational thinking

The relational value of *farming with an intergenerational perspective* encompassed diverse sentiments and emerged as a defining feature for many of the participants' decisions and interactions with other actors. Participants often felt limited and uncertain due to

short-term grocer and policy programmes, and emphasised opportunities for co-creating longer-term production planning and supporting policy.

When considering motivational and driving forces behind their farming, participants often mentioned the principle of leaving the farm and land in a better state than they got it, closely linked with the values of care, respect and pride described above. In turn, this was influenced by interactions with other actors and shaped their decisions on the farm. Most farmers in our study articulated an intergenerational perspective where farms, equipment, local knowledge and even production contracts with grocers were passed down among family. For example:

To produce something, knowing that all your efforts result in produce that you can sell, and knowing that in this area people eat what you managed to cultivate yourself, that is valuable. We also have two small children, and it is very nice to have them stumbling around our feet and to offer them that upbringing and perspective on life, that is a key part of my motivation.

C3

These statements exemplified that for many, while the act of farming is in itself worthwhile, the notion of passing the associated set of skills, values, lifestyle and traditions on to the next generation added a value-laden dimension to their farming and often motivated sustainable and innovative farming approaches. These findings indicated that participants held purposeful and value-laden perspectives on time, in line with previous research (Kreitzman et al., 2022; Mikołajczak et al., 2022).

These sentiments were critical for their interactions with other actors. Many farmers underlined how this perspective would influence most if not all their decisions, whether it was navigating demands from grocers, presenting their food at local markets to connect directly with consumers, or contributing to active farming communities. For example:

We work all the time to improve what we are doing, to maintain the resources we have, and the land. This is about short-term goals of a plentiful yield this year, but also for ensuring that will be possible in five years and in ten, and for the next generation.

A7

In this regard, several participants noted the opportunities they saw for co-creating more long-term policy and programming. The 1-year production plans from grocers and policy that fluctuated in line with the 4-year electoral cycles could be starting points for more meaningful engagement between different actors in the value chain to further develop initiatives that would offer more predictability for farmers.

Finally, it is worth noting that two the farmers did not have explicit reflections around the traditions and lifestyle of farming in relation to past and future generations. Both had inherited the farm from family, but the future of the farm and plans for passing it on did not considerably influence present decisions. There are many possible reasons for this, where economic concerns, competition and increasing uncertainty in their farm management were mentioned by both.

4 | DISCUSSION

Understanding how and why farmers make decisions lies at the core of sustainable agricultural change. We draw on the concept of relational values to show that while participants held diverse preferences and beliefs and operated in a range of different contexts, a common set of values predominantly relational in nature were widely shared, continually unfolding and important for farm management. Moreover, these values were entwined in a complex web of other actors that acted as barriers and enablers for farmers' enactment of their relational values. As such, our findings underline that considering relational values in this wider context can help deepen our understanding of how various actors and economic and socio-political forces influence and are influenced by farmers, with important implications for sustainable livelihoods and environments.

4.1 | Relational values as guiding farm management

The farms in our study differed in their geographic regions, size and crop output. Still, how participants managed their farms, including the use of (chemical) crop protection measures, seeking advice from and socialising with other farmers, and contributing to thriving pollinator habitats and waterway management on and beyond the farm, could be broadly understood as expressions of relational values and, critically, how they interacted with other actors. This could be seen, for example, by the experience of farmers' joy and pride in tending to their farmland and producing crops, which could be strengthened by the positive feedback they got from supplying fresh produce to their community, or diminished if their produce was rejected due to aesthetic demands by grocers or consumers. In line with previous findings, these relational dimensions existed in addition to the instrumental values that participants held linked to crop production, economic profits, and food security (Hoelle et al., 2022; Tobin, 2022) and intrinsic values of biodiversity and nature (Braitto et al., 2020; Geissberger & Chapman, 2023; Mills et al., 2017; Moroder & Kernecker, 2022). Our observation of the relational values as rooted in relationships with farmland, nature and community also aligned with previous research from other contexts, for example in Europe (Chapman & Deplazes-Zemp, 2022; Mikołajczak et al., 2022) and North America

(Chapman et al., 2019; Kreitzman et al., 2022). Taken together, the relational values and sentiments of their farming to be meaningful, deriving a sense of pride, achievement and community, outweighed the labour-intensive and long days that farming entails.

Thus, the relational values identified in this paper exemplified some of the diverse values of farmers that either directly or indirectly influenced their farm management practices, such as responsibility and commitment to soil health, nature, admiration and place attachment (Chapman & Deplazes-Zemp, 2022; Mikołajczak et al., 2022). For example, care is central in human–nature relationships as well as for human well-beings, and fosters trust, responsibility, and social connectedness (Jax et al., 2018). Here, one participant's collaboration with other farmers to manage a water stream not adjacent to or directly relevant to their farms was an intriguing example of an initiative that did not enhance on-farm productivity, soil properties or economic benefits. Indeed, it took up energy, time and economic costs that could have been spent otherwise. Instead, it served to strengthen feelings of care, community and place attachment, and worked indirectly to encourage other environmental actions, thus reflecting relational values and a commitment to personal and social welfare as well as ecological well-being (Jones & Tobin, 2018).

As such, our findings highlight that most horticultural farmers have close relationships with their farmland, with nature and with the farming community—the nature and quality of which constituted 'the good life' (Jax et al., 2018). The embodied notion of relational values like care and respect apparent in participants' decisions further align with findings from Kreitzman et al. (2022) and the conceptual framework of Chan et al. (2016) of relational values as both individual in nature (stemming from farmer–farmland and farmer–nature relationships) and involving human collectives (farmer–farming community relationship). Moreover, the findings underlined the utility of considering relational values as they pertain to a diverse set of actors to understand the driving and restricting forces. Taken together, our results thus augment recent arguments to move beyond understanding agricultural decision-making as predominantly individual and economically oriented, by demonstrating the roles that a web of relational values and actors, and their interactions, play in farm management.

4.2 | Navigating multiple values and interests: How do other food system actors influence farmers' relational values?

Expanding on findings focusing on individuals' relational values in the context of agricultural landscapes, our results demonstrate the utility of considering these values as embedded in a dynamic system of actors that enable or restrain farmers' enactment of them. This helps to show the different contexts that work as enablers and barriers for farmers (Fischer et al., 2021; Fish et al., 2016), and possible solutions (West et al., 2020).

There were both enabling and restricting forces associated with the identified actors. Notably, most participants expressed

that grocers' accumulation of power, unpredictable decision by both grocers and policymakers, and low political prioritisation of horticulture threatened their agency and sense of purpose in farming. Many also expressed consumer preferences as a key influence driving retail, grocer, and in turn farming constraints and priorities. These dynamics in turn defined the opportunity space for enacting relational values (Baker et al., 2021; Bataille et al., 2021; Chapman & Deplazes-Zemp, 2022). This is not to say that in their absence farmers would refrain from unsustainable farming practices such as overfertilising or using pesticides (enacting only 'desirable' relational values; Hoelle et al., 2022). For example, while farmers considered themselves responsible for avoiding harmful pesticide use (Milford et al., 2022), many considered spraying to be safe and necessary, and they lacked support from policy and programming to further reduce their usage and mitigate the risks of doing so. This reveals a gap between farmers' various values and motivations, the conditions needed to enact their relational values in a way that enables sustainable consumption and production, and the current reality of the nuanced interlinkages with multiple actors in the agri-food value chain.

This broadened consideration of relational values can be particularly useful for a sector like agriculture that must respond to challenges like climate change, environmental degradation and population growth (Riechers, Balázs, Engler, et al., 2021). Values can be vulnerable to such turbulences which can provoke conflicts and unrest between different groups of people living within a landscape (Chapman et al., 2019). For our participants, interactions with, for example, grocers and policymakers have over time eroded their relational values and resulted in an accumulation of stress and a strong sense of uncertainty, to the point where several considered exiting farming. Critically, other types of support including formal and informal support from peers, farm advisors and consumers helped to reduce such effects. This demonstrates the clear relevance of considering these multiple actors and their interactions in efforts to support farmers' enactment of relational values.

Moreover, this perspective helps to demonstrate that 'individual' decisions rarely are so. Instead, they are subject to contextual influences. While reductionist approaches could be useful as a temporary way of understanding decision-making (Eyster et al., 2022), it is crucial to recognise the broader context in which choices are made. Our participants, situated within a complex value chain, navigated interacting biophysical, social and political processes that heavily influenced their farm management and any potential to change. As such, adopting a relational values lens that explicitly considers interlinkages with valued entities and other actors helps illuminate dynamic decision environments and change rather than static features and states. This is useful for shifting focus to the relations that can enable transformational change (Gould et al., 2023; West et al., 2020). Just as individuals do not operate in isolation, relationships or valued entities do not exist in a vacuum. The barriers and enablers associated with value-chain actors that shape farmers' enactment of their relational values are summarised in Table 2, and we consider this an important area for further research. Future work could also consider

TABLE 2 Summary of enablers and barriers for enacting relational values associated with the different value-chain actors.

Grocers	Retailers and consumers	Farm advisors	Policymakers
Barriers			
Production plans favour myopic decisions over long-term planning	Aesthetic demands on produce	Farmers' time/economic constraints can hinder engagement	Farmers not included in decisions
Infringing individual identities	Disconnect between producers and consumers		Regulations not responding to farmers' needs
Fractured community cohesion through fostering competition	Upholding and sustaining farmers' low status (e.g., by choosing foreign produce)		Agricultural policy too short term (tied with electoral cycle)
Enablers			
Stimulating innovation through partnerships	Meaning in work by providing fresh and healthy produce	Formal and informal collaboration for peer support and knowledge exchange	Opportunity to co-create policy
Supporting a stewardship ethic	Community contribution: economic, health and environmental	Foster resilient farming communities	Meaningful engagement between policymakers and farmers
Predictable planning processes and horizons	Educational opportunities	Individual capacity building	Predictable planning processes and horizons

the interactions between the relational values themselves, and how they develop over time.

5 | CONCLUDING REMARKS: IMPLICATIONS FOR DECISION-MAKING

This paper integrates views on elements underlying farm management and sheds light on how different value chain actors influence farmers' enactment of a wider suite of relational values. Considering the importance of these values in farm management, and the increasing demands, regulations and uncertainty imposed on farmers' enactment of them, how can these insights be leveraged for understanding farmers' decisions and a prosperous horticultural sector moving forward?

Several findings in this paper relate to policy-relevant topics for supporting farmers. Value-laden social relationships—the significance of farmers' communities and social networks—represent one such topic which merits further attention (Castillo et al., 2021; Rust et al., 2021; Skaalsveen et al., 2020). Notably, given farmers' diverse needs and wants the social support networks do not have a one-size-fits-all configuration (Cofré-Bravo et al., 2019; Schreiber et al., 2023). A critical consideration of the role of social interactions and processes between actors in a network, including how collaboration and conflict can occur in tandem, can help understand underlying processes of social influence and their outcomes (Bodin et al., 2020; Reed et al., 2010). Although our participants were individual decision-makers who generated their livelihoods from farming, their social relationships to other farmers often enabled access to more and better information, offered a channel through which to cope with and find solutions to challenges, and functioned as a source of motivation and comfort. There were also examples of strong competition and negative community relations, often linked to value chain pressures (Chapman et al., 2019). Supporting and strengthening farmers' social networks according to their needs is therefore important.

Another topic includes the restructuring of subsidies and regulations related to horticulture and agricultural imports. Participants frequently mentioned that the status quo economic and policy environment promoted practices that compromised their ability to manage their farm in line with agronomic and environmental ideals. A relational values approach as demonstrated in this paper could help expand insights beyond individuals' motivations, preferences, barriers and opportunities in farm management, to provide novel perspectives on system dynamics and the priorities and values of other actors in the agri-food value chain. It may be that it is the current (mis)alignment of these values, and not the organising principles of the system, that determines the opportunity for systemic sustainability (Jones & Tobin, 2018). Understanding diverse values held by actors and relevant barriers and enablers for enactment could lead to better design of these programmes.

Indeed, nascent literature suggests that relational value framings can affect stakeholders' perceptions of policy instruments (Allen et al., 2018; Chan et al., 2018; Chapman et al., 2019, 2020; Díaz et al., 2015). Converting policy tools from instrumental to a relational logic, emphasising relationships with people and nature, rather than market exchange, could significantly increase policy support from farmers (Gallemore et al., 2022). From a policy perspective, understanding whether and how different actors' values harmonise, or whether they are incompatible, can help to identify areas of conflict in ecosystem management, facilitate joint goal setting, and encourage open dialogue about prioritisations in land use (Bataille et al., 2021; Ives & Kendal, 2014). Constraints to relational values, such as power differences between value chain actors, societal norms that do not value farming, and policy that frequently fluctuates with electoral cycles, must be addressed at multiple levels of the agri-food value chain to deepen our understanding of farmers, the agricultural context and opportunities for change.

AUTHOR CONTRIBUTIONS

Andrea Byfuglien, Mark Hirons and Anna Birgitte Milford conceived the ideas and designed the methodology. Andrea Byfuglien collected and analysed the data. Andrea Byfuglien wrote the first draft of the manuscript including the development of the table and figure contents, and led the revisions. All authors contributed critically to the drafts and gave the final approval for the publication.

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CONFLICT OF INTEREST STATEMENT

The authors declare that the research was conducted with no commercial or financial relationships that could be construed as a potential conflict of interest.

DATA AVAILABILITY STATEMENT

Full transcripts of the interviews cannot be made available to avoid compromising respondents' anonymity.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

Table S1. Further example quotes supporting the relational values.

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