

Norsk Geografisk Tidsskrift - Norwegian Journal of Geography



ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/sgeo20

Feminist and gender research in Norwegian farming and forestry (*landbruk*) contexts: Past and future directions

Madeleine Gustavsson & Maja Farstad

To cite this article: Madeleine Gustavsson & Maja Farstad (2022) Feminist and gender research in Norwegian farming and forestry (*landbruk*) contexts: Past and future directions, Norsk Geografisk Tidsskrift - Norwegian Journal of Geography, 76:5, 286-299, DOI: 10.1080/00291951.2022.2156920

To link to this article: https://doi.org/10.1080/00291951.2022.2156920







Feminist and gender research in Norwegian farming and forestry (*landbruk*) contexts: Past and future directions

Madeleine Gustavsson D & Maja Farstad D

RURALIS - Institute for Rural and Regional Research, Trondheim, Norway

ARSTRACT

Much feminist rural geography to date has centred on understanding gender issues in rural space. Norwegian scholars have been leading the way in identifying new themes and approaches to examining the positions of women and men on farms and in farming communities, which has contributed to important contextual knowledge of gender relations on Norwegian farms, as well as conceptual understandings of farming lives more broadly. The article has the same objective. The authors review the extensive body of literature and identify themes, trajectories, approaches, and concepts used since the 1990s. They find that there were three main periods: 1990s to 1997, with early work that sought to describe gender roles; 1994–2005, when constructivist approaches were used; and the mid-2000s onwards, when researchers 'branched out' to study more specific themes. To encourage a widening of feminist perspectives in Norwegian farming and forestry, the authors suggest taking up (1) an intersectional approach in attending to gender, sexuality, class, ethnicity, and ability, (2) a decolonial approach, and (3) a focus on the 'green transition'. They conclude that, together, these could help to address pressing issues relating to equity, sustainability, and the future of agriculture and forestry in Norwegian contexts.



ARTICLE HISTORY Received 25 March 2021 Accepted 5 December 2022

FDITORS

Karoline Daugstad; Catriona Turner

KEVWORD

farming, feminism, forestry, gender, Norway

Gustavsson, M. & Farstad, M. 2022. Feminist and gender research in Norwegian farming and forestry (*landbruk*) contexts: Past and future directions. *Norsk Geografisk Tidsskrift–Norwegian Journal of Geography* Vol. 76, 286–299. ISSN 0029-1951.

Introduction

For more than thirty years, scholars have produced ground-breaking conceptual and empirical feminist research focused on gender issues in agriculture, forestry, and rural society in Norwegian contexts. Leading researchers such as Berit Brandth and Marit S. Haugen have throughout their careers explored the importance of gender relations on Norwegian farms and in the forestry sector, and their work has paved the way for feminist and gender rural sociology and geography farther afield. Their legacies also serve as testament to wider trends and trajectories in the rural social sciences, as well as of changes in gender relations in Norwegian rural society. As these key authors retire, it is crucial to continue their legacy of strong and ground-breaking feminist and gender rural research in Norwegian contexts.² Even though the amount of feminist and gender research in Norwegian farming and forestry contexts has decreased slightly in recent years, such research is arguably still highly relevant and important, particularly given the necessary green transition and the associated expansion of a sustainable bioeconomy that can respond to challenges around the environment and the climate. The green transition also highlights the continued need for infrastructures, food, and the development of a functioning and growing economy, and rural areas and their land and 'resources' are at the forefront of the implementation of policy relating to the transition. For the imagined future economies to be sustainable *and* equitable, there is a need for strong feminist and gender research.

To learn from the past in laying out an agenda for future research, there is arguably value in synthesising the existing rich body of literature on feminist and gender rural issues in Norwegian farming and forestry.

¹In Norway, farming and forestry are often considered under the shared term *landbruk*. Farms used to be small, and, as they combined farming and forestry practices, as well as property, we consider these sectors jointly.

²Whilst new scholars have entered the field, they have not been as prolific or as focused on feminist and gender issues in Norwegian agriculture and forestry as earlier generations of scholars.

This article does so, not only to celebrate the work done to date, but also to trace trends, trajectories, and approaches that have evolved over time. However, feminist research in rural geography and sociology has recently adopted new approaches that extend the focus on gender. At the end of this article, we lay out some suggestions for future directions for feminist research in Norwegian rural studies that can enable a continuation of key authors' legacy by being at the forefront of feminist and gender discussions in this field. The aim of this article is to provide a comprehensive overview of the Norwegian feminist and gender literature on agriculture and forestry, and in doing so to identify changing approaches, themes, and foci of research that can inform the ways in which research in Norwegian contexts can stay ground-breaking in its feminist and gender rural geographical and sociological inquiry.

After outlining the methodology, we provide some background statistical data on women's involvement in farming and forestry that set the context of the analysis. Following this, we review the literature on Norwegian farming and forestry. The review is organised into several themes, beginning with early women's studies in the early 1990s and then focusing on constructivist gender approaches from the late 1990s onwards, which focused both on women's positions and masculinities. Thereafter, we discuss later studies of gender relations in farming and forestry (2000s onwards), which built on previous work by introducing new themes and approaches (farm tourism, divorce, and men's reproductive work) and revisited ones (e.g. succession). The review is followed by some suggestions for future directions in studies of Norwegian agriculture and forestry that draw on recent conceptual discussions in feminist and gender rural research internationally, such as intersectional and decolonial perspectives (e.g. Pini et al. 2021) and we suggest there is a need to focus on the environment and the green transition using such perspectives.

Methodology

In this article we draw on a literature review of feminist and gender research in Norwegian agriculture and forestry. Papers, chapters, and reports were selected through several methods. First, key publications were identified by searching for keywords such as 'gender AND farming AND Norway', 'women AND farming AND Norway', 'masculinity AND farming AND Norway'. The terms farming, agriculture, and forestry were all used in combination with the search terms. Second, we examined the online research profiles of key authors (e.g. on Google Scholar, university websites, and the Norwegian national

research information database Cristin (Current research information system in Norway)) and the authors' CVs to identify publications relevant to the themes of gender and Norwegian farming and forestry. Third, we followed citations in publications on the topics of relevance to identify further publications.

As the key search terms indicate, we focused on uncovering women's access and positions in farming and forestry, and how these are situated within wider gender relations, norms, and structures. Given the present circumstances, with global crises threatening both food production and access to food, combined with the fact that only 3% of Norway's area is classified as arable land (Landbruks- og matdepartementet 2021), it is crucial to focus on women's involvement in active farming and forestry. Our approach is in line with the definitions of farms and farmers employed by Statistics Norway (SSB) (Statistisk sentralbyrå 2022). Whilst we make this delamination in our review, it is important to mention the significant research on women's use of the farm property as a foundation for diversification into other lines of businesses, such as farm tourism and care activities offered in farm locations (e.g. Brandth & Haugen 2007; 2010; 2011; Brandth et al. 2010; Heggem 2014a). Such work has explored how gender relations on farms become negotiated/renegotiated as farm households enter other business field, such as the tourism service economy or the care economy.

We identified over 30 publications on Norwegian forestry and farming, which we read in full (Table 1). In cases multiple publications (e.g. reports, articles) were revealed by the same analysis/dataset, we chose to only include the most well-developed publication in our analysis. As such, it should be noted that we did not conduct an exhaustive literature review as we selectively excluded publications that raised similar points and issues. Further it is important to highlight that the current article reflects our own interpretation of the literature.

Themes were inductively identified through a thematic text analysis. At the same time, the analysis took on a temporal structure, as themes developed over a time axis (1990-2019). This temporal structure enabled us to explore how the literature developed over time, how it built on previous knowledge production in Norway, and how it sometimes took inspiration from, as well as shaped, international research developments. It is our understanding that the themes emerging from the literature were temporally structured because they were derived from research projects that focused on specific themes for a given period. As should become clearer in our analysis, we have structured our review into (1) early studies that developed a solid foundation for understanding gender issues in Norwegian farming

Table 1. Overview of reviewed literature and the timeline covered in the analysis

Period	Theme/approach	Subthemes	Cited studies
1990–1997	Early studies of women in farming and forestry	-	Haugen 1990; Almås & Haugen 1991; Brandth & Bolsø 1995; Storstad & Haugen 1997
1994–2005	Cultural turn and gender studies in Norwegian	Constructing women farmers	Brandth 1994; 2002; Haugen & Brandth 1994; Brandth & Haugen 1997; Haugen 1998a; 1998b
	agriculture	Constructing women forest workers Constructing rural masculinity	Brandth & Haugen 1998a; 1998b; Follo 2002; Brandth et al. 2004 Brandth 1995; Brandth & Haugen 2000; 2005a; 2005b
2006–2019	Branching out: new	Gendered embodiment	Brandth 2006a; 2006b
	approaches and themes	Succession, the 'tractor gene' and farming styles	Bjørkhaug & Blekesaune 2007; 2008; Heggem 2014b
		Divorce and family break-up	Haugen & Brandth 2014; Haugen et al. 2015
		Men and reproductive work: fathering and masculinities	Brandth & Overrein 2013; Brandth 2016; 2017; 2019
		Gender on agricultural boards	Brandth & Bjørkhaug 2015

and forestry (1990s to mid-2000s), and (2) later studies (mid-2000s onwards) (Table 1). Early studies initially drew on descriptive and positivist knowledge approaches (1990s to 1997), but later studies shifted to more constructivist approaches where the gendered positions and identities of men and women were explored in more depth (1994–2005). By contrast, later studies drew on this already established foundation in 'branching out' into more specific themes and foci (mid-2000s onwards). Our thematic analysis is structured according to this emergent timeline.

In addition to reviewing literature on the Norwegian context, we have sought to contextualise our analysis within the wider international literature in rural studies (including geography and sociology).

Background: the number of women farmers

A key event with regards to changing gender relations in Norwegian farming and forestry, was the 1974 amendment to the successions rule that defined who had the right to take over a farm (the Allodial Law or Odelslova (Lovdata 2021)). Prior to 1974, a farm or forestry property was passed to the eldest male heir. The new succession regulation gave the eldest child, 'irrespective of gender' (Haugen 1990, 198) (for a discussion of the implications of this amendment, see Almås & Haugen 1991), the right to take over the farm. On the back of this policy change, researchers sought to understand its implications for gender relations and women's farming positions.

Despite legal changes, there has not been a major transformation in the gender balance of farm and forest ownership. Since the 1974 amendment came into force, the share of women farmers has increased only slightly: c.16% of farm properties were run by women in 2020 (Fig. 1). Even though the share of women farmers has increased, the actual number decreased from 9045 in

1999 to 6128 in 2020 (Statistisk sentralbyrå n.d.,a).³ In 1995, prior to the commencement of SSB time series data in 1999, Storstad & Haugen (1997, cited in Haugen 1998a;1998b) found that 11% of Norwegian farms were held by women, thus highlighting a sharper and more recent increase in the share of women farmers compared with men than that conveyed by the SSB time series data. In the case of forestry, gender disaggregated data were only available for the years 2005–2011. The data reveal there was a slightly increasing trend, with 26,794 (23%) women forest owners in 2005, and 29,157 (25%) in 2011 (Statistisk sentralbyrå n.d.,b).

It is important to emphasise that the numbers and shares (percentages) of women farmers and forestry owners are somewhat misleading, due to rules about how farmers and forestry owners are registered in official statistics in Norway. SSB's registration of farmers and forestry owners allows for only one owner, even if many farms are run by couples (Zahl-Thanem & Melås 2020). This is a problematic limitation, as a recent survey among Norwegian farmers found that almost 40% of the main farm operators had a spouse or common-law spouse who either always or often participated in daily decisions and management of the farm, as well as in practical farm work (Zahl-Thanem & Melås 2020). While it is likely that some of the unregistered spouses were men, many women farmers who worked with their partners are invisible in the statistics. Nonetheless, the national data highlight that women are still in a minority when it comes to owning and running farms and forestry enterprises, despite key legal reforms relating to the inheritance of such properties.

Early studies of women in farming and forestry

Early studies of gender and farming in Norway focused on women's roles in agriculture. Those studies were

³The total number of farms in Norway decreased by close to 50% between 1999 and 2020.

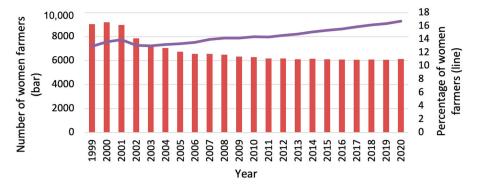


Fig. 1. The number and share of women farmers in the years 1999 and 2020 (Statistisk sentralbyrå n.d.,a)

largely descriptive in nature and did not draw heavily on social theory. They found that women were often viewed as the 'farmer's spouse' and directly involved in farm work on the family farm (Almås & Haugen 1991). As Norwegian agriculture became more modernised and mechanised, the number of smallholdings decreased by 65% between 1949 and 1986 (Haugen 1990). This indicates that women's traditional farm roles had changed dramatically.

Towards the end of the 20th century, women were seen to leave farms, primarily for two reasons. First, women were attracted by job opportunities outside farming. Second, there were several 'push factors', such as rising debts and declining incomes, which burdened farming families and meant that it was important for women to have off-farm employment. The result was that many women who were married to farmers had professional and independent careers, and their involvement in farm work decreased – a phenomena that is often referred to as farm 'masculinisation' (Almås & Haugen 1991).

Cultural turn and gender studies in Norwegian *landbruk*

Studies of Norwegian contexts have gone beyond describing women and men's roles in *landbruk* (farming and forestry) to examine how gender relations and identities are constructed (e.g. Brandth 1994; Haugen & Brandth 1994). Such research has drawn inspiration from, and forms part of, the 'cultural turn' in geography, thus shifting the focus to the 'other' in rural studies (Philo 1992) – later renamed as 'othered' or 'othering', to highlight the power relations at play in representing groups as 'same' or 'other' (Little 1999). Norwegian studies that took on a constructivist perspective focused on gender identities and changes over time. Studies also became increasingly interested in difference amongst women in farming, noting both generational differences (Haugen 1990; Haugen & Brandth 1994) and ideological

differences (Brandth & Haugen 1997). Research also started to explore rural masculinities in farming and forestry contexts (e.g. Brandth 1995; Brandth & Haugen 2000), which we explore in the next subsection.

Constructing women farmers

Approximately two decades after the important amendment to the succession law in 1974, Haugen (1990) identified an important generational change in the way women had become farmers. Whilst older female farmers had become farmers when their husbands fell ill or died, younger women (under 40 years old) were seen as having taken up farming more as a choice. The younger women also had more technological skills in farming, particularly measured in terms of their ability to drive tractors, and they increasingly participated in vocational training and farmers' unions. Based on these observations, Haugen (1998a) developed three 'ideal types' of women farmers as a means to highlight differences in their approaches to farming and their identities (Table 2).

Whilst in particular 'professional women farmers' entered farming in ways that were similar to those of male farmers, Haugen (1990) argues that the cultural values within the farming community often remained difficult to change and that these presented barriers to women's equal participation. Compared with daughters, sons were still favoured and given more encouragement by parents to become farmers. An additional cultural barrier for women farmers was that gender relations in the home remained stubbornly intact, with women continuing to perform most of the domestic labour, in addition to working either on the farm or off-farm. Taken together, this meant that whilst legal gender discrimination had been overcome, the culturally defined gender norms, identities, and practices continued to construct women as less appropriate farmers.

Brandth's study of the social construction of women farmers through the lens of femininity and masculinity

Table 2. Haugen's three ideal types of women farmers (Haugen 1998a; 1998b)

Traditional women farmers

- Female farm managers
- Professional women farmers

- No plans to become farmersNo agri-vocational training
- Includes (1) widows who become farmers when their husbands die; (2) elderly unmarried women who become farmers because of their sense of 'obligation towards their parents and the farm' (Haugen 1998a, 141); (3) married women whose husbands work in fulltime off-farm jobs; and (4) younger women who combine farm work with care of pre-school children
- Women farmers who manage farms but have their main occupation and occupational identity outside farming (e.g. nursing or teaching)
- 'farm managers rather than farm workers' (Haugen 1998a, 143)
- Motivated by keeping the family farm in the family even if they do not want to do farm work
- Those who want to maintain control over the farm by hiring labour rather than renting their land to others
- Choose farming as an occupation
- Interested in farming
- Often young (under 40 years)
- Vocational training in agriculture
- Often married and their husbands work off-farm
- Strive towards demonstrating their capabilities and how they are similar to male farmers
- Expected to combine childcare and farm work
- Working schedule not compatible with nursery opening times
- 'break gender barriers by being active in all arenas related to agriculture' (Haugen 1998a, 148)

(Brandth 1994) is particularly interesting, as it focuses directly on gendered power relations. By studying women farmers' use of machinery, their domestic work, and how they constructed their gender in relation to masculinity, she found the following:

on a relation level, difference between masculinity and femininity are ordered so that feminine is subordinated to the masculine. In a farming context where women are entering men's social positions, femininity is being reconstructed but in a way that maintains hierarchy. [...] The transformation is, however, distinct on one point: masculine superiority has changed from being a most visible and legitimate patriarchal power to a more covert form of male dominance. (Brandth 1994, 147)

By studying the hierarchical power relationship between masculinity and femininity, Brandth was able to demonstrate how pre-existing relations became reproduced despite an increasing number of women farmers and changing regulatory and technological contexts. Building on this perspective, Haugen (1998a) argued that women farmers were both part of a process of continuation and change.

In moving beyond interview methodologies, studies started to explore the changing gender constructions in Norwegian farming and forestry, focusing on how gender was represented in the associated media. In a study of how women represented themselves in a Norwegian magazine on the rural women's organisation, Brandth & Haugen (1997), similar to Haugen & Brandth (1994), explored whether women positioned themselves as similar or different to men who were farmers. By examining representations of women farmers over three decades (focusing on 1974, 1984, and 1994), they found that the magazine was 'reinforcing an image of rural women as keepers of tradition and cultural values' (Brandth & Haugen 1997, 333). They argued that the 'magazine presents a picture of rural women as

caretakers, valuing traditions and family. It does not challenge traditional gender roles and ideologies, never featuring women who break with tradition and norms, or in some ways are social innovators' (Brandth & Haugen 1997, 333).

Furthermore, Brandth & Haugen (1997) found that the rural women's organisation was focused on representing women's traditional roles in farming and struggled to remain relevant, as women's roles and positions were becoming increasingly diversified. Women who did not identify with traditional gendered farming identities, such as younger women farmers, were seen to move to more traditionally male spaces, such as the farmers' union for collective organising. Building on these findings, Brandth (2002) suggested there needed to be more attention paid to women's agency, and to how the construction of femininity and masculinity was changing in the context of wider structural and gendered transitions in farming and forestry.

Constructing women forest workers

In widening the scope of research topics, Brandth & Haugen (1998a) extended their focus on women in farming by also exploring women's positions in forestry. They particularly examined how women forest workers were constructed in the forestry press over three years (1976, 1986, 1996). According to Brandth & Haugen (1998b), 15% of forest owners were women in 1989. Just like in farming, the 1974 amendment to the succession rules gave women equal formal right to take over farm and forestry properties. However, cultural aspects of forestry work presented barriers to women's equal participation and ownership. Brandth & Haugen (1998b) found that there were three distinct 'sites' with specific gender relations in the forestry sector: (1) forestry work, (2) expert work, and (3) managerial/ organisational work.

When analysing the forestry press, Brandth & Haugen (1998a, 435) found that when practical forestry work was represented, it was symbolised by men who were 'represented as outstanding forest workers and farmers [...]. The way they were described, constructs forest workers and farmers as being tough, rugged, hard-working, battling natural forces like rain, snow, storms, frost - and even heat and insects'. The authors argued that this representation implied that practical forestry work was constructed with masculine symbolism, with the potential to alienate women. However, planting was seen as an appropriate task for women (Brandth & Haugen 1998b). Whilst women experts were largely absent in 1976 and 1986, women were frequently featured in expert positions (e.g. researchers, lawyers, consultants) in 1996 (Brandth & Haugen 1998b). However, women experts were still featured to a much lesser extent than male experts. Brandth & Haugen (1998b) also found that none of the studied women occupied managerial or organisational positions.

Brandth & Haugen (1998a, 439) found that overall there was a wider change in how women were represented in the forestry media, 'from being represented as primarily belonging to work and relations in the family/household (1976) to individual forest owners, workers and professionals in 1986 and 1996'. They suggested that in 1996 'women were represented in a greater repertoire of roles. It seems that in every decade new elements were introduced, even if the old remained' (Brandth & Haugen 1998a, 439). The wider implications of such media studies were that they enabled a more nuanced understanding of how gender was constructed and negotiated/renegotiated over time. They highlighted that women's positions were improved in some ways, yet inequities existed and were reproduced over time, meaning that gender relations were gradually changing but had not transformed entirely.

Studies of women in forestry in the Norwegian context were later expanded. In 2002, Gro Follo studied young women who had received an education in forestry at comprehensive schools (pupils in the age range 16–19 years), to explore how women's experiences of forestry education impacted their recruitment to forestry. Whilst she found that there were no negative attitudes towards girls and young women in the schools, she noted that most of those pupils did not aim towards a career in forestry (Follo 2002). Furthermore, Brandth et al. (2004) expanded on their study of women's forestry organisations and identified a dilemma facing separate forestry organisations for women. Women's justifications for developing separate forestry organisations for women were that traditional forest organisations were male dominated and women's participation was low. However, by establishing a separate organisation, they positioned themselves as different to men, albeit having the objective to become included within the wider forestry industry. Brandth et al. (2004) argued that this was the dilemma faced by a separate organisation for women. Nevertheless, they found that because of the work of the organisation, women had become more visible, particularly in the national forestry press. The above-discussed studies highlight the complexity in women's agency to navigate the gendered context of farming and forestry. Whilst the studies clearly found that women wanted to be taken seriously on the same terms as men (by being positioned as similar to men), they experienced challenges specific to women in that gendered context (such as low entry into the job market and dilemmas when organising for equality).

Constructing rural masculinity

Whilst earlier research on Norwegian agriculture touched on both masculinity and femininity (Almås & Haugen 1991; Brandth 1994), and the relative dominance of masculinity in that context (Brandth 1994), the studies by Almas & Haugen (1991) and Brandth (1994) focused more on women's position than explicitly on men and masculinities. With the increased recognition amongst gender scholars internationally that also men's lives and experiences were gendered (e.g. Morgan 1992), studies of agriculture and rural society began to focus more explicitly on how farming was constructed as masculine (Liepins 1998; Campbell & Bell 2000; Peter et al. 2000; Ni Laoire 2001; Little 2002a; 2002b; Saugeres 2002a; 2002b). Brandth's study of masculinity in tractor advertisements in Norway (Brandth 1995) was internationally groundbreaking, as it shifted the focus directly to how rural masculinities were constructed and reshaped over time.

Brandth (1995) particularly explored how the tractor became a symbol of rural masculinity. She did so by exploring tractor advertisements in an agricultural magazine, Norsk Landbruk, for the years 1984 to 1994. Brandth (1995, 128) found that the advertisements positioned the tractor as powerful in controlling 'nature' and she argued it was 'the relationship between man and technology, connected to control and mastery, [that were] central sources of power'. She also found that as technology was changing, particularly with computer technology entering farming, masculinities had shifted from a more traditional masculinity tied to manual labour, symbolised by heavy, dirty, and noisy machines, to a 'business-like' masculinity that included technical skills and knowledge. In tractor advertisements, these new technologies were constructed as 'innovative' and

enabled farmers to be competitive and 'modern' (Brandth 1995, 130), and in that way, the advertisements produced new symbols of masculinity. She also argued the changes needed to be contextualised within structural change in agriculture where manual labour centred on increasing production led to the need to reduce costs to respond to new economic demands.

In a later study, Brandth & Haugen (2000) went slightly deeper into how masculinities were changing in the Norwegian forestry sector. By analysing the forestry press, specifically Skogseieren (the membership magazine of the Norwegian Forest Owners Association), and by exploring how masculinities were constructed within either 'practical forestry' 'organisational management', Brandth & Haugen found that hegemonic masculinity was shifting from the 'macho man' image (associated with the forestry worker) to an organisational masculinity. They drew on Connell's notions of hegemonic masculinity that recognised the hierarchical relationships amongst multiple masculinities (Connell 1987). Brandth & Haugen (2000) also engaged with the work of Judith Butler (1990) in conceptualising gender as performative. In doing so, they attended to how men presented/represented themselves by means of dress, body postures, emotions, and relationships to, for example, technology. Through their analysis, drawing on the work of Liepins (1998), Brandth & Haugen identified two discourses of masculinity: 'the tough men' and 'the powerful men lead'.

The first discourse, the 'tough men' was associated with practical forestry work, characterised as 'heavy, dirty and dangerous' (Brandth & Haugen 2000, 346). Within practical forestry work, men were portrayed as tough, hard-working, strong, dirty, smelly, rugged, independent, stoic, and having 'a strong back'. Male bonding, which reflected the importance of the community of forest workers, was frequently depicted in the magazines. Practical forestry work was portrayed as risky, and dealing with risk was part of the identified masculinity. Knowledge of forestry and handling of machinery was at the core of how that masculinity was represented in the Norwegian forestry media.

The second discourse, the 'powerful men lead', emerged as new skills associated with computers become increasingly important and their use gradually challenged the previously dominant rural masculinity based on 'toughness' (Brandth & Haugen 2000). Brandth & Haugen also found that other 'sites' than practical forestry work became increasingly important in how masculinity was being performed. The new discourse was instead associated with forest ownership and management. The media represented the masculinity by

including powerful men, photographed in meetings around conference tables, thereby constructing 'a masculinity based on managerial decisiveness, assertiveness, authority, oratorical gifts and diplomatic skills' (Brandth & Haugen 2000, 352). The 'powerful-menlead masculinity' was performed by deploying economic skills, efficiency, and managerial competencies.

Whilst it was important to identify change to masculinities, later and more nuanced research enabled an understanding of how multiple masculinities co-exist, are contextual, and legitimate one another. In expanding on their earlier work, Brandth & Haugen (2005b) drew on theoretical and conceptual advances in other geographical localities (Liepins 1998; Campbell & Bell 2000; Peter et al. 2000; Ni Laoire 2001; Little 2002a; 2002b; Saugeres 2002a; 2002b) to re-examine their earlier findings. They were particularly concerned with how different masculinities were 'linked, contested, and mutually constructed' (Brandth & Haugen 2005b, 150). They found that there was mutual dependency between the two types of masculinities (the forest worker and the powerful organisational man), as the powerful organisational men had to draw on their direct experience of forest workers in their managerial work, and the forest worker was incorporating elements of organisational skills to be successful. However, Brandth & Haugen (2005b) found that both masculinities drew on parallel qualities constructed through control and battle with nature and machines, and against markets, deregulations, and other politics. The wider significance of their reinterpretation of earlier findings was that multiple sociospatial (and hierarchical) masculinities coexisted, which allowed for a more nuanced analysis of change and continuance in gender performances in the forestry context.

Branching out: new approaches and themes

From the mid-2000s onwards, research built on the now solid feminist and gender literature on Norwegian *land-bruk* in both exploring new and often more specific themes and developing new approaches. Thus, we label that period 'branching out'. Central to much gender scholarship in farming and forestry contexts was the continued relevance of the farm family as a way of organising agricultural lives and production practices. With changes to gender studies more generally, and to rural studies in particular, scholars began to explore the family farm through more specific themes, such as embodiment (Brandth 2006a; 2006b), the gendering of machinery, skills, and competences, and the gendering of succession patterns (Heggem 2014b). Other themes related to family farming were the meaning and

implications of divorce (Haugen & Brandth 2015; Haugen et al. 2015), as well as farming men's changing domestic roles and fathering practices (e.g. Brandth & Overrein 2013). Also, the focus of inquiry was changed by researchers exploring the importance of gender in agricultural boardrooms (Brandth & Bjørkhaug 2015). These key themes are discussed in turn in the following five subsections.

Gendered embodiment

The importance of 'embodiment' entered international gender discussions of farming in the early 2000s (for a discussion of gendered embodiment on farms, see Little & Leyshon 2003). Whilst a report on the relationship between women, machinery, and gender equality (Brandth & Bolsø 1995) had been published much earlier, that work was not internationally known until much later, when Brandth (2006a; 2006b) revisited the topics. Brandth argued that farm work was bodily work, as the 'output of the farm is produced by embodied beings and their labour' (Brandth 2006a, 19). In particular, the 'family farm' was 'embodied in the sense that it is based on emotion (love) and sexual ties between husband and wife' (Brandth 2006a, 19). This claim echoed the work of Little (2002a) in the UK, which highlighted the importance of sexuality in the embodied family farm, as it was particularly an assumed heterosexual embodiment that regulated farm production within the family farm organisation – a theme we will return to in the section 'Future directions'. Research also attended to how gendered bodies were situated in different spaces, with men's bodies associated with physical farm work and tied to the performance of rural masculinity, and women's bodies associated with the home, caring, and reproduction on the family farm (Little & Leyshon 2003; Brandth 2006a). Brandth (2006a) also explored the relationship between women farmers and tractor use through the lens of embodiment (for a French case, see Saugeres 2002a; 2002b).

Succession, the 'tractor gene' and farming styles

In the mid-2010s, studies revisited earlier discussions around gender and succession in farming. Researchers explored why women farmers remained in the minority despite major changes to the succession law more than 40 years earlier, which had given women the right to inherit and take over the farm. To explore these issues, Heggem (2014b) focused on farm succession and what she terms the 'tractor gene'. By examining gendered assumptions about how the different predispositions, interests, and aptitudes of boys and girls impact their

farming abilities, she sought to understand how gendered assumptions shaped farm succession in Norway. Heggem found that parents' beliefs relating to 'innate gender differences' were associated with children's abilities to become farmers. In particular, girls were thought to be competent in handling animals, whilst boys were thought to be competent with machinery and born with a 'tractor gene' (Heggem 2014b). Heggem identified different discourses on how such beliefs translated into whether or not boys or girls were considered appropriate farm successors. These discourses differed in three ways. First, they ascribed importance to the 'tractor gene' for becoming 'good farmers'. Second, 'they diverge in how they evaluate caring for animals in relation to tractor work', and third,

they divide on the question of whether a successor should exhibit the competencies perceived to be required by the main farm operation [...] or [whether] the type of production should be adjusted towards the farmer's preferences so that feminine competencies could be utilised. (Heggem 2014b, 269)

Whilst the farmers she spoke to held similar views on the innate abilities of men and women, they differed in how they assigned significance to those masculine and feminine competencies for becoming a farmer (Heggem 2014b). Heggem (2014b, 270) suggested the implications of those findings was that 'Daughters are excluded because of their natural lack of mechanical competence, but they may be included by giving them the opportunity to learn how to operate machinery and by valuing the supposedly feminine task of caring for animals.'

By changing the hegemonic value system that positioned the 'tractor gene' as essential for becoming a farmer, Heggem (2014b) argued that women could potentially become more included, and that their 'innate' abilities could be recognised and valued. Furthermore, as agricultural vocational training becomes increasingly valued, and perhaps more so than traditional embodied cultural capital (e.g. Burton 2004) associated with the tractor gene and machinery operation, there was an opportunity for women to be increasingly recognised as suitable successors (Heggem 2014b). However, according to Heggem (2014b), innate beliefs about gender differences prevail and arguably this could lead to women's exclusion or subordination.

The theme of women's continued marginalisation on Norwegian farms was also picked up in the research conducted by Bjørkhaug & Blekesaune (2007; 2008), when they explored whether it was possible to identify a gender-neutral professionalisation of Norwegian farmers. They found that while male farmers in general were 'professionalising' into what they called 'one-man

farmers', female farmers were more likely to farm together with an active farming partner, and hence to a higher extent depend on their partner's contributions to the farm work (Bjørkhaug & Blekesaune 2007; 2008). Such findings indicate that whilst working together does not necessarily have to be negative, it does point to the continuation of gendered farming styles and approaches in Norwegian contexts.

Divorce and family break-up

Building on international research taking feminist approaches to understand the survival of the 'family farm' and the role of women in enabling its survival, even in the event of family break-up (Price & Evans 2006), research in Norway explored issues around divorce. With increasing divorce rates in Norway, research sought to understand the meaning of family break-ups on farms. This research found that divorce on farms took on particular meanings, as it challenged the common heteronormative organisation of farming embodied in the family farm. Haugen & Brandth (2015, 1) state:

While any divorce or break up is stressful for the individuals involved, the break up of a farm couple has especially severe practical and social consequences. It may threaten the economic viability of the enterprise and even challenge the normative basis of the family farm as an institution.

In exploring how farm couples coped with their divorce 'in relation to how they perceived their cultural values and gendered moral codes in rural communities', Haugen & Brandth (2015, 2) identified two contrasting images of rural communities. On the one hand, rural communities were characterised as close-knit communities - places where everyone knew and supported one another. On the other hand, social control and fear of gossip regulated how couples dealt with their break-ups. Haugen & Brandth (2015) found that both men and women tended to keep details of their divorce private, for fear of 'reputation-damaging gossip' and its broader implications for their lives.

Haugen & Brandth (2015) found that men and women tended to react differently to break-ups, with many men experiencing severe depression (sometimes with suicidal thoughts) and struggling to manage their farms. Women were often determined to move forward, whilst trying to act 'in accordance with ideals of appropriate femininity and mothering' (Haugen & Brandth 2015, 8), as that constituted their basis of self-worth. In doing so, they often prioritised safeguarding the farm in their divorce settlements.

Whilst the fear of gossip was important for how couples dealt with their divorce, there was also local support in the rural community, which couples could access. Although some of the men who stayed on the farm kept quiet about their struggles, and consequently received no support from the local community, some male farmers who spoke to their local networks found much helpful assistance with farm work (but less so with their emotional problems) (Haugen & Brandth 2015). By contrast, in the case of women who remained on the farm, Haugen & Brandth (2015) found that either their male ex-partners often continued to do farm work for a transitional period or that women adjusted their farm production so that it demanded less labour. In this regard, the main difference found by Haugen & Brandth (2015) was that men experienced stigma when they asked for help, whilst women experienced no loss of self-respect when asking others for assistance. However, women who left the farm following a divorce experienced very little help from the local community, which suggested that they 'defied the dominant norms of rural womanhood' (Haugen & Brandth 2015, 12). In expanding on the same theme, Haugen et al. (2015) found that women 'were reluctant to pursue their own self-interest at the expense of the obligations they felt to preserve the farm's viability' (Haugen et al. 2015, 44). Even if women farmers had more room to manoeuvre than men farmers, their actions were embedded in the local patriarchal culture of care and obligation to others, particularly to their children and former partners. Haugen et al. (2015) noted that a negative reputation and troubled conscience sometimes reflected badly on the women, who often remained in the local community. Haugen et al. (2015, 47) argue that this 'may be the reason why they [divorcing women farmers] accept patriarchal values even when they are aware that they are giving up something financially'. The research on farm family divorce particularly helped to highlight how situated gender norms underpinned farm economies, individual health and wellbeing, and farm sustainability.

Men and reproductive work: fathering and masculinities

In early work on gender in farming in Norway that focused on women, Haugen (1990) pointed to the importance of exploring how men's domestic lives were gendered. In focusing on the gendered division of domestic labour, Haugen (1990, 209) asked 'when will the husbands of female farmers and the male

farmers start to change their working roles?' This topic was picked up in much later studies on masculinities within the Norwegian agricultural context.

Even though rural masculinities had previously been researched in Norway (e.g. Brandth & Haugen 2005a) and elsewhere (Pini 2008; Campbell & Bell 2000), existing research on farming was limited to a focus on men's economic practices and had not explored men's caring and reproductive roles (Brandth & Overrein 2013). Brandth & Overrein (2013) changed this status in their seminal paper on men's fathering practices across two generations of farmers. They found that for the older generation fathering practices revolved around children joining them at work. Children often played in the barn whilst their fathers worked or they joined them on the tractor. When children were older, those farmers actively involved their children in farm work, with the important objective of teaching them how to work and 'equipping them for a future as farmers' by transferring knowledge to the next generation (Brandth & Overrein 2013, 102). By contrast, fathers in the younger generation often emphasised that the agricultural labour process had changed, with machinery and mechanisation becoming more advanced and complicated, resulting in there being fewer tasks that were suitable for children (Brandth & Overrein 2013). Those farmers were more child-centred in their fathering practices, which materialised in how they prioritised their spare time with their children and how they engaged in children's' activities 'as opposed to work, duties and routines' (Brandth & Overrein 2013, 106). Since farm work and child caring were co-located in the same space, Brandth (2017) found that those men farmers sometimes adjusted their farm work around the needs of their children. Later in the lives of their children, fathering became centred on organised (outdoor) activities such as football, skiing, and shooting practice. Brandth (2017) argued there had been a cultural change around how childhood was understood and practised, and that was also the case amongst farming men. From seeing children as a resource in farm work, children were no longer expected to take part in farm work. Instead, fathers needed to express an interest in the lives of their children and their activities (Brandth 2017).

In a later conceptually focused paper, Brandth (2016) drew on the work of Connell (1995) and on Connell and Messerschmidt's concept of hegemonic masculinity (Connell & Messerschmidt 2005) in reanalysing earlier data on how rural masculinity was articulated through men farmers' fathering practices. Brandth (2016) explored whether and how alternative

masculinities had emerged in their fathering practices, and found the following:

father's involvement in childcare does not however, seem to clash with dominant rural gender norms. Rather, the new fathering practices are added on and combined with stable features of rural masculinity and presented in culturally recognizable and acceptable ways. There seems to be no dissonance between identities, but rather a gradual widening of the repertoire of fathering practices. (Brandth 2016, 12)

As such, she argued that the rural men did not compare themselves with women, nor did they compare their masculinity with femininity, but instead they compared themselves and positioned their masculinity in relation to older generations of men farmers (Brandth 2016). In a later paper, Brandth (2019) argued that fathering practices, despite differing across generations, became part of the rural masculinity. However, we have found that less research has explored how men's fathering relate to changes in women's experiences on farms and how it may or may not contribute to women's liberation.

Gender and agricultural boards

In the context of the green transition, farming is arguably becoming more managerial and business oriented, and in this context research on gender in connection with agricultural boards has become increasingly important. In drawing on previous research that explored gender meanings in managerial and leadership positions in Australia (Pini 2008), Brandth & Bjørkhaug (2015) explored what the recent introduction of gender quotas in agricultural boardrooms meant for how gender was constructed and practiced. On agricultural boards, there is currently a commitment to have women's representation at 40% (Brandth & Bjørkhaug 2015). Brandth & Bjørkhaug (2015) noted that women board members had undergone higher education and their skills differed compared with many of the male board members, who mainly had farming experience. Whilst they found that some men positioned women's knowledge as less valuable than that of the men, women's competencies were also valued. In particular, Brandth & Bjørkhaug (2015, 625–626) were 'somewhat surprised that [we] did not find more discriminatory or essentialist understandings of gender among the board members interviewed'. The participants highlighted differences between men and women, as well as among women and among men. Thus, board members all belonged to a 'gender-neutral' category.

Future directions

Norway has been one of the leading countries in the field of feminist and gender rural studies that focus on farming and forestry. When looking back at the central themes and directions of the research, it is striking to note the relative decline of work in this area in recent years (2016-2020s) (in Table 1, only one subtheme -'men and reproductive work' - is shown as having been focus in those years), which can be attributed to a decline in national funding available for specific projects on gender in Norwegian landbruk contexts (Svein Frisvoll, personal communication 2022). Furthermore, as the agricultural context in Norway has changed since the 1990s (e.g. reduced number of farms, larger size of the remaining farms, new technologies), we argue there is a need to re-explore previous research themes in the present-day context (e.g. women's access to and positions in farming and forestry work and in property, as well as the gender constructs that reinforce such pattern of access). Gender norms and relations have changed over the years - a particularly notable example is men's caring and reproductive roles, as discussed above - and it is important to continue to examine norms relating to family farm continuation and how children's sense of duty to take over the farm, may no longer be as strong as they were in previous generations of children on farms, not least due to individualisation processes in society. Such wider changes in farming contexts could imply important changes to gender and socialisation, which are well worth exploring anew.

In taking a more conceptual perspective, research has often taken gender as the main focus of analysis, and the assumed subject has primarily been a white Norwegian heterosexual woman and/or man, often a landowner and/or his/her partner. However, as Pini et al. (2020) suggest for the case of Australia, it is time to challenge such assumptions in feminist rural studies. Here, we wish to echo their argument by suggesting there is a need to widen feminist research on Norwegian farming and forestry, in particular by (1) drawing on intersectional approaches and (2) using a decolonial lens. We also argue there is a need for feminist and gender research to engage with the promises and issues emerging in relation to the future, ongoing, and necessary 'green transition' that is evolving in response to urgent environmental and climate issues. Such work should preferably draw on intersectional and decolonial perspectives.

Earlier studies in rural geography particularly highlighted the need to explore the intersections between gender. In their study of these

interconnections, Bryant & Pini (2009, 52) found that although class was often downplayed in rural communities, as 'rurality is constructed as communitarian', class had relevance in both symbolic ways (e.g. family longevity in place) and material ways (e.g. landownership). They particularly noted how class and gender intersected in mediating community narratives, and that there is value in combining a gender and class analysis, as 'it raises the potential to identify economic, moral, symbolic and cultural narratives of self and others and to explore questions of belonging in rural communities' (Bryant & Pini 2009, 56).

Whilst Brandth & Haugen (2016) touch on the need to attend to multiple categories of social difference (e.g. class) in their later work on gender in farming, here we build on their work by arguing for the need to develop an intersectional approach (Crenshaw 1989; Valentine 2007) to feminist and gender research in Norwegian farming and forestry. An analysis based on such an approach would attend to how intersecting social positions (e.g. gender, sexuality, ethnicity, race, class, ability, age) shape the lived experiences of groups and individuals.

There has been particular attention in international research to how sexuality shapes the organisation of farming (Little 2003). This is evident in the heteronormative relations that underpin the 'family farm' (Pini et al. 2020). However, little of this work has shaped rural studies in Norway. Leslie et al. (2019) call for a 'relational agriculture', which they argue, drawing on ecofeminism and queer approaches, would challenge the heteropatriarchal hegemony in our understanding of farming and rural life. A relational agriculture is a 'lens for drawing attention to gender relations and also sexual relations in agriculture' and 'demands calling attention to and re-orienting heteropatriarchal relations in farming' (Leslie et al. 2019, 867). Leslie et al. highlight the invisibility of LGBTQ+, immigrants, race, and class in the literature relating to gender relations in agriculture and they argue there is a need for 'queering' this literature (for a discussion of queer ruralities, see Keller 2015).

In the Norwegian context, an intersectional analysis would enable feminist and gender researchers to explore topical and ongoing struggles over rural and farming space, such as the more recent deployment of migrant labour in farming and forestry work (Holm 2012; Zahl-Thanem & Melås 2020). Whilst historically women have been key workers in lower status positions in farming and forestry, such work has more recently been done by migrant workers. Discussions relating to the feminisation of labour and in particular the 'feminisation' of working conditions (i.e. more precarious,

insecure, and flexible work (e.g. McDowell 2009)) could be informative for an intersectional analysis of farm and forestry work on the one hand, and workers and rural change on the other.

Furthermore, whereas Pini et al. (2021, 3) argue for the need to 'decolonise' rural studies, particularly in Australia, we argue there is much to learn from Pini et al.'s insights for the case of Norway. They challenge 'white feminist scholarship', which 'has challenged the masculine centrality of Australian rural studies' (also true for Norway) by arguing that such contributions have been 'deeply entangled in the reproduction of colonial power' and as such are 'complicit in the structures that sustain white supremacy' (Pini et al. 2021, 3). This is a particularly important aspect to consider in feminist rural studies in Norway, given the presence of indigenous Sámi and the centrality of land use to their everyday lives, cultural practices, and identities. As discussed in the Introduction, the Norwegian word landbruk covers both farming and forestry. However, it also covers indigenous practices, such as reindeer herding (in addition to Sámi farming and forestry). Hence, even the present article reproduces colonial representations of *landbruk* by omitting Sámi land use practices. Whilst research on such practices has been conducted (e.g. Horstkotte et al. 2020), the literature has remained separate (Katrina Rønningen, personal communication 2021). Perhaps the argument is that there is a need for researchers of rural Norway to pay more attention to the ways in which feminist research has tended to marginalise indigenous groups, practices, and communities. In reiterating Pini et al.'s argument (Pini et al. 2021), there is a need to decolonialise feminist and gender research, and this applies also to Norway and to the ways in which landbruk is researched.

The final point raised here concerns the need for feminist and gender studies in landbruk contexts to explore the 'green transition' in Norway and beyond. Whilst previous research has explored whether women farm differently - with Villa (2001) and Bjørkhaug (2006) attending to the question of whether women's farming practices were more environmentally friendly and critiquing such perspectives for being essentialist (in assuming women's closer relationship to nature) and for failing to recognise how not all women are the same (Villa 2001) - there remains a need to attend to how the green transition produces and reproduces equities/inequities. For example, more research could usefully explore the gendered implications of the green transition, as well as how gender shapes the green transition itself. More importantly, there is a need to consider how the green transition can be done differently to support non-traditional and marginalised groups,

drawing on both intersectional and decolonial approaches, to enhance equities in the landbruk sector in the future. There is a need for strong feminist and gender research to enable the development of an equitable and sustainable green transition in these contexts.

Conclusions

In this article we began by discussing the importance of Norwegian scholars in shaping the field of feminist and gender rural studies with a particular focus on agriculture and forestry. Research in the Norwegian context has both shaped and been shaped by wider trends in the rural (and beyond) feminist and gender scholarship. Our objective has been to synthesise existing literature and to identify changing approaches, themes, and foci of research in order to develop an agenda for future feminist and gender research to inform future challenges in Norwegian landbruk (farming and forestry) contexts. We have identified that key trends in research focus have been on: (1) how women farmers and forestry workers were constructed, (2) how rural masculinities have been conceptualised and constructed, (3) how farm families are grounded in embodied work and construct gender relation, as well as what that means for intergenerational succession and divorce amongst couples, (4) men farmers' changing fathering practices across generations, and (5) the relevance of gender with regard to agricultural boards.

We have looked beyond Norwegian contexts to identify new trends and perspectives that could enrich feminist and gender research in Norwegian forestry and farming contexts. In particular, we argue that research could benefit from an intersectional and a decolonial approach to have a better understand ongoing and future challenges in Norwegian farming and forestry contexts. Such work could usefully explore the ambitions relating to the 'green transition'.

To conclude, the legacies of key authors in rural Norwegian feminist and gender research is a testament to wider trends within the rural social sciences. To build on this legacy, there is a need to engage new feminist approaches and perspectives continuously in order to understand ongoing and emergent issues. Drawing on intersectional and decolonial perspectives in exploring how the green transition can be more equitable and sustainable is an important avenue for future research.

Acknowledgements

Thanks are given to Marit S. Haugen, Katrina Rønningen, Svein Frisvoll, Rob Burton, and Richard Helliwell for comments on an earlier draft version of this article. We also



wish to thank the journal's editors and three anonymous reviewers. The research was funded by internal strategic funds at RURALIS – Institute for Rural and Regional Research.

ORCID

Madeleine Gustavsson bhttp://orcid.org/0000-0002-6469-0675

Maja Farstad http://orcid.org/0000-0002-2170-4475

References

- Almås, R. & Haugen, M.S. 1991. Norwegian gender roles in transition: The masculinization hypothesis in the past and in the future. *Journal of Rural Studies* 7(1-2), 79–83.
- Bjørkhaug, H. 2006. Is there a female principle in organic farming? An interpretation of data for Norway. Holt, G.C. & Reed, M. (eds.) Sociological Perspectives of Organic Agriculture: From Pioneer to Policy, 195–209. Wallingford: CABI.
- Bjørkhaug, H. & Blekesaune, A. 2007. Masculinization or professionalization of Norwegian farm work: A gender neutral division of work on Norwegian family farms? *Journal of Comparative Family Studies* 38(3), 423–434.
- Bjørkhaug, H. & Blekesaune, A. 2008. Gender and work in Norwegian family farm businesses. *Sociologia Ruralis* 48 (2), 152–165.
- Brandth, B. 1994. Changing femininity the social construction of women farmers in Norway. *Sociologia Ruralis* 34(2-3), 127–149.
- Brandth, B. 1995. Rural masculinity in transition: Gender images in tractor advertisements. *Journal of Rural Studies* 11(2), 123–133.
- Brandth, B. 2002. Gender identity in European family farming: A literature review. *Sociologia Ruralis* 42(3), 181–200.
- Brandth, B. 2006a. Agricultural body-building: Incorporations of gender, body and work. *Journal of Rural Studies* 22(1), 17–27.
- Brandth, B. 2006b. Embodying family farm work. Bock, B.B. & Shortfall, S. (eds.) *Rural Gender Relations: Issues and Case Studies*, 329–344. Cambridge: CABI Publishing.
- Brandth, B. 2016. Rural masculinities and fathering practices. *Gender, Place & Culture* 23(3), 435–450.
- Brandth, B. 2017. Farm fathers and their fathers: Flexible work and cultural change. Česnuitytė, V., Lück, D. & Widmer, E.D. (eds.) *Family Continuity and Change*, 291–312. London: Palgrave Macmillan.
- Brandth, B. 2019. 'Tough and tender'? Agricultural masculinities and fathering activities. *Norma* 14(4), 223–238.
- Brandth, B. & Bolsø, A. 1995. *Kvinner, Maskiner og Likestilling in Landbruket*. Ruralis rapport R-4/95. Trondheim: Ruralis.
- Brandth, B. & Haugen, M.S. 1997. Rural women, feminism and the politics of identity. *Sociologia Ruralis* 37(3), 325–344.
- Brandth, B. & Haugen, M.S. 1998a. Breaking into a masculine discourse: Women and farm forestry. *Sociologia Ruralis* 38 (3), 427–442.
- Brandth, B. & Haugen, M.S. 1998b. *The Discursive Gendering of Farm Forestry*. P-2/98. Trondheim: Norwegian Centre for Rural Research.

- Brandth, B. & Haugen, M.S. 2000. From lumberjack to business manager: Masculinity in the Norwegian forestry press. *Journal of Rural Studies* 16(3), 343–355.
- Brandth, B. & Haugen, M.S. 2005a. Doing rural masculinity from logging to outfield tourism. *Journal of Gender Studies* 14(1), 13–22.
- Brandth, B. & Haugen, M.S. 2005b. Text, body, and tools: Changing mediations of rural masculinity. *Men and Masculinities* 8(2), 148–163.
- Brandth, B. & Haugen, M.S. 2007. Gendered work in family farm tourism. *Journal of Comparative Family Studies* 38 (3), 379–393.
- Brandth, B. & Haugen, M.S. 2010. Doing farm tourism: The intertwining practices of gender and work. *Signs: Journal of Women in Culture and Society* 35(2), 425–446.
- Brandth, B. & Haugen, M.S. 2011. Farm diversification into tourism Implications for social identity? *Journal of Rural Studies* 27(1), 35–44.
- Brandth, B. & Overrein, G. 2013. Resourcing children in a changing rural context: Fathering and farm succession in two generations of farmers. *Sociologia Ruralis* 53(1), 95–111.
- Brandth, B. & Bjørkhaug, H. 2015. Gender quotas for agricultural boards: Changing constructions of gender? *Gender, Work and Organization* 22(6), 614–628.
- Brandth, B. & Haugen, M.S. 2016. Rural masculinity. Schucksmith, M. & Brown, D.L. (eds.) Routledge International Handbook of Rural Studies, 412–423. Abingdon: Routledge.
- Brandth, B., Follo, G. & Haugen, M.S. 2004. Women in forestry: Dilemmas of a separate women's organization. *Scandinavian Journal of Forest Research* 19(5), 466–472.
- Brandth, B., Haugen, M.S. & Kroken, A. 2010. Farm Tourism: A Question of Gender and Competence? P-1/10. Trondheim: Norwegian Centre for Rural Research.
- Bryant, L. & Pini, B. 2009. Gender, class and rurality: Australian case studies. *Journal of Rural Studies* 25(1), 48–57.
- Burton, R.J.F. 2004. Seeing through the 'good farmer's' eyes: Towards developing an understanding of the social symbolic value of 'productivist' behaviour. *Sociologia Ruralis* 44(2), 195–215.
- Butler, J. 1990. Gender Trouble: Feminism and the Subversion of Identity. New York: Routledge.
- Campbell, H. & Bell, M.M. 2000. The question of rural masculinities. *Rural Sociology* 65(4), 532–546.
- Connell, R.W. 1987. Gender and Power. Cambridge: Polity Press.
- Connell, R.W. 1995. Masculinities. 2nd ed. Cambridge: Polity Press.
- Connell, R.W. & Messerschmidt, J.W. 2005. Hegemonic masculinity: Rethinking the concept. *Gender & Society* 19(6), 829–859.
- Crenshaw, K.W. 1989. Demarginalizing the intersection of race and sex: A black feminist critique of antidiscimination doctrine, feminist theory and antiracist politics. *Feminist Legal Theories* 1(8), 139–68.
- Follo, G. 2002. A hero's journey: Young women among males in forestry education. *Journal of Rural Studies* 18(3), 292–306.
- Haugen, M.S. 1990. Female farmers in Norwegian agriculture: From traditional farm women to professional farmers. *Sociologia Ruralis* 30(2), 197–209.



- Haugen, M.S. 1998a. The gendering of farming: The case of Norway. European Journal of Women's Studies 5(2), 133– 153.
- Haugen, M.S. 1998b. *Women Farmers in Norway*. PhD thesis. Trondheim: NTNU.
- Haugen, M.S. & Brandth, B. 1994. Gender differences in modern agriculture: The case of female farmers in Norway. *Gender & Society* 8(2), 206–229.
- Haugen, M.S. & Brandth, B. 2015. When farm couples break up: Gendered moralities, gossip and the fear of stigmatisation in rural communities. *Sociologia Ruralis* 55(2), 227–242.
- Haugen, M.S., Brandth, B. & Follo, G. 2015. Farm, family, and myself: Farm women dealing with family break-up. *Gender, Place & Culture* 22(1), 37–49.
- Heggem, R. 2014a. Diversification and re-feminisation of Norwegian farm properties. Sociologia Ruralis 54(4), 439– 459.
- Heggem, R. 2014b. Exclusion and inclusion of women in Norwegian agriculture: Exploring different outcomes of the 'tractor gene'. *Journal of Rural Studies* 34, 263–271.
- Holm, F.E. 2012. *Arbeidsinnvandring i landbruket*. R-10/12. Trondheim: Institutt for rural- og regionalforskning.
- Horstkotte, T., Lépy, É. & Risvoll, C. (eds.) 2020. Supplementary Feeding in Reindeer Husbandry: Results from a Workshop with Reindeer Herders and Researchers from Norway, Sweden and Finland. Umeå: Umeå University. http://umu.diva-portal.org/smash/record.jsf? pid=diva2%3A1514960&dswid=-1081 (accessed 5 December 2022).
- Keller, J.C. 2015. Rural queer theory. Pini, B., Brandth, B. & Little, J. (eds.) Feminisms and Ruralities, 155–166. London: Lexington Books.
- Landbruks- og matdepartementet. 2021. *Jordvern*. https://www.regjeringen.no/no/tema/mat-fiske-og-landbruk/landbrukseiendommer/innsikt/jordvern/jordvern/id2009556/(accessed 7 October 2022).
- Leslie, I.S., Wypler, J. & Bell, M.M. 2019. Relational agriculture: Gender, sexuality, and sustainability in U.S. farming. *Society and Natural Resources* 32(8), 853–874.
- Liepins, R. 1998. The gendering of farming and agricultural politics: A matter of discourse and power. *Australian Geographer* 29, 371–388.
- Little, J. 1999. Otherness, representation and the cultural construction of rurality. *Progress in Human Geography* 23(3), 437–442.
- Little, J. 2002a. Gender and Rural Geography: Identity, Sexuality and Power in the Countryside. Harlow: Pearson Education.
- Little, J. 2002b. Rural geography: Rural gender identity and the performance of masculinity and femininity in the countryside. *Progress in Human Geography* 26(5), 665–670.
- Little, J. 2003. 'Riding the rural love train': Heterosexuality and the rural community. *Sociologia Ruralis* 43(4), 401–417.
- Little, J. & Leyshon, M. 2003. Embodied rural geographies: Developing research agendas. *Progress in Human Geography* 273), 257–272.
- Lovdata. 2021. LOV-1974-06-28-58: Lov om odelsretten og åsetesretten. https://lovdata.no/dokument/NL/lov/1974-06-28-58 (accessed 5 December 2021).

- McDowell, L. 2009. Working Bodies: Interactive Service Employment and Workplace Identities. Chichester: Wiley-Blackwell.
- Morgan, D.H.J. 1992. *Discovering Men: Sociology and Masculinities*. Critical Studies on Men and Masculinities. London: Routledge.
- Ni Laoire, C. 2001. A matter of life and death? Men, masculinities and staying 'behind' in rural Ireland. *Sociologia Ruralis* 41(2), 220–236.
- Peter, G., Bell, M.M., Jarnagin, S. & Bauer, D. 2000. Coming back across the fence: Masculinity and the transition to sustainable agriculture. *Rural Sociology* 65(2), 215–233.
- Philo, C. 1992. Neglected rural geographies: A review. *Journal of Rural Studies* 8(2), 193–207.
- Pini, B. 2008. Masculinities and Management in Agricultural Organizations Worldwide. Aldershot: Ashgate.
- Pini, B., Mayes, R. & Rodriguez Castro, L. 2020. Rurality, geography and feminism: Troubling relationships. Datta, A., Hopkins, P., Johnston, L., Olson, E. & Silva, J.S. (eds.) Routledge Handbook of Gender and Feminist Geographies, 202–211. Abingdon: Routledge.
- Pini, B., Rodriguez Castro, L. & Mayes, R. 2021. An agenda for Australian rural sociology: Troubling the white middle-class farming woman. *Journal of Sociology* 58(2), 253–269.
- Price, L. & Evans, N. 2006. From 'as good as gold' to 'gold diggers': Farming women and the survival of British family farming. *Sociologia Ruralis* 46(4), 280–298.
- Saugeres, L. 2002a. Of tractors and men: Masculinity, technology and power in a French farming community. *Sociologia Ruralis* 42(2), 143–159.
- Saugeres, L. 2002b. 'She's not really a woman, she's half a man': Gendered discourses of embodiment in a French farming community. *Women's Studies International Forum* 25(6), 641–650.
- Statistisk sentralbyrå. 2022. *Gardsbruk, jordbruksareal og husdyr*. https://www.ssb.no/jord-skog-jakt-og-fiskeri/jordbruk/statistikk/gardsbruk-jordbruksareal-og-husdyr#om-statistikken (accessed 7 October 2022).
- Statistisk sentralbyrå. n.d.,a. 05972: Gardsbruk, jordbruksareal og husdyr: Jordbruksbedrifter, etter kjønn på referanseperson og brukartype 1999–2021. https://www.ssb.no/statbank/table/05972/ (accessed 7 October 2022).
- Statistisk sentralbyrå. n.d.,b. Skogeiendommer: 06312: Skogeiendommer, etter skogeiers kjønn og eiendomsstørrelse (F) (avslutta serie) 2005–2011. https://www.ssb.no/statbank/table/06312/ (accessed 7 October 2022).
- Storstad, O. & Haugen, M.S. 1997. Nøkkelinformasjon om kvinner i landbruket. Oslo: Landbruksdepartementet.
- Valentine, G. 2007. Theorizing and researching intersectionality: A challenge for feminist geography. *Professional Geographer* 59(1), 10–21.
- Villa, M. 2001. Kvinnelige prinsipper også for menn? Om kvinner, menn, næringsutøvelse og resursforvaltning. Rapport 01/01. Trondheim: Institutt for rural- og regionalforskning.
- Zahl-Thanem, A. & Melås, A.M. 2020. *Trender i Norsk Landbruk* 2020. Trondheim: Ruralis Institutt for ruralog regionalforskning.