



Through a Different Lens: Unravelling Perspectives on Women's Roles in Farming and Drought Resilience

Anna Kosovac¹, Madeline Grupper ²

- Faculty of Arts, The University of Melbourne
 - ² Faculty of Engineering and Information Technology, The University of Melbourne

Correspondence to: Anna Kosovac (anna.kosovac@unimelb.edu.au)

Abstract. A gender difference exists in the access to resources and inclusion in decision-making in issues of drought and women are overwhelmingly denied a 'voice' in such a landscape (Clarke 2014). This is particularly prevalent in irrigation and farming communities which carry on a legacy of patriarchal stewardship over farming and agricultural matters. This study considers the role of women in farming practice in the Mallee Region and how they view their position as decision-makers in drought and water management. This study presents three key findings from interviews of women within the region: women are increasingly adopting the label 'farmer' so that they can be 'counted' and given decision-making power regarding drought and water. Interviewees also stated a distinct difference in gender relations within horticultural dryland farming, compared to irrigation farming. Namely, many found that that gender dynamics were more progressive and equal within dryland. Some stated that this was due to many irrigation farmers being recent migrants and more likely to have traditional gender roles in their own family units, resulting in a perceived subordination of women. The dynamic between white settler farming women and those who had recently settled in the area (migrants) was wholly unexpected and highlights a potential 'us-and-them' distinction in farming. Despite the psychological distance of drought during the time of the interviews (many had recently experienced flooding), there was nevertheless a strong sense of the danger of drought, and the foreboding sense that it was coming. Interviewees stated that women were pivotal during times of drought as they were the ones to draw on community networks for help, to apply for grants, and also to supplement family income from off-farm work.

1 Introduction

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Women are hitting the 'grass' ceiling in agriculture. As coined terms go, Margaret Alston (Alston, 2013 (2000)) has hit on a pun that both reflects the position of women in farming, while also encompassing the intractability of an issue that extends to all members of the agricultural community. In Australia, farming culture is rooted in the duality of being adaptive to environmental change while staying true to post-colonial social traditions and historical roots (Rodriguez Castro and Pini, 2022;Alston, 2021). These cultural imperatives are challenged on both fronts by environmental change and identity shifts about who gets to be a 'farmer.' (Rodriguez Castro and Pini, 2022). For a long time, social tradition elevated *white* male voices in decision making spaces (Rodriguez Castro and Pini, 2022), but there's been recent encroachment as other groups have attempted to take up the farming mantle. At the same time, climate change has created unprecedented challenges to farmers





ability to maintain their land as the deluge of flooding, interspersed with droughts, results in additional challenges related to agriculture. These juxtaposing effects (overly wet and overly dry) introduce a question of how differing perspectives, particularly related to gender, may impact farming culture and resilience in the face of environmental change.

Settler farming experiences in Australia are socially gendered, resulting in predetermined expectations in roles based on gender assignation (Twigg, 2021). Settler farming women have almost always been considered in traditional gender roles such as the 'farmer's wife' or the 'haggard woman,' (Twigg, 2021) that places women in positions of disempowerment that facilitates the dominance of the male farmer (Whatmore, 1991), rather than as farmers themselves. These images associate women with exhaustion and subservience, despite women often carrying out administrative or field work essential to survival of the farm (Rickards, 2008;Twigg, 2021;Alston and Whittenbury, 2013). In contrast, there has been an overarching mythologisation of the male farmer as a battler, carrying discourses of survival, persistence, stoicism and struggle (Bryant and Garnham, 2015). This rhetoric often puts settler "hegemonic masculinity" (see Raewyn Connell's (1995) conceptualisation of this) and male perspectives on a pedestal. As such, masculine hegemony is recognised as the most pervasive influence on drought rhetoric and discussion of regional water issues in Australia (Clarke, 2014;Holmes, 2017) and has been recognised within academic feminist social critique as omitting and making invisible women's experiences in agricultural communities (Alston, 2006;Rickards, 2008;Alston, 2021).

Despite women in Australia making up 32% of the farming workforce (Alston, 2013 (2000)) they are often denied access to resources and inclusion in decision-making in issues of environmental change, with women overwhelmingly denied a 'voice' in such a landscape (Clarke, 2014;Zwarteveen, 2008). Similarly, women lack representation on boards and within water organisations, limiting their access to decision making spaces that impact policy and management. This also carries to the public domain, with a recent study by Kosovac et al (2024) demonstrating that men have had the most prominent public 'voice' in irrigation and environmental water debates and were given the widest media platform from which to present their perspectives on water issue. This carries implications for environmental decision-making as women tend to have a more proenvironmental lens when making choices (McCright and Xiao, 2014;Casey and Scott, 2006). In turn, male dominated water management practices have tended to focus on technological and technocratic solutions to environmental problems. This trend carries implications for centring technocratic solutions that may have limited benefit for both women and the environment more generally (Kosovac, 2021).

The continuing trend of patriarchal hegemony in settler farming has left little legitimacy for women looking to establish themselves as 'farmers'. Women have accepted less visible workloads as a result, often undertaking unpaid farm work in addition to family upkeep. This lack of visibility, voice, and image has implications for justice for women looking to establish themselves as new farmers. Farmland has also often been kept within the family and inherited through generations, but inheritance of family farming practices tend to pass over women in favour of male family members (Carolan, 2018).

Decreased legitimacy for settler women in farming is not only poignant for equity's sake; it bears implications for environmental trends and adaptation to change. Australia has seen both drought-ridden and flooded landscapes, creating financial and psychological difficulty for farmers (Heo et al., 2020). With climate change, the risk of future drought is





inevitable, but recent El-Ninõ/La-Ninã years may have driven that risk out of sight and consequentially out-of-mind, resulting in low salience (Stewart, 2009). Low salience of an issue may result in a taken-for-granted trust that can leave communities underprepared for change and with less adaptive capacity, particularly when an seemingly non-salient issue results in major consequences (Grupper et al., 2021; Mollering, 2006). Because salience is impacted by attention paid to a topic (Stewart, 2009; Grupper et al., 2021), it creates a pathway for gendered 'voices' steer agricultural discussions away from non-salient issues, an issue for ensuring community resilience. This study considers the decision-making power female-identifying farmers feel they have (and feel others have) in the context of their farms and drought.

75 2 Study Area

Our work focuses in the Mallee region of southern Australia. This region had been cared for and occupied for thousands of years by various Traditional Owner groups of the region, including (but not limited to) Latji Latji, Wadi Wadi, Wamba Wamba, Tati Tati, Jari Jari, Nyeri Nyeri, Ngintait, Ngarkat and Barengi Gadjin Land Council Aboriginal Corporation (Mallee Catchment Management Authority, nd). For thousands of generations, these tribes lived off roots, berries, and grass seeds (Gardner, 1986). From the 1850s, and the onset of Europeans in the area, white settlement of the area significantly expanded. A surveyor, exploring the area in 1864 recounted that "I can readily imagine why most people speak of this part of the country with a certain dread for there is actually no grass and no water to be found" (Victorian Historical Journal, 1975). Many rural disasters have plagued the region, including the Federation Drought between 1895 to 1903 and the more recent, Millennium drought between 1997 and 2009. A 'drought' is defined by the Bureau of Meteorology as "prolonged, abnormally dry period when the amount of available water is insufficient to meet our normal use". The onslaught of droughts and dust storms in the region severely limited the capacity of farmers to be able to continue their practices, with graziers walking off their land, and pastoralists overwhelmed by debt.

Notable Australian poet, Banjo Paterson, writes in 1902 of the central role that water plays in the drought-stricken region: "It's grand to be a Western man, with shovel in your hand, to dig your little homestead out, from underneath the sand... It's grand to be a lot of things in this fair southern land, but if the lord would send us rain, that would, indeed be grand!"

In 1887, the Victorian government implemented a large-scale irrigation scheme in the region, sourcing their water from the Murray-Darling Basin river system. This had resulted in a decline in the river water quality (salinity issues) and in the flora and fauna that use the riparian zones as their livelihoods (Kosovac et al., 2023). An market-based water allocation scheme was introduced in the 2012, which separated land rights from water rights, allowing water rights to be bought and sold on the market as needed (see Loch et al (2017) for more information on this).

Although drought has always been a feature of the region, in recent years there has been a deluge of flash flooding taking its place instead. Inundation of towns such as Mildura and Swan Hill had been a feature of the landscape since 2020 and presents the backdrop to the interviews taking place in this study.



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In our study, it is important to remain cognisant of the differences between the farming practices (Figure 1). These not only affect farmer relationships to water, but also the types of bonds within respective communities. Practice structures differ substantially, with irrigation being heavily influenced by larger corporations whereas dryland agriculture remains in the realm of small business/family farming.

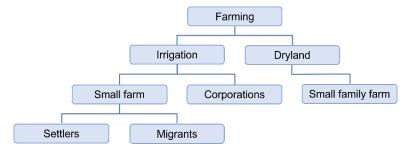


Figure 1: Flow chart of the types of farming practices present in the Mallee region.

The Mallee region farmers are either irrigators or dryland farmers. Dryland farmers almost entirely comprise small family farm structures while irrigators are split between small farms and corporations. Small farms may either be settler or migrant families.

Irrigated horticulture and dryland farming are the two main types of agricultural practices in the Mallee region. Their main differences exist in the water required for crop production. Irrigated horticulture involves the controlled application of water to crops, typically through artificial means such as sprinklers, drip irrigation, or flood irrigation. This allows crops to be grown in areas with limited rainfall or in regions where rainfall is unevenly distributed. Dryland farming, in contrast, refers to crop production in areas where rainfall is the primary source of water for plants. This type of farming is more dependent on natural precipitation and is typically practiced in areas where rainfall is sufficient to support crop growth. Farmers often rely on techniques such as crop rotation, soil conservation, and drought-resistant crop varieties to maximize yields and minimize the impact of droughts.

Within irrigated horticulture, there is a move to corporatization of farming over the last decade which has reduced the proportion of 'family-led' farming in this space. This has resulted in gender dynamics to be played out in 'professionalised' settings that carry their own barriers in female representation in leadership practices (Sheridan and Newsome, 2021). In the Mallee region, the small family farms that do exist in irrigated horticulture are split between settler and migrants.

3 Methods

We conducted semi-structured interviews with female identifying farmers in the Mallee region (n=6). The sampling for the study was undertaken using networks at the Mallee Regional Innovation Centre (MRIC). Based in Mildura, the MRIC concerns itself with the area of The Murray River from Swan Hill to the South Australian border. This centre works closely with local





growers in the Mallee region and therefore has strong connections with the local community. The requirements for participants was that they identified as women, live in the Mallee region, and have links to agriculture and farming in the region. In lieu of in-person interviews, they were conducted online, a factor which may have limited the number of participants. Furthermore, the timings of the interviews were in February/March of 2022 which was harvesting season for many of the growers in the region, once again limiting participation rates. These exist as limitations to the study that should be considered for any future research in the region.

Our interview approach was chosen for its conversational style to de-limit the responses of the people being interviewed. The broad questions were developed as a guide to provide an opportunity for research participants to show their social world in a way that is flexible and reflective (Bryman, 2016). These questions were developed from the themes in the literature around gender and drought.

We interviewed six participants, four were directly involved in farming practice through their own or a family farm, one was involved in conservation work, and one was involved in providing financial advice to farming families stricken by drought. The sample size, while appearing low, likely reflected of the limited population in our interest group as well as the effects of pandemic restrictions. The interviews were initially planned to take place in-person in 2022, however were shifted to online due to Covid restrictions. We recorded the interviews online, transcribed them using automatic transcription software (Trint), and qualitatively coded them in NVivo by way of thematic analysis (Bryman, 2016).

After developing a list of the main thematic findings from interview coding, we presented these themes to a local working group for discussion and confirmation. The working group comprised of representatives from peak industry bodies, horticultural organisations, farmers and local business owners, many of whom were women themselves. This group helped provide guidance in affirming or denying interpretations and findings.

145 4 Results

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4.1 Female Representation

"[I]f [women] want to be seen as equal and if we want to have the same opportunities, then go forth and talk about yourself as a farmer rather than congratulating yourself for being a farmer." (Study Participant)

To understand how female farmers think about their representation, we first needed to examine their beliefs about roles and power within farming communities. Although the image of the iconic Australian farmer has historically been white and male (Rodriguez Castro and Pini, 2022), participants sensed that women were more readily adopting the title of 'farmer' in the past several years than they had previously done, confirming a trend seen in other studies (Shisler and Sbicca, 2019;Sheridan and Newsome, 2021;Rodriguez Castro and Pini, 2022). According to participants, female adoption of the farmer identity was a slight trend rather than a major one, and there was still a wide representation gap between genders. Many participants spoke of an expansion of roles in what it means to be a farmer that they had seen in the past decade. One participant suggested that



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she believed women were more prone to accept the title of 'farmers' because of the desirability of the credibility associated with that identity. This also carried with it a sense of empowerment and higher perceived legitimacy to discuss issues of water.

"Sometimes you do see people describe them as themselves, this farmer's wife, it just depends. ... It's a bit of everything in the broad acre [farming community]. I'd say it's more likely that that you'd have women say, No, no, I'm a farmer, because they'll... be counted. They'll be more inclined to stand up and be counted then." (Study Participant)

This aspect of being 'counted' refers to legitimisation in having a say over issues of farming in the community. This suggests that women are accepting the mantle of farmer for the utility of the identity rather than for internal identity characteristics alone.

Perceived female representation within farming was tied to beliefs about underlying power dynamics within different types of farming, particularly differences in dryland farming family roles to irrigated horticulture. Irrigators or water users were seen as having more decision-making power than dry land farmers, despite both being impacted by water availability.

"Often it would be the man who's the decision maker often and again in the selling the water space that would be an irrigator who has it rather than a dry land one." (Study Participant)

In contrast to irrigated horticulture, the family farming practices of dryland farming report women having greater empowerment over decision-making on matters of the farm and water (e.g. (Alston, 2021)). Women in dryland communities tend to be well-educated and more visible in decisions around farming and water. Sons are often assumed to be the successor of farming practices following high school education, and are then expected to learn and understand the family business (Sheridan et al., 2021;Carolan, 2018). Daughters of farming families however are often sent away from the farm to gain a university education in a non-agricultural career path. It is not unusual to see the daughters within farming families return to their hometowns to start new careers or marry into another farming family, but with a degree in tow (Sheridan et al., 2021).

4.2 "Us and Them" – Perceptions of Migrant Farmers among Settler Farming Women

Perhaps the most surprising finding of the interviews was the strength with which migration trends had created a divide between those with farming families in the region for generations and those that had recently come into the area. Migration has seemingly ebbed and flowed in the region, with an increase in migration leading up to the 2020 COVID-19 Pandemic, dropping away during Australian border closures, and only starting to pick up at time of writing (2023). As a result, there have been severe worker shortages within agricultural regions as businesses rely on migrants and permanent residents to aid in harvesting of produce. Despite this drop in migrant workers, there are nevertheless migrant families that had moved into farming practice within the region in the last 20 years that provide distinctions mentioned in interviews. This is as a direct result of the Australian government's strategy to increase migration to regional areas, offering special visas with the requirement for longer stays. Not only does this create questionable exploitative practices within Agricultural regions (Coates et al., 2023), but it has also subsequently created a distinction between those that have had farming families in the region for generations and those that had recently settled into the area. This distinction was also particularly prevalent along the irrigated horticulture vs dryland



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farming characteristic. Participants mentioned that many migrant families undertook irrigated farming, whereas "Australian" families (as described by participants) were predominantly in dryland. This distinction was noted by one of the interviewees as a gendered difference:

"[T]he men [in irrigated farming with non-English speaking backgrounds] will have a strong belief that it's up to them to provide... for the family" (Study Participant)

Beyond the distinctions between migrant and settler farmers, there are differences in practice and culture between farming practices, many of which relate to gendered issues. Small settler family farms tend to be families with traditional patriarchal values and clear delineation of gender roles within the home and across farming practices (REF). It is not unusual for women in these small farms to take traditional roles in the home such as primary care giver, domestic duties and general emotional support while men take on the role of 'farmer', making decisions on behalf of the family unit (Alston, 2021;Shisler and Sbicca, 2019;Stehlik et al., 2000). This top-down hierarchy also plays out in water issues in irrigated spaces. The financial matters and any selling or buying of water entitlements are mostly borne by men (REF). Furthermore, there is a strong male representation on water issues in community meetings with many women feeling disempowered to speak on topics of water, due to their role not encompassing 'farming' within its traditional remit.

Gender norms interact with existing dynamics between cultural background, oftentimes connected to perceived education norms in different communities. Differences in educational norms between farming type has been noted in literature elsewhere (Sheridan et al., 2023), but interviewees in the Mallee also recognised further differences in educational norms for women between settler farmer families and migrant ones. Many of the irrigated areas that were not corporatized, were seen by participants to be occupied by migrant farming families that carried traditional gender norms within their family units. A participant stated that cultural differences reflected a change in decision-making power as highlighted by the quote below.

"Some European cultures and I'm thinking particularly Greek, Italian, Turkish, the boys are considered more valuable than the girls. ... where there's lots of need for labour at particular times of the year, the girls will actually have to leave school earlier to help with picking or help with something, whereas the [boys' value of education] has been more strongly pointed out, perhaps than girls. And again, I'd say that's the opposite to dry land because in dry land, often there's an expectation that the boys in the family will end up being the farmers, so we better get the girls educated." (Study Participant)

Although this is a generalised statement that may not reflect all migrant families within farming, it presents an insight into the experience of this participant who works closely with families across the region. Therefore, in reading the discussion on horticulture and dryland farming in the previous section, it cannot be considered in isolation to the migrant dynamic unravelling in the area. Horticulture, as previously mentioned, is seen by many of the interviewees as having 'unsavoury' elements attached: namely, increasing corporatisation and increasing non-English speaking families. This, as was stated by a participant, produces looser community bonds that could hinder community resilience to disaster.

Most of the women interviewed had placed themselves in a camp wherein the 'other' was seen as undesirable. Their desired gender dynamics were realised in their 'white' dryland communities, which provided them with a sense of superiority over



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migrant families. These desired gender norms include the sense that women could have strong decision-making capacity within farmland practices representing a a cultural reformation of the white farming imaginary set in a settler-colonial basis described by Rodriguez Castro and Pini (2022) in their analysis of the Invisible Farmer project. The perceived lack of female voice and legitimacy in migrant farming threatened what settler women wanted to achieve in their communities. Discourses of white feminism permeate these discussions, as coveted positions of leadership in family dynamics are upheld as distinctions of import that separate their communities from 'the other'. This lies in tandem with an ongoing aspect of the increasing racialisation notions of a "local" as being white, despite many generations of migrants and Indigenous people forming an important ongoing aspect of community (Stead et al., 2022). It is this intertwining of racialized imaginaries of white farming practice, together with the superiority complex associated with feminist identities that are steeped in, and continually uphold, colonial practice.

4.3 Perceptions of the role of women in community cohesion during drought

"So drought might sort of trickle in. It might hit us like a ton of bricks. But in small communities, you see it so prominently in our agricultural industry because everyone feels it. The water that you use across, you know, in towns is really important as well, and everyone is very much aware and conscious of what they use." (Study Participant)

2020 – 2022 has seen years of La Nina weather patterns throughout the Mallee region, which has resulted in higher-than-average rainfalls. This came off the back of a drought year in 2019. Despite this, study participants still held on to memories of the drought closely and these had formed their perception of climate risk. The saliency and impact of these experiences have sought to ensure that their risk perceptions are not easily swayed away from drought risk.

Many participants reflected on the fact that the current situation has provided much water in tanks and rainfall, resulting in little needed from a town's water supply or from irrigation networks. Despite this, there was definite lingering effects of drought stress that was exposed in responses. Participants mentioned the 'lag' that is seen on the effects of drought, and much of this related to the caring roles that they had, mostly those related to children. A participant describes the harrowing effects of not having water to properly bathe her children, resulting in skin conditions throughout the family. Another mentions the distressing scenes of witnessing her father needing to sell off the farm due to drought. Arguments have been witnessed between couples when required financially to sell off water rights. Although there were many government schemes and funding available, it was often women who were the ones to organise the paperwork associated with accessing these grants but there were suggestions that many of the women had a limited say in whether water licenses were sold. And once the drought ended, it was noted that these grants subsequently tended to dry up, despite the lag that drought provides. Similarly, the women's offfarm income that tended to sustain the family during times of drought (Alston and Whittenbury, 2013). The drought examples that were mentioned by participants referred to direct effects on family health and livelihood, and they are elements that directly affect women's roles as carers in the family, and the administrative burdens that are associated with relief assistance. As a result, there isn't a sense of psychological distance taking place between participants and the next drought; they are very wary



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of the changing weather patterns. Drought nevertheless retains the saliency in risk perceptions. This is particularly important when considering the expected increase in extreme weather events in the region (Wasko et al., 2021).

The importance of community bonds has not previously been captured as a perceived divider between settler and migrant farmers, particularly related to gender. Irrigated horticulture was mentioned by participants to not have as strong a community culture, due to both the changing nature of the demographics in the community (migrant families coming and going) and also the increasing corporatisation of farming leading to less women being involved in creating community cohesion. Participants believed this produced looser community bonds that could negatively impact disaster resilience. The role of women in establishing and driving these bonds has been shown to be key to rebuilding communities during times of crisis (Lester et al., 2022). In this way, 'caring for the community' was positioned as an asset that settler women could bring to farming communities in ways that migrants and settler male farmers were unlikely to do. However, it's not all bad when it comes to the corporatisation of farming, some participants noted the greater visibility of women in high-level professional positions within corporations and water departments.

One of the key drivers in the 'othering' mentality between settler and migrant farmer was perceptions of community bonds.

The importance of community bonds in farming, and particularly during drought, is not a novel concept and has been discussed in recent reports (see for example, Lester et al. (2022)). To our participants, differences in community bonds were not only gendered, but also related to farming type. Some participants commented that the communities with predominantly dryland farming had stronger community bonds, suggesting that it was the women who took the time to foster these connections through their networks and groups. The participant below is one that works closely with various families across the region, in the financial sector.

"Often [in] irrigated horticulture, we will work more with the man. ... Which is unusual. ... And I think, ... there would be far less equality in the decision making than what there would be in dry land. ... [G]enerally across the board, I'd say irrigated water horticulture is many of the men who wear the pants... And in dryland, it's usually equal and sometimes two women." (Study Participant)

One of the themes that emerged from the interviews was the sense of empowerment women felt from their role in the community and accessing drought relief funds to foster community cohesion and resilience during difficult times (Twigg, 2021).

"Women are often more concerned for the community impacts of drought... so when so when the drought funding comes and it goes to the community associations... It goes into those... women driven organisations... And it's the women who put the proposals forward on the drought relief events and those sorts of things, they have the interest there to do that." (Study Participant)

There are nevertheless distinct differences in the roles that men and women take in dryland farming. Women are more likely to be present in meetings, especially those related to financial aspects. In irrigated horticulture, some participants highlighted that many women often did not know much about farming or finances, including whether they should sell water entitlements.





This role in "caring for the community" falls within traditional gender notions of women as nurturing, mothering (Shisler and Sbicca, 2019). By adopting 'farmer' status while also taking on roles to foster community cohesion, women are disrupting traditional notions of what it means to be a farmer by performing care-work (Shisler and Sbicca, 2019), while bolstering their communities resilience against environmental change.

5 Conclusion

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In the Mallee region, settler women are experiencing a tenuous but growing connection with farming as an identity. With these identity changes come increasing empowerment to have a say over issues of drought and water rights. In line with previous studies (Sheridan et al., 2023; Carolan, 2018; Sheridan et al., 2021; Alston and Whittenbury, 2013), interviews within this study still highlighted an ongoing trend with gendered farming succession which encouraged women to go to University and develop a career outside of the family farm, while sons were provided with the tools and training needed to take over the farming business. There are reports that this tendency is beginning to shift, as a result of growing awareness of female representation and equity in farming, thus challenging gender norms related to succession practices (Sheridan et al., 2023).

This study into role of women and their identity related to farming should come with a wide range of caveats. To begin with, the small sample size limits the generalizability of the study. It nevertheless provides insights into the exploration of the research question that can be used to supplement existing literature.

Agricultural farming businesses have been predominantly the realm of white settler-colonial peoples and as such, the participants in the study have been overwhelmingly in this category. Especially in considering that much of water decision-making is getting done at the farming level, among corporations, irrigators and white farming families. This carries with it a certain amount of elite status within these discussions compared to Indigenous communities who have their own struggles with retaining water rights (Hartwig et al., 2023).

Furthermore, the distinction made in the interviews between migrant farmers and those that have been farming for many generations is quite stark. It reflects a dynamic that is more nuanced than purely along gender lines, but also highlights aspects of who deserves to be a farmer and who performs gender relations 'right'. The issues related to migrant and settler colonial farmers is one that has been raised by Barbara Pini and colleagues (2021), who discuss the under-exploration of this topic in the rural sociology literature. Their analysis of publications in the last 20 years had highlighted a burgeoning interest in white female experiences, with little mention of emphasis on racial inequality and class difference inherent in such environments. Our article acts as a starting point to begin to address these gaps in the literature, while also being cognisant of not perpetuating colonial settler predominance.

Paying attention to non-dominant voices is key to building resilience in response to environmental challenges, such as increasing droughts and floods in the region. This does not end at only women, but especially within intersectional realms of migrant women, and also Indigenous women. Women are key to fostering strong community bonds that helps families get through tough times, especially in the face of an ever-changing climate. Further research is needed with a focus on the





intersection between migration and gender within these farming communities to provide a more comprehensive view of our drought landscapes.

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References

- Alston, M.: 'I'd Like to Just Walk Out of Here': Australian Women's Experience of Drought, Sociologia Ruralis, 46, 154-170, 10.1111/j.1467-9523.2006.00409.x, 2006.
 - Alston, M., and Whittenbury, K.: Does climatic crisis in Australia's food bowl create a basis for change in agricultural gender relations?, Agriculture and Human Values, 30, 115-128, 10.1007/s10460-012-9382-x, 2013.
 - Alston, M.: Breaking Through Grass Ceiling, Routledge and Harwood Academic Publishers, Oxon and New York, 2013 (2000).
- Alston, M.: Gendered vulnerabilities and adaptation to climate change, in: Routledge Handbook of Gender and Agriculture, edited by: Sachs, C. E., Jensen, L., Castellanos, P., and Sexsmith, K., Routledge, Oxon and New York, 2021.

 Bryant, L., and Garnham, B.: The fallen hero: masculinity, shame and farmer suicide in Australia, Gender, Place & Culture, 22, 67-82, 10.1080/0966369X.2013.855628, 2015.
 - Bryman, A.: Social research methods, 5th ed., Oxford University Press, Oxford, 2016.
- Carolan, M.: Lands changing hands: Experiences of succession and farm (knowledge) acquisition among first-generation, multigenerational, and aspiring farmers, Land Use Policy, 79, 179-189, https://doi.org/10.1016/j.landusepol.2018.08.011, 2018.
 - Casey, P. J., and Scott, K.: Environmental concern and behaviour in an Australian sample within an ecocentric anthropocentric framework, Australian Journal of Psychology, 58, 57-67, https://doi.org/10.1080/00049530600730419, 2006.
- Clarke, J. L.: A gender analysis of agricultural and rural restructuring in the Mallee region, PhD, Department of Social Work, Monash University Clayton, 2014.
 - Coates, B., Wiltshire, T., and Reysenbach, T.: Short-changed: How to stop the exploitation of migrant workers in Australia, 2023.
- 350 Connell, R.: Masculinities, Polity Press, Cambridge, 1995.
 - Gardner, G.: Murray-Mallee Country: Swan Hill and District, 1836 1986, Swan Hill and District 150th District 150th Anniversary Committee, Swan Hill, Australia, 1986.
 - Hartwig, L. D., Jackson, S., Smart, J. C. R., and Osborne, N.: Water trading by Aboriginal organisations in NSW, Australia, Journal of Rural Studies, 100, 102997, https://doi.org/10.1016/j.jrurstud.2023.03.005, 2023.
- Heo, W., Lee, J. M., and Park, N.: Financial-related psychological factors affect life satisfaction of farmers, Journal of Rural Studies, 80, 185-194, https://doi.org/10.1016/j.jrurstud.2020.08.053, 2020.
 - Holmes, K.: Making Masculinity: Land, Body, Image in Australia's Mallee Country, in: RCC Perspectives: Transformations in Environment and Society, edited by: Christoff Mauch, R. M. a. E. O. G., Rachel Carson Center for Environment and Society, Munich, 39-48, 2017.
- Kosovac, A.: Masculinity and smart water management: why we need a critical perspective, Water International, 10.1080/02508060.2021.1886832, 2021.
 - Kosovac, A., Horne, A. C., and O'Donnell, E.: Community perceptions of environmental water: a review, Environmental Conservation, 50, 73-82, 10.1017/S0376892923000036, 2023.





- Kosovac, A., Shermon, A., O'Donnell, E., Horne, A., and Mesikämmen, E.: Water courses and discourses: A media content analysis of environmental water reporting in Australia, Environmental Science & Policy, 154, 103703, https://doi.org/10.1016/j.envsci.2024.103703, 2024.
 - Lester, L., Flatau, P., and Kyron, M.: Understanding the Social Impacts of Drought, The University of Western Australia, Perth, 2022.
- Loch, A., O'Donnell, E., Adamson, D., and Horne, A.: Submission to the Senate Rural and Regional Affairs and Transport References
 - Committee Inquiry: The integrity of the water market in the Murray-Darling Basin, Senate Rural and Regional Affairs and Transport References Committee, 1-15, 2017.
 - Culture and Heritage in the Mallee: https://malleecma.com.au/culture-and-heritage/, access: 22 February, nd.
 - McCright, A. M., and Xiao, C.: Gender and Environmental Concern: Insights from Recent Work and for Future Research, Society & Natural Resources, 27, 1109-1113, 10.1080/08941920.2014.918235, 2014.
 - Rickards, L.: Critical Breaking Point? The effects of drought and other pressures on farming families, Birchip Cropping Group, 2008.
 - Rodriguez Castro, L., and Pini, B.: The "White middle-class farming woman": Instagram and settler colonialism in contemporary rural Australia, Journal of Rural Studies, 94, 83-90, https://doi.org/10.1016/j.jrurstud.2022.05.024, 2022.
- 380 Sheridan, A., and Newsome, L.: Tempered disruption: Gender and agricultural professional services, Gender, Work & Organization, 28, 1040-1058, https://doi.org/10.1111/gwao.12623, 2021.
 - Sheridan, A., Newsome, L., Howard, T., Lawson, A., and Saunders, S.: Intergenerational farm succession: How does gender fit?, Land Use Policy, 109, 105612, https://doi.org/10.1016/j.landusepol.2021.105612, 2021.
- Sheridan, A., Newsome, L., Lawson, A., Charry, S., and Field, S.: Changing scripts: Gender, family farm succession and increasing farm values in Australia, Journal of Rural Studies, 100, 103024, https://doi.org/10.1016/j.jrurstud.2023.103024, 2023
 - Shisler, R. C., and Sbicca, J.: Agriculture as Carework: The Contradictions of Performing Femininity in a Male-Dominated Occupation, Society & Natural Resources, 32, 875-892, 10.1080/08941920.2019.1597234, 2019.
- Stead, D. V., Taula, L., and Silaga, M.: Making place in a place that doesn't recognise you: Racialised labour and intergenerational belonging in an Australian horticultural region, Journal of Rural Studies, 94, 454-461, https://doi.org/10.1016/j.jrurstud.2022.07.006, 2022.
 - Stehlik, D., Lawrence, G., and Gray, I.: Gender and Drought: Experiences of Australian Women in the Drought of the 1990s, Disasters, 24, 38-53, https://doi.org/10.1111/1467-7717.00130, 2000.
- Twigg, K.: 'Dust, dryness and departure': constructions of masculinity and femininity during the WWII drought, History Australia, 1-20, 10.1080/14490854.2021.1993740, 2021.
 - Victorian Historical Journal: The Victorian Historical Magazine, 36, 175, 1975.
 - Wasko, C., Nathan, R., Stein, L., and O'Shea, D.: Evidence of shorter more extreme rainfalls and increased flood variability under climate change, Journal of Hydrology, 603, 126994, https://doi.org/10.1016/j.jhydrol.2021.126994, 2021.
 - Whatmore, S.: Farming Women: Gender, Work and Family Enterprise, Palgrave Macmillan, London, 1991.
- 400 Zwarteveen, M.: Men, Masculinities and Water Powers in Irrigation, Water Alternatives, 1, 111-130, 2008.