

# Drought preparedness and climate resilience

## Example Gender Impact Assessment

November 2024



# 1

## Steps 1 - 3 in the Gender Impact Assessment Process



This case study is based on a hypothetical proposal.  
It is intended for guidance purposes only.

## Proposal Summary

The proposal is for the creation of a drought preparedness and climate resilience fund, designed to assist farmers to prepare and respond to drought conditions. The fund will provide low interest loans to primary producers in regional New South Wales to support activities and services aimed at improving drought management and resilience to climate change.

### Question 1: How does the issue you are seeking to address affect women, men or gender diverse people differently?

Drought is an inevitable feature of the NSW climate and a growing challenge due to climate change. The more severe the drought, the more significant the social and economic impacts for rural communities and farming families.<sup>1</sup> Changes in supply chains and increased prices can have an impact on individual and community wellbeing at state and national levels.

Drought can impact people directly and indirectly in many ways, with common impacts including mental health issues, changes to employment and education, out-migration, change in workloads, higher costs, income losses and decreased access to community resources and support.

The challenges associated with drought often look different for women, men and gender diverse people, which has implications for drought preparedness and response.

#### a) Economic activity and workload

Drought can have a significant impact on economic activity and workload. During drought, farm business income is often low or running at a loss. As a result, women are more likely to obtain off-farm employment or to work longer hours to earn the income needed to cover household expenses.<sup>2</sup> At the same time, as Victorian research demonstrates, women seeking off-farm work face additional challenges, including a lack of childcare options and workplace flexibility in rural areas.<sup>3</sup>

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<sup>1</sup> Lester L, Flatau P, and Kyron M 2022, *Understanding the social impact of drought*, The University of Western Australia.

<sup>2</sup> Alston M, 2023, *Rurality and Gender and Disaster Literature Review*, *Gender and Disaster Australia*; Alston M, 2011 '*Gender and Climate Change in Australia*', *Journal of Sociology*, vol. 47, no. 1, pp. 53–70; and Casey S, Crimmins G, Rodriguez Castro L and Holliday P, 2021, "*We would be dead in the water without our social media!*": Women using entrepreneurial bricolage to mitigate drought impacts in rural Australia', *Community Development*, vol. 53, no. 2, pp. 1-18.

<sup>3</sup> Commission for Gender Equality in the Public Sector, 2023, *Intersectionality at work: building a baseline on compounded gender inequality in the Victorian public sector*: Special Look: Rurality, Gender and Workforce Participation.

Alongside off-farm work, rural women are likely to have increased workloads on farms during drought, such as stock feeding and water carting.<sup>4</sup> In addition, the family workload, traditionally borne by women, can intensify during drought.<sup>5</sup> For example, women are more likely to take on the role of 'home tutors' to their children.<sup>6</sup> Many women report significant stress due to the need to work on the farm while juggling increased family workloads.<sup>7</sup> Employment changes, together with gendered role expectations, can also put stress on relationships within the household.<sup>8</sup> There is also evidence of the extensive workload borne by women leading community volunteer work in natural disaster contexts.<sup>9</sup>

The nature of women's work during drought is often overlooked. For example, historical analysis of several Australian Government drought relief payments revealed how eligibility linked to the definition of 'farmer' made the contribution of women to family income (often from off-farm or indirect farm work) effectively invisible.<sup>10</sup>

## b) Mental health

It is now well recognised that drought has significant impacts on mental health.<sup>11</sup> Studies suggest that women are at greater risk of poor mental health from drought than men. For example, research focused on farming families revealed that female farmers experience greater psychological distress than male farmers.<sup>12</sup> However, overall men are at increased risk of suicide during moderate and extreme drought. One study found that during moderate drought, the risk of suicide increases for rural men and boys aged 10 to 49 years.<sup>13</sup> Other research found a connection between higher monthly temperatures in extreme drought and increased suicide rates for this male age group.<sup>14</sup> Extreme drought has also been associated with higher rates of suicide for both males and females aged 10 to 29 years.<sup>15</sup>

Experiences of mental distress are not the same for all women. For example, research has shown longer drought duration is associated with higher distress in middle-aged rural women (aged 40–54) than older rural women. This may be because older rural women are more experienced with a range of adverse conditions and, as a result, have developed better coping mechanisms.<sup>16</sup>

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<sup>4</sup> Alston M, 2023, *Rurality and Gender and Disaster Literature Review*, Prepared for Gender and Disaster Australia.

<sup>5</sup> Alston M, Clarke J, and Whittenbury K 2018, *Contemporary feminist analysis of Australian farm women in the context of climate changes*, *Social Sciences*, vol.7, no. 2.

<sup>6</sup> Alston, M and Kent J, 2006, *'The impact of drought on secondary education access in Australia's rural and remote areas'*, Regional Australia Institute, cited in Lester L, Flatau P, and Kyron M, 2022, *Understanding the social impact of drought*, The University of Western Australia.

<sup>7</sup> Alston M, 2023, *Rurality and Gender and Disaster Literature Review*, Prepared for Gender and Disaster Australia.

<sup>8</sup> Alston M, 2006, *"I'd like to just walk out of here": Australian women's experience of drought'*, *Sociologia Ruralis*, vol. 46, no. 2, pp. 154-170 cited in Lester L, Flatau P, and Kyron M, 2022, *Understanding the social impact of drought*, The University of Western Australia.

<sup>9</sup> Foote W L, Alston M, Betts D, and McEwan T, 2024, *Women's leadership and a community 'saving itself' : learning from disasters, health and wellbeing impacts of the Northern Rivers flood 2022*, University of Newcastle.

<sup>10</sup> Alston M, 2009, *'Drought policy in Australia: gender mainstreaming or gender blindness?'*, *Gender, Place & Culture*, vol. 16, no. 2, pp. 139-154.

<sup>11</sup> Fleming-Munoz D, 2023, *The economics of drought: A review of impacts and costs*; and Mental Health Commission of New South Wales, 2022, *Reporting on mental health and wellbeing in Regional NSW*.

<sup>12</sup> Wheeler S, Zuo A, Xu Y, and Grafton Q, 2019, *Emergency Drought Relief Package — Health and Resilience Services: an Evidence Check rapid review* brokered by the Sax Institute for the NSW Ministry of Health.

<sup>13</sup> Hanigan I C, and Chaston TB, 2022, *'Climate Change, Drought and Rural Suicide in New South Wales, Australia: Future Impact Scenario Projections to 2099'*, *International Journal of Environmental Research and Public Health*, vol. 19, no. 13: 7855.

<sup>14</sup> Xu Z, Wheeler SA and Zuo A, 2024, *'Drought and Hotter Temperature Impacts on Suicide: Evidence From the Murray - Darling Basin, Australia'*, *Climate Change Economics*, vol. 15, no. 1, pp. 1-19.

<sup>15</sup> Xu Z, Wheeler SA and Zuo A, 2024, *'Drought and Hotter Temperature Impacts on Suicide: Evidence From the Murray - Darling Basin, Australia'*, *Climate Change Economics*, vol. 15, no. 1, pp. 1-19.

<sup>16</sup> Hanigan IC, Schirmer, J, & Niyonsenga T, 2018, *'Drought and distress in southeastern Australia'*, *EcoHealth*, vol. 15, no. 3, pp. 642-655.

There is also evidence that being either unemployed, less educated, in poor health, or First Nations increases the likelihood of greater drought-related mental illness.<sup>17</sup> For example, a study found that a higher proportion of First Nations people in a local drought-affected area was associated with higher suicide rates.<sup>18</sup>

Women tend to undertake the carer role in the household during drought, providing ongoing emotional support for their partners, families and broader community. As a result, research shows that women tend to ignore their own mental health to care for others first.<sup>19</sup> This is likely a contributor to the poor mental health outcomes experienced by women.

Deterioration in younger men's mental health during drought has been linked to financial hardship, a lack of accessed services, family stress, and increased social isolation.<sup>20</sup> Rural men are less likely to seek community support after natural disaster and describe the stigma attached to accessing mental health services.<sup>21</sup> In the general Australian population, men are also less likely to access mental health support than women. In a 2020-22 study, females with a 12-month mental disorder<sup>22</sup> were more likely to have seen a health professional for their mental health than males with a 12-month mental disorder (51.1 per cent compared with 36.4 per cent).<sup>23</sup>

### c) Drought-related decision making

Research shows that there remains an unequal distribution of power and influence within Australian farming families, with women's input into decisions affecting the farm remaining limited.<sup>24</sup> Farming is still viewed predominately as a male occupation.<sup>25</sup> This is compounded by the continuing over representation of men in industry bodies.<sup>26</sup> 68.5 per cent of the Agriculture, Fisheries and Forestry sector workforce was male, as at August 2024.<sup>27</sup> Women are also under-represented in the science and technology sectors which will help shape climate responses in the future, with women making up only 15 per cent of Australia's STEM-skilled workforce.<sup>28</sup> This imbalance in decision making power, across all levels, impacts on women's involvement in drought management and climate change resilience decisions.<sup>29</sup>

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<sup>17</sup> Wheeler S, Zuo A, Xu Y, Grafton Q, 2019, *Emergency Drought Relief Package — Health and Resilience Services: an Evidence Check rapid review* brokered by the Sax Institute for the NSW Ministry of Health

<sup>18</sup> Xu Z, Wheeler SA and Zuo A, 2024, '*Drought and Hotter Temperature Impacts on Suicide: Evidence From the Murray - Darling Basin, Australia*', *Climate Change Economics*, vol. 15, no. 1, pp. 1-19.

<sup>19</sup> Alston M, Clarke J, and Whittenbury K 2018, '*Contemporary feminist analysis of Australian farm women in the context of climate changes*', *Social Sciences*, vol.7, no. 2.; and Alston, M. 2011. '*Gender and climate change in Australia*,' *Journal of Sociology*, vol. 47, no. 1, pp. 53-70.

<sup>20</sup> Dean JG, and HJ Stain, 2010, '*Mental health impact for adolescents living with prolonged drought*', *Australian Journal of Rural Health*, 18, pp. 32-37; Carnie, TL, Berry HL, Blinkhorn SA and Hart CR, 2011, '*In their own words: Young people's mental health in drought-affected rural and remote NSW*', *Australian Journal of Rural Health*, vol. 19, pp. 244-248 cited in Xu Z, Wheeler SA and Zuo A, 2024, '*Drought and Hotter Temperature Impacts on Suicide: Evidence From the Murray -Darling Basin, Australia*', *Climate Change Economics*, vol. 15, no. 1, pp. 1-19.

<sup>21</sup> Zara C, Parkinson D, Duncan A and Joyce K 2016, '*Men and Disasters: Men's experiences of the Black Saturday bushfires and the aftermath*' *Australian Journal of Emergency Management*, vol. 31, no. 3, pp. 40-48.

<sup>22</sup> People who had experienced at least one mental disorder at some time in their life and had sufficient symptoms of that disorder in the 12 months prior to the survey.

<sup>23</sup> Australia Bureau of Statistics 2023, *National Study of Mental Health and Wellbeing 2020-22*.

<sup>24</sup> Downey H and Clune T 2023, '*Constructions of gender in contemporary Australian family farming: A rural financial counsellor perspective*' *Journal of Rural Studies*, vol. 102, pp. 1-10.

<sup>25</sup> Alston M, Clarke J, and Whittenbury K 2018, '*Contemporary feminist analysis of Australian farm women in the context of climate changes*', *Social Sciences*, vol.7, no. 2.

<sup>26</sup> Alston M, Clarke J, and Whittenbury K 2018, '*Contemporary feminist analysis of Australian farm women in the context of climate changes*', *Social Sciences*, vol.7, no. 2.

<sup>27</sup> Australian Bureau of Statistics 2024, *Labour Force, Australia, Detailed*, released August 2024.

<sup>28</sup> Department of Industry, Science and Resources 2023, *The state of STEM gender equity in 2023*.

<sup>29</sup> Women's Environmental Leadership Australia 2024, *Gender, Climate and Environmental Justice in Australia*.

#### d) Increased gender-based violence

International research from across countries and from a diverse range of disasters reveals that violence against women escalates in the aftermath of natural disaster.<sup>30</sup> For example, research on droughts in Australia found that gender-based violence escalated in rural communities during drought, and peaked when three monthly bills were due.<sup>31</sup>

Research in Victoria following the 2009 Black Saturday bushfires found an increase in the incidence and severity of domestic and family violence following the disaster.<sup>32</sup> An increase in gender-based violence was also documented after the 2011 earthquake in Christchurch and in the aftermath of Hurricane Katrina in the United States.<sup>33</sup>

#### e) Geographic isolation and access to support

People of all genders in rural and regional areas may face barriers to accessing drought funding due to limited resources and/or financial capital. This can impact on their ability to engage with support services or participate in decision-making processes related to drought relief. Barriers to accessing support can also be compounded by complex application processes.

Drought is associated with the lack of availability, and higher rates of closures, of key services including banks, schools, hospitals, and medical practices.<sup>34</sup> This exacerbates existing barriers (including travel time, service shortages, costs and wait times) to accessing health and other support services.<sup>35</sup> Women are also impacted by the long-term effects of drought on sense of community, including the loss of neighbours through out-migration, and the closure of community stores and services.<sup>36</sup> First Nations people also face limited access to culturally appropriate services and infrastructure.<sup>37</sup> There is a need for resilience-focused interventions in times of drought and adaptative strategies drawing on the knowledge of First Nations peoples.<sup>38</sup>

#### f) How intersectional factors shape experiences

There is an evidence gap in understanding how intersectional factors impact on experiences of drought, and disasters more broadly, in Australia. For example, the experiences of First Nations women, people from culturally and linguistically diverse backgrounds, older women and those living with disability remain largely undocumented.<sup>39</sup> There is also a lack of evidence in relation to the experiences of gender diverse people.

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<sup>30</sup> Alston M, 2023, *Rurality and Gender and Disaster Literature Review*, Gender and Disaster Australia.

<sup>31</sup> Whittenbury K 2013, *Climate Change, Women's Health, Wellbeing and Experiences of Gender-based Violence in Australia*, in Alston M and Whittenbury K (eds) *Research, Action and Policy: Addressing the Gendered Impacts of Climate Change*. cited in Alston M, 2023, *Rurality and Gender and Disaster Literature Review*, Gender and Disaster Australia.

<sup>32</sup> Parkinson D and Zara C, 2013, 'The Hidden Disaster: violence in the aftermath of natural disaster,' *Australian Journal of Emergency Management*, vol. 28, no. 2, pp. 28–35; Parkinson D, 2019, 'Investigating the Increase in Domestic Violence Post Disaster: An Australian Case Study', *Journal of Interpersonal Violence*, vol. 34, no. 11, pp.2333-2362.

<sup>33</sup> Enarson E, 2012, *Women Confronting Natural Disaster: From Vulnerability to Resilience*; and Lynch K 2011, 'Spike in domestic violence after Christchurch earthquake' cited in M. Alston. 2023. *Rurality and Gender and Disaster Literature Review*, Gender and Disaster Australia.

<sup>34</sup> Edwards B, Gray M, and Hunter B, 2019, 'The social and economic impacts of drought' *Australian Journal of Social Issues*, vol. 54, no. 1.

<sup>35</sup> Sivertsen N, Abigail W, Tieu M, Eastman M, McCloud C, Thomson W, and Tonkin H, 2022, 'What women want: Women's health in Rural and Regional Australia - Insights from an interprofessional research collaboration between academic researchers, nursing clinicians, and industry professionals', *Health & Social Care in the Community*, vol. 30, no. 5, pp. 2236-2244.

<sup>36</sup> Lester L, Flatau P, and Kyron M, 2022, *Understanding the social impact of drought*, University of Western Australia.

<sup>37</sup> Standen JC, Spencer J, Lee, GW, Van Buskirk J, Matthews V, Hanigan I, Boylan S, Jegasothy E, Breth-Petersen M, and Morgan G.G, 2022, *Aboriginal Population and Climate Change in Australia: Implications for Health and Adaptation Planning*. *International Journal of Environmental Research and Public Health*, vol. 19.

<sup>38</sup> Black Dog Institute, 2020, *Mental Health Interventions Following Disasters*.

<sup>39</sup> Alston M, 2023, *Rurality and Gender and Disaster Literature Review*, Gender and Disaster Australia.

## Question 2: What are the expected positive impacts of the proposal on women, men or gender diverse people?

The proposal will have an expected positive impact on:

### 1. Economic opportunity and advancement:

- Enhancing primary industries' resilience to drought may create opportunities for women, men, and gender diverse individuals to participate in agricultural activities and contribute to the economic sustainability of rural communities.
- Eligibility criteria for the Fund will consider the different roles of women, men and gender diverse people in the economies of rural communities, with input from the Fund Advisory Group.
- During the design phase, the Fund will be utilised to explore training and capacity-building initiatives targeted at women and gender diverse individuals in sustainable resource management, in order to address gender disparities in access to training and funding opportunities.
- The Drought Preparedness and Climate Resilience Fund will be designed in collaboration with other departments working in rural areas on programs such as childcare, access to flexible work, family and domestic violence services, and community support services, to support these existing initiatives.

### 2. Health and wellbeing

- Investments in community networks, infrastructure and support services will be prioritised as a component of the fund, to improve social cohesion and mental health outcomes for women, men and gender diverse individuals experiencing the negative psychological impacts of drought.
- This will include targeted interventions to address gender-based violence and contribute to safer and more inclusive environments, designed in consultation with community organisations.
- This will also include investment in community infrastructure projects, such as recreational facilities, community centres, and public spaces, which can create inclusive and accessible environments where women, men, and gender diverse people can socialise, and participate in activities.

### 3. Participation and empowerment

- Guiding principles will be developed that will support the application of a gender lens to the design and implementation of the fund, including diverse representation in decision making mechanisms and consultation processes, gender responsive evaluation requirements, and investment in skills development and access to farming technology for people of all genders in farming communities.
- An advisory group will be created to inform the design and implementation of the fund, with representation targets for women.
- Investment in areas such as increased skills development and participation in sustainable land management practices could provide opportunities for women and gender diverse individuals to engage in traditionally male-dominated sectors such as agriculture and conservation.

## Question 3: How will you mitigate any risks, barriers or limitations of the proposal on women, men or gender diverse people?

Risks / barriers / limitations	Mitigating strategies
<p>If a gendered lens is not applied to fund design and implementation, unintentional adverse impacts may result, including exacerbating existing inequalities in access to resources and decision making in rural communities.</p>	<p>Guiding principles will be developed to support the application of a gendered lens to fund design and implementation. These principles will focus on eligibility criteria, decision making mechanisms<sup>40</sup>, and consultation and evaluation requirements.<sup>41</sup></p>
<p>Underrepresentation of women and gender diverse individuals in decision-making processes may hinder the development of inclusive policies and programs that address the diverse and broader needs of rural and regional communities.</p>	<p>A Fund Advisory Group, made up of members from diverse backgrounds, with a target of at least 40 per cent women, will provide advice and guidance on the design and implementation of the fund.</p> <p>Collaborations and partnerships with local women’s organisations will be explored as part of fund implementation.</p>
<p>The fund does not account for the contribution of women to family income (often from off-farm work) and the increased workload borne by women in farming families during drought.</p>	<p>The Drought Preparedness and Climate Resilience Fund will be designed in collaboration with other departments working in regional and rural areas on programs which support women’s workforce participation including the provision of childcare and community support services, in order to identify any gaps which could be targeted as part of the Fund.</p>
<p>Men may be less likely to access mental health services supported by the fund, and will remain isolated from community support.</p>	<p>Targeted outreach and awareness campaigns will be delivered alongside the fund to inform communities about available support services, and the different impacts of drought on men, women and gender diverse people. This will include targeted telehealth services, men’s sheds and drought counselling services.</p>

<sup>40</sup> Such as project teams, advisory groups and community forums.

<sup>41</sup> Evaluation requirements such as including gender expertise on evaluation team and gender specific indicators will be considered.



# 2

## Steps 4 - 6 in the Gender Impact Assessment Process



## Question 4: Does the proposal support any gender equality indicators?

### Participation and empowerment

- Supports recovery and resilience after natural disasters

## Question 5: What are the knowledge gaps about the gendered impacts of this issue?

There remain significant knowledge gaps regarding the experiences of certain communities, particularly First Nations women, people with disability, culturally and linguistically diverse communities and LGBTQIA+ individuals. While there has been research acknowledging the unique challenges faced by First Nations communities during drought, there is a need for more detailed research that explores how drought exacerbates existing socio-economic disadvantages experienced by First Nations women, including access to resources, healthcare and education.

Research on the gendered impacts of drought has traditionally focused on heterosexual relationships and traditional gender roles within farming communities, neglecting the experiences of LGBTQIA+ individuals. There is a lack of data on how drought impacts LGBTQIA+ individuals and families, as well as the unique challenges faced by LGBTQIA+ farmers.

As part of the design of the fund, a data collection improvement plan will be developed. This will be phased over the lifetime of the fund. Collaboration with existing university drought-related research projects will also be explored as part of the plan.

## Question 6: How will you collect data to monitor and/or evaluate the gendered impacts of the proposal?

- Collect gender disaggregated data
- Source case studies from participants of different genders
- Develop gender-specific indicators (qualitative and / or quantitative)
- Source gender expertise in the evaluation team
- Ensure diverse gender representation in consultations and analysis

## Summary of the gender impact assessment

The proposal is for the creation of a drought preparedness and climate resilience fund, designed to assist farmers to prepare and respond to drought conditions. It is likely to have a positive impact on gender equality as it aims to address the gendered impacts of drought.

This proposal will consider how drought can impact people of different genders differently, and the implications for drought preparedness and response by:

- Developing guiding principles to support that will application of a gender lens to the design and implementation of the fund. These principles may include: diverse representation in decision making mechanisms and consultation processes, gender responsive evaluation requirements, and prioritisation or higher weightings for investment in areas such as skills development and access to farming technology for people of all genders.
- Creating an advisory group, with representation from women and gender diverse people, to inform the design and implementation of the fund.
- Ensuring eligibility for the fund considers the different roles of women, men and gender diverse people in rural economies, with input from the Fund Advisory Group.
- Exploring training and capacity-building initiatives, targeted at women and gender diverse individuals, in sustainable resource management, to address gender disparities in access to training and funding opportunities.
- Designing the fund in collaboration with other departments working in rural areas on programs such as childcare, family and domestic violence services, and community support services, to support these existing initiatives, and identify gaps.
- Invest in community networks, infrastructure and support services as a component of the fund, to improve social cohesion and mental health outcomes for women, men and gender diverse individuals experiencing the negative psychological impacts of drought.
- Including targeted interventions to address gender-based violence.
- Recommending targeted outreach and awareness campaigns to inform women, men and gender diverse communities about available support services, and the different impacts of drought on all community members.

Outcomes will be monitored through gender responsive monitoring tools, including having gender expertise on evaluation teams and gender-specific indicators, as well as a phased data collection improvement plan.

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