



# Farming challenges & farmer wellbeing

2015 Regional  
Wellbeing Survey -  
Farmer Report 1

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## Introduction

This report examines the barriers to farm development experienced by Australian farmers in 2015. It draws on data collected during October and November 2015 as part of the *Regional Wellbeing Survey*, an annual survey of more than 13,000 rural and regional Australians, including almost 4,000 farmers.

The *Regional Wellbeing Survey* includes questions about challenges experienced on the farm because what is happening on the farm is critical to a farmer's wellbeing. In our past reports, we've found that experiencing substantial barriers to managing the farm goes hand in hand with poorer wellbeing for many farmers. These barriers can include a wide range of challenges, from ongoing drought and decline in market prices, to floods, pest or disease outbreaks, lack of transport, difficulty accessing finance, or rising input prices, amongst many others. While experiencing challenges is common in farming, and farmers are often able to successfully adapt to difficult circumstances, even the most resilient farmer can find it difficult to cope when multiple challenges happen on the farm at the same time. Understanding the barriers to farm development experienced by Australian farmers helps us identify and recommend the best on-farm interventions to achieve not only improved farm performance, but also improved farmer wellbeing.

## Methods

The Regional Wellbeing Survey is a large annual survey of rural and regional Australians, defined as people living outside Australia's largest capital cities. In 2015, 13,303 people took part in the survey, including just under 4,000 farmers. Participants were asked questions examining their wellbeing and the quality of life and liveability of their community. Just under 3,000 farmers were asked to answer the questions about barriers to farm development examined in this report.

A detailed description of the methods used to collect data is provided in our 'Wellbeing, resilience, and liveability' report (Schirmer et al. 2016). This should be referred to for information about how the survey sampling is achieved, and known limitations of the data set.

Most surveys achieve more responses from some groups than others, and the Regional Wellbeing Survey is no exception. To address this, and ensure results reported are representative of the population, data used in this report was weighted. Weighting involves adjusting the relative contribution each survey respondent contributes to the whole when analysing survey results, so that analysed data more accurately represents the population it was drawn from. Weighting doesn't change the answers people gave to survey questions. Data were weighted using GREGWT, a generalised regression weighting procedure developed by the Australian Bureau of Statistics. For Australian farmers, the weighting has ensured the data are representative of the proportion of farmers who are female and male, of different ages, and who live in different states.

Throughout this report, confidence intervals are shown as part of the results. A confidence interval, put simply, is a measure of how confident we can be in the results. More accurately, it tells you the boundaries between which the value of a given variable would be 95% likely to fall if you repeated the survey multiple times with a similar sample. While confidence intervals provide a useful way of understanding how reliable the results are likely to be, they are not perfect: key limitations are described in Schirmer et al. (2016) together with calculation methods.

## What barriers to farm development were experienced by Australian farmers in 2015?

Australian farmers were asked if any of several issues had acted as a barrier to them managing their farm they wanted to in the last five years. A total of 2,910 farmers were asked “Have any of the following prevented you running your farm business the way you would like to in the last 3 years?” and given a list of 14 items known to sometimes be key challenges for farm management.

The most commonly reported barriers were (Figure 1):

- Rising inputs costs (reported as a large or very large barrier by 63% of farmers)
- Drought (57%)
- Increased charges for permanent water entitlements (irrigators only, 56%)
- Lack of adequate telecommunications infrastructure (55%)
- Reduced water allocation (irrigators only, 55%)
- Falling prices for goods produced (52%)
- Increases in the costs of purchasing temporary water (irrigators only, 52%)
- Too many environmental regulations (45%)
- Pest, disease or weed invasion causing substantial damage (38%)
- Difficulty obtaining labour (33%)
- Lack of demand for goods produced (32%)
- Other natural disasters including flood, bushfire and storm damage (32%)
- Difficulty accessing affordable finance (27%)
- Difficulty transporting produce to market (23%).

The severity of each barrier is also shown in Figure 1. Drought, lack of telecommunications infrastructure, reduced water allocation and increases in costs of both temporary water and permanent water were the issues most likely to present large barriers to a farmer running their farm business the way they wanted to. Rising input costs and drought were the most severe barriers to farm development, with only 21 and 27% of farmers indicating that these were not challenges on their farm in the last three years. Rising water costs and reduced water availability were moderate to large challenges for a majority of irrigators.

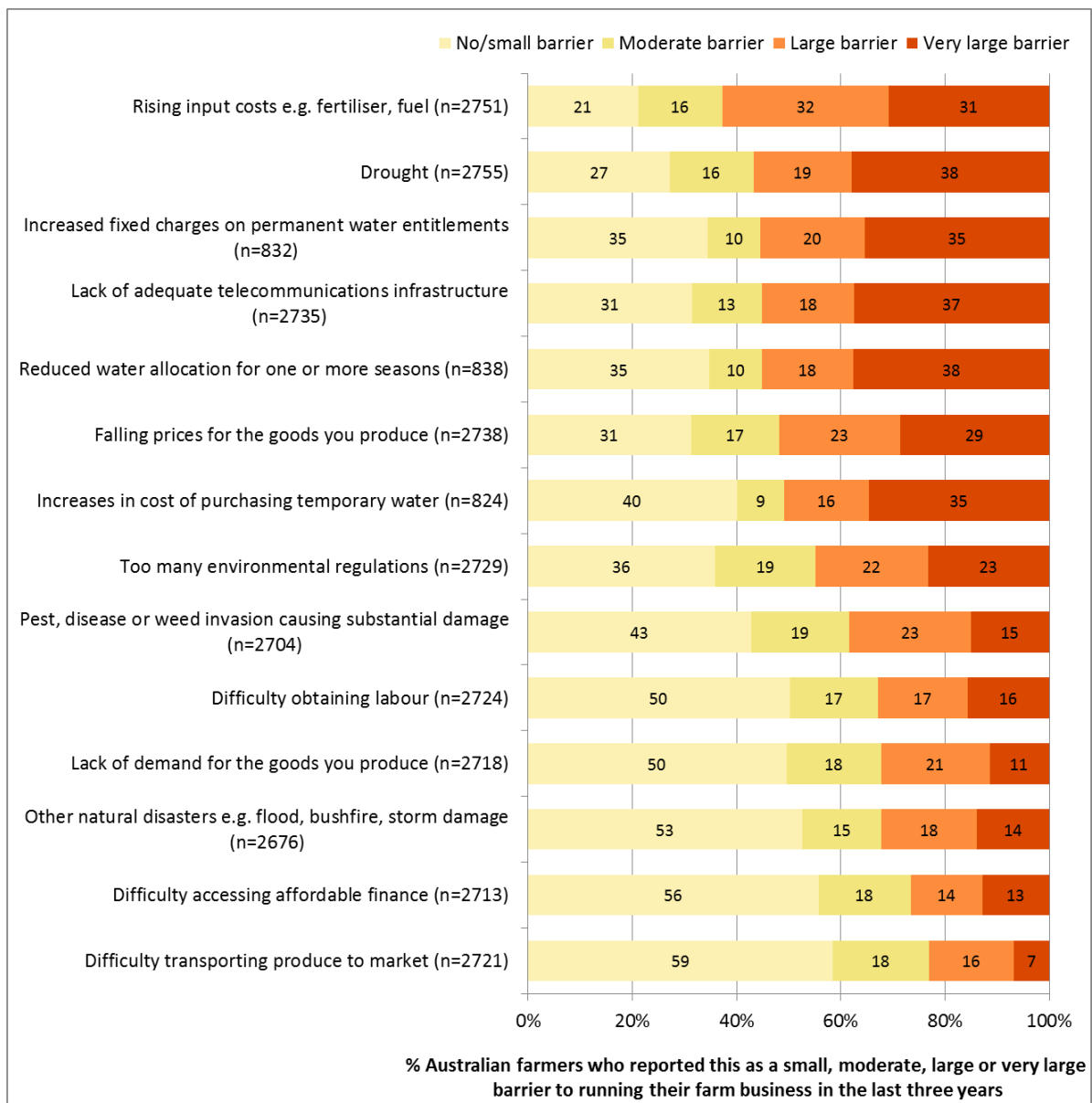


Figure 1 Barriers to farm development experienced by Australian farmers in the three years to spring 2015<sup>1</sup>

Between 2014 and 2015, the occurrence of some farming challenges increased (Figure 2), in particular:

- Rising temporary and permanent water costs were reported as issues by significantly more irrigators in 2015 compared to 2014, rising from 39% and 48% of irrigators to 60% and 65% respectively, highlighting growing stress related to water costs
- Difficulty accessing affordable finance: 44% of farmers reported this as an issue in 2015 compared to 35% in 2014
- The occurrence of some other farming challenges increased slightly between 2014 and 2015, but cannot be said to have definitely increased as the small sample size in 2014 means the

<sup>1</sup> Farmers were asked to identify on a scale from 0 (not a barrier) to 7 (very large barrier), how much each of the things listed in Figure 1 had prevented them running their farm business the way they wanted to in the previous three years. Scores of 0 and 1 were combined into 'No/small barrier', scores of 2 and 3 into 'Moderate barrier', scores of 4 and 5 into 'Large barrier' and scores of 6 and 7 into 'Very large barrier'.

differences are not statistically significant. This includes lack of adequate telecommunications infrastructure, reduced water allocation, pest/disease/weed invasion, and environmental regulations.

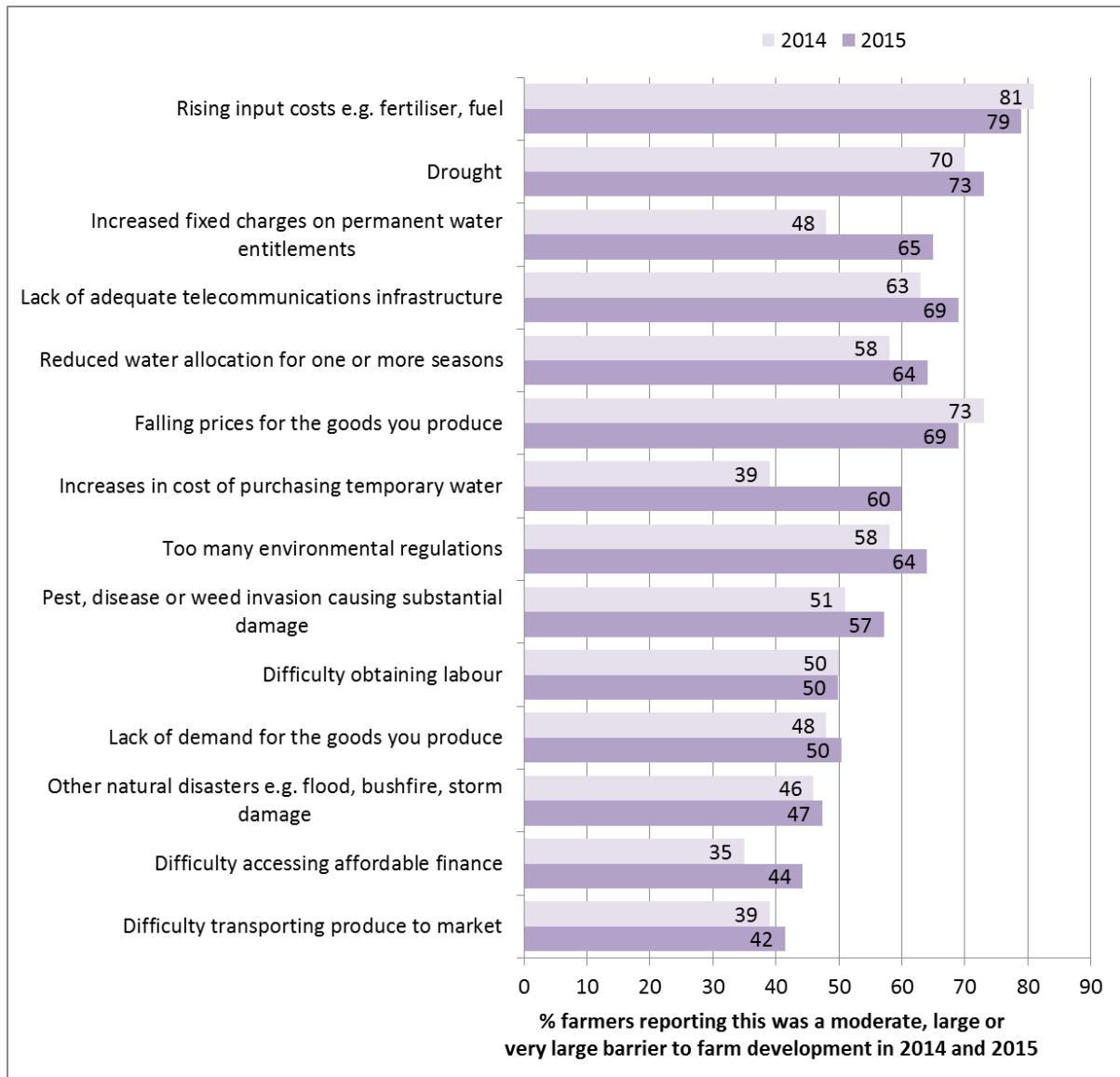


Figure 2 What's changing? Comparison of farm barriers reported in 2014 and 2015<sup>2</sup>

<sup>2</sup> In 2014, the sample of farmers asked these questions was much smaller (around 1,050 farmers altogether, and 380 irrigators for irrigator specific questions; in 2015, these questions were asked of a much larger sample of farmers, with 2,750 farmers answering most questions and more than 800 irrigators answering questions about irrigation.

## Which farmers are experiencing different barriers?

Most types of farmers listed similar barriers with rising input costs, drought, falling prices, lack of telecommunications infrastructure and environmental regulation being the most common (Tables 1 and 2):

- **Rising input costs** were the top ranked issue for almost types of farmer, with only three exceptions: falling prices were the top ranked issue for dairy farmers (despite this survey being conducted in Spring 2015 prior to the substantial reductions in prices announced in 2016), and drought was top ranked for mixed sheep-beef enterprises.
- **Drought** was the second or third most commonly reported farming challenge for almost all groups of farmers.
- **Lack of telecommunications** was the second or third most commonly reported barrier for almost all types of farmers, with the exception of dairy farmers.
- **Falling prices** were the fourth most commonly reported issue for most groups, but was more commonly reported by dairy farmers, irrigators, and less commonly by sheep and beef graziers.
- **Environmental regulations** were ranked the fourth or fifth most common barrier for most types of farmers, and were ranked higher by irrigators.
- Irrigators commonly reported **rising costs of water** as a key challenge, as well as **reduced water allocation**.
- **Difficulty acquiring labour** was an important issue for dairy farmers and intensive livestock producers, but was not one of the 'top 5' for other types of farmers.

**Table 1 Top five barriers to farm development by farmer type**

Farmer type	Most commonly reported barriers				
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
<b>Female farmers</b> (n=1030)	Rising input costs (65%)	Drought (61%)	Lack of telecomms (56%)	Falling prices (53%)	Environmental regulations (42%)
<b>Male farmers</b> (n=1421)	Rising input costs (61%)	Lack of telecomms (55%)	Drought (54%)	Falling prices (51%)	Environmental regulations (46%)
<b>Farmers aged 18-39</b> (n=201)	Rising input costs (74%)	Drought (74%)	Lack of telecomms (71%)	Falling prices (64%)	Pest, disease or weed invasion (48%)
<b>Farmers aged 40-54</b> (n=728)	Rising input costs (64%)	Lack of telecomms (57%)	Falling prices (55%)	Drought (55%)	Environmental regulations (46%)
<b>Farmers aged 55 to 64</b> (n=810)	Rising input costs (60%)	Drought (58%)	Lack of telecomms (52%)	Falling prices (48%)	Environmental regulations (43%)
<b>Farmers aged 65+</b> (n=705)	Rising input costs (53%)	Environmental regulations (44%)	Lack of telecomms (44%)	Drought (44%)	Falling prices (41%)
<b>Dryland farmers</b> (n=1812)	Rising input costs (62%)	Drought (59%)	Lack of telecomms (55%)	Falling prices (50%)	Environmental regulations (42%)
<b>Irrigators</b> (n=740)	Rising input costs (63%)	Falling prices (58%)	Lack of telecomms (55%)	Increased water entitlement charges (54%)	Reduced water allocation (54%)

**Table 2 Top five barriers to farm development by farm type**

Farmer type	Most commonly reported barriers to farm development				
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
<b>Beef graziers</b> (n=562)	Rising input costs (59%)	Drought (56%)	Lack of telecomms (50%)	Environmental reg'ns (41%)	Falling prices (39%)
<b>Beef-sheep graziers</b> (n=119)	Drought (68%)	Rising input costs (57%)	Lack of telecomms (57%)	Environmental reg'ns (48%)	Falling prices (42%)
<b>Crop growers</b> (n=283)	Rising input costs (65%)	Drought (64%)	Lack of telecomms (62%)	Falling prices (58%)	Environmental reg'ns (48%)
<b>Dairy farmers</b> (n=226)	Falling prices (65%)	Rising input costs (63%)	Drought (49%)	Environmental reg'ns (44%)	Difficulty acquiring labour (43%)
<b>Fruit/nut growers</b> (n=107)	Rising input costs (67%)	Lack of telecomms (58%)	Falling prices (58%)	Drought (55%)	Environmental reg'ns (54%)
<b>Intensive cattle farmers</b> (n=65)	Rising input costs (59%)	Falling prices (56%)	Lack of telecomms (48%)	Lack of demand for produce (45%)	Difficulty acquiring labour (41%)
<b>Mixed crop-sheep farmers</b> (n=274)	Rising input costs (72%)	Lack of telecomms (68%)	Drought (66%)	Environmental reg'ns (58%)	Difficulty accessing finance (34%)
<b>Sheep graziers</b> (n=333)	Rising input costs (74%)	Lack of telecomms (67%)	Falling prices (62%)	Drought (58%)	Environmental reg'ns (52%)
<b>Winegrape growers</b> (n=115)	Rising input costs (57%)	Drought (55%)	Lack of telecomms (53%)	Falling prices (46%)	Environmental reg'ns (41%)

## Cumulative barriers

Barriers to farm development do not typically occur in isolation: most farmers who reported experiencing any barriers to farm development reported experiencing multiple barriers to farm development. To better understand what types of farmers were experiencing more and more severe barriers we created a cumulative measure of barriers to farm development by summing each farmers scores for the individual items, and then arithmetically converting them to a score from 0 to 100.

Figure 3 shows the cumulative barriers for different types of farmers. Farmers in Queensland, younger farmers and those involved in cropping were experiencing the greatest number of cumulative barriers in 2015, while those in Tasmania and those aged 65 and older were experiencing the fewest.

Between 2014 and 2015, the total number of farming challenges reported by Australian farmers increased somewhat (Figure 4). This was driven in particular by increases in the number of challenges reported by younger farmers (aged 18-39), farmers involved in crop growing, and Victorian and South Australian farmers. However, in addition to these groups reporting larger increases in the number and severity of challenges they were experiencing in their farming, many other types of farmers also reported smaller increases in the challenges they experienced, including fruit and nut growers, dairy farmers and sheep farmers.



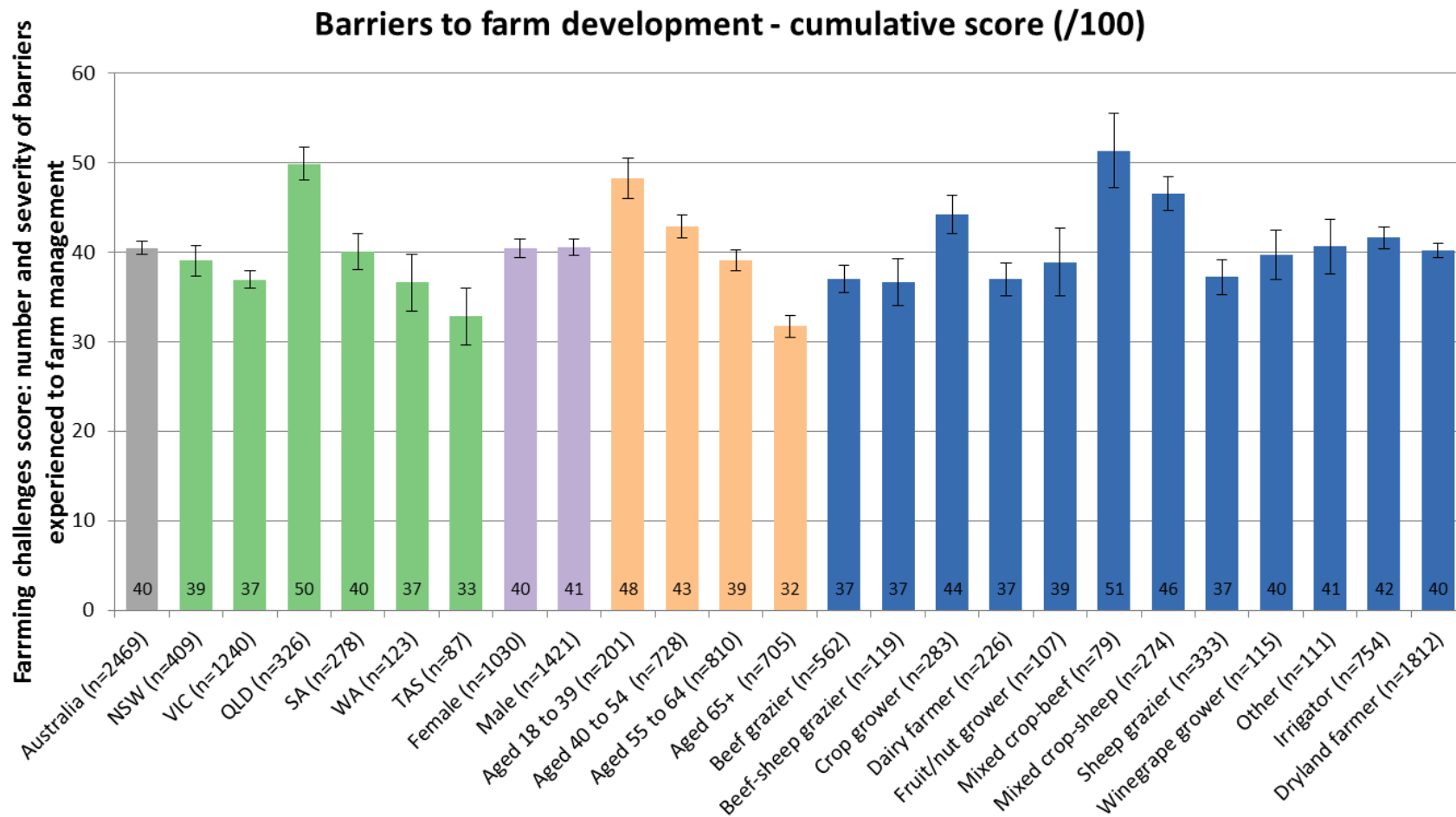


Figure 3 Cumulative barriers to farm development by farmer and farm type

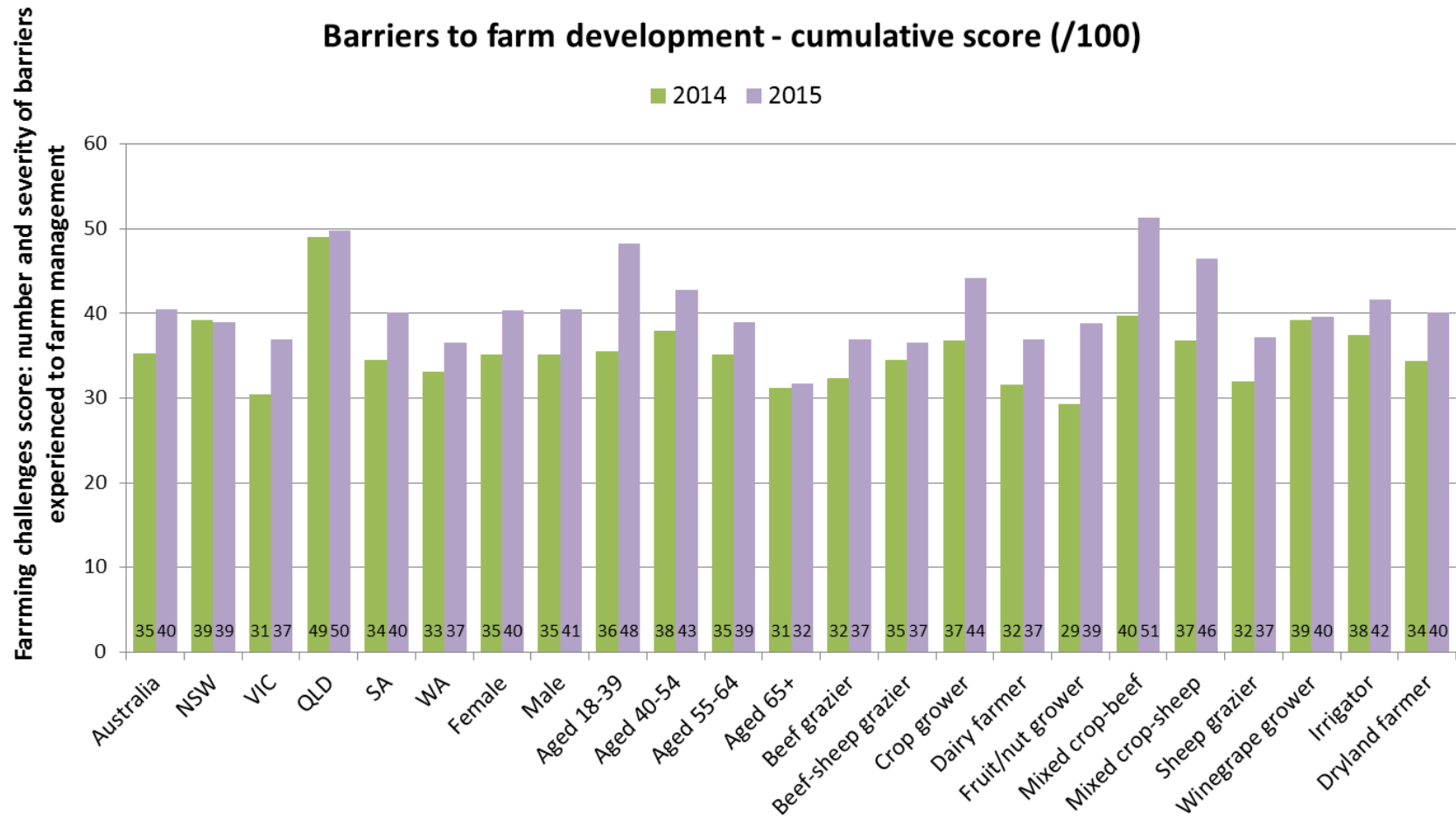


Figure 4 Cumulative barriers to farm development: How did they change 2014 to 2015?

## Farming challenges and farmer wellbeing

Experiencing farming challenges is associated with poorer farmer wellbeing. As shown in Figure 5, the number and severity of the barriers a farmer experiences to running their farm is associated with their wellbeing, with wellbeing being poorer as farming challenges increase. In this instance, farmer wellbeing is measured based on identifying how satisfied they are with their life overall. This 'global life satisfaction' measure is strongly correlated with a number of measures of mental and physical health, and provides a useful overall picture of a farmer's wellbeing.

In 2015, the average Australian farmer had a life satisfaction score of 74 out of a possible 100, similar to rural Australians overall. However, those who experienced no/few barriers reported much higher than average wellbeing, with an average score of 81. Those experiencing some or moderate barriers had wellbeing that was similar to the average (76 and 72 respectively). Those experiencing several large barriers reported significantly poorer wellbeing (an average score of 68), and the small number of farmers who experienced multiple large barriers to farm management reported much lower wellbeing (average score of 59).

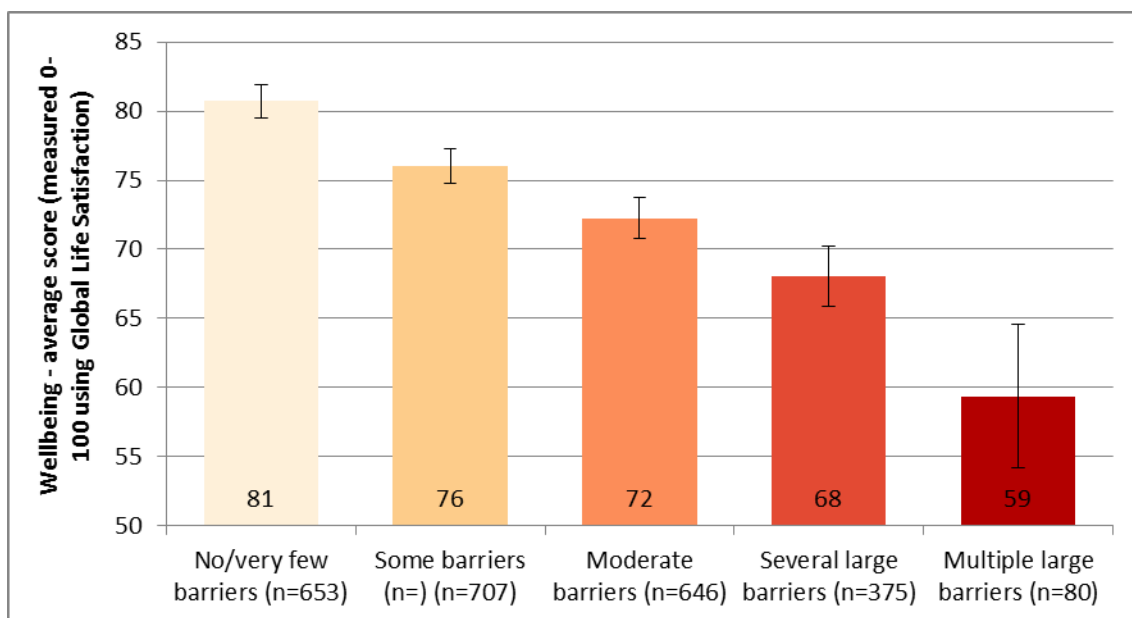


Figure 5 Wellbeing of farmers who reported experiencing differing levels of barriers to farm development

Not all types of farming challenges were associated with significantly poorer wellbeing, although most were, as shown in Figure 6. Difficulty accessing affordable finance was associated with the poorest wellbeing, likely because those who had difficulty accessing finance were already experiencing multiple farming challenges that had created the need to apply for large amounts of finance: almost all of those who reported difficulty accessing finance also reported experiencing other farming challenges. Similarly, farmers who reported difficulty transporting produce to market, difficulty obtaining labour, and lack of demand or falling prices, had particularly low wellbeing. Again, this is likely to reflect that those farmers often reported experiencing multiple barriers: many of these farmers also reported experiencing drought and poor telecommunications, for example.

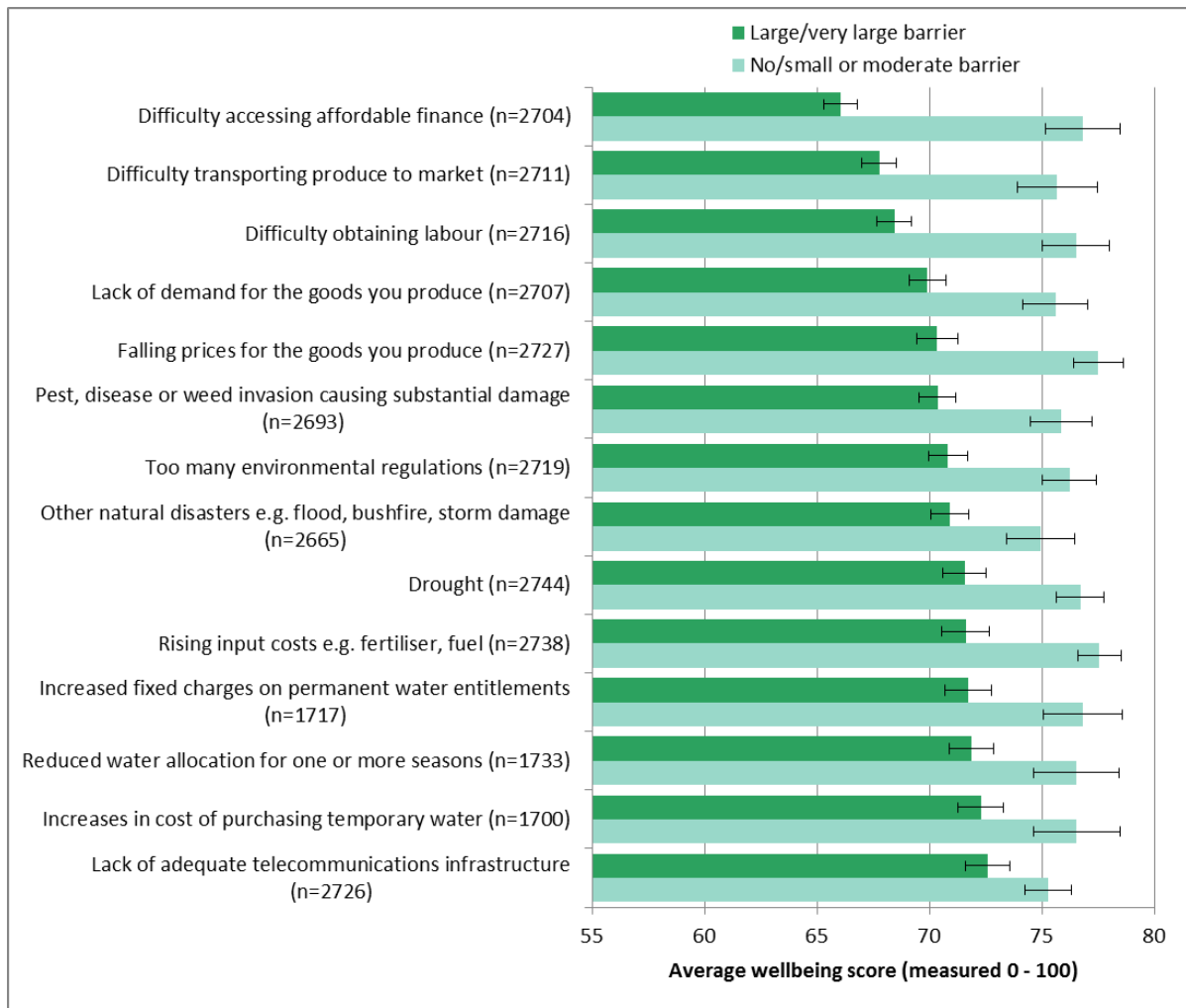


Figure 6 Wellbeing of farmers who report experiencing different farming challenges in the last three years

## Farming challenges and farm financial performance

Farmers who experienced multiple barriers to their farm development also typically reported poorer farm financial performance, as can be seen in Figure 7. Farmers who experienced multiple large barriers on average reported making a slight loss on their farm, while those who experienced moderate barriers on average reported breaking even, and those who experienced no or few barriers reported making a profit in the previous financial year. While the differences appear small, they are significant, particularly as they are often the difference between making a loss or a positive return on the farm.

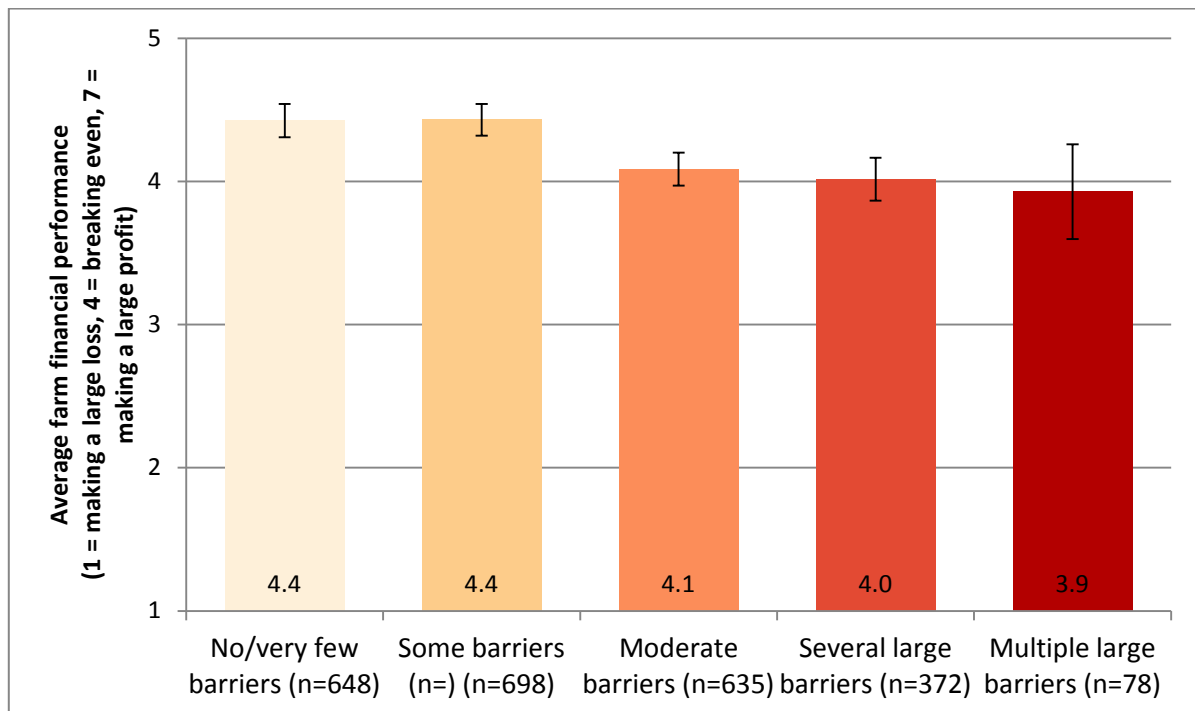


Figure 7 Profitability of farmers who reported experiencing differing levels of barriers to farm development

## Conclusions

In 2015, the most common farming challenges reported by Australian farmers were rising input costs, drought, increased water costs, lack of access to telecommunications, and reduced water allocation, with more than 55% of farmers reporting that one or more of these had prevented them running their farm they wanted to during the past three years. Experience of some farming challenges increased between 2014 and 2015: in particular, the number of farmers reporting difficulty accessing finance grew from 35% in 2014 to 44% in 2015, indicating substantial growth in farm stress for many farmers. The number of irrigators reporting rising water costs as a barrier to farm management also grew substantially between 2014 and 2015. Younger farmers, crop growers, and farmers based in Victoria and South Australia, reported an increasing number of farming challenges between 2014 and 2015, highlighting growing levels of farm-related stress amongst these groups. Farmers who report experiencing many farming challenges also typically report significantly poorer wellbeing, and slightly poorer farm financial performance. This highlights the importance of considering how to address common farming challenges in order to support not only farm productivity and performance, but also farmer wellbeing.

## References

Schirmer, J., Yabsley, B., Mylek, M. and Peel, D. 2016. Wellbeing, resilience and liveability in regional Australia. University of Canberra, Canberra.

## Find out more

This report is part of a series produced using results of the Regional Wellbeing Survey. To access more reports, results and data, go to [www.regionalwellbeing.org.au](http://www.regionalwellbeing.org.au)

To contact the Regional Wellbeing Survey team, email [regionalwellbeing@canberra.edu.au](mailto:regionalwellbeing@canberra.edu.au) or call 1800 981 499.