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Australian farming and farmers

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Australian farming and farmers

In 2012, Australia celebrates the Year of the Farmer, a chance to pay tribute to the important role that farming and agriculture plays in our economy and society, and the unique place it holds in our cultural heritage. The events associated with the Year of the Farmer aim to establish closer links between Australia's rural and urban communities, celebrating the range and quality of Australian farm produce, and highlighting the role of Australian agriculture in maintaining national and global food security.¹

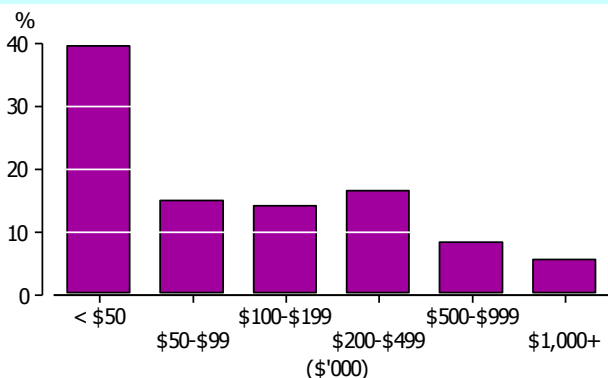
Farming has been a major contributor to the Australian economy since the earliest days of European settlement. In the first half of the 20th century, agriculture accounted for around a quarter of the nation's output and up to 80% of Australia's exports.² Such was the importance of agriculture, particularly wool production, to Australia's prosperity that the country was said to "ride on the sheep's back".

In recent decades, the growth of other industries, including a thriving services sector, has seen a relative decline in Australia's reliance on agriculture. While this is consistent with trends in other developed countries, Australia's agricultural output as a proportion of the economy is among the highest in the OECD.²

Farming – big business and small

The 2010–11 Agricultural Census found that there were 135,000 farm businesses across Australia. The majority of these were involved in specialised beef cattle farming (28%), mixed grain-sheep or grain-beef cattle farming (9%),

Size(a) of Australian farm businesses – 2011



(a) Based on estimated value of agricultural operations.

Source: ABS [Agricultural Commodities](#), Australia, 2010-11 (cat. no. 7121.0)

Data sources and definitions

The information in this article comes from a variety of sources. The information on individuals and families draws on data from the ABS 1981, 2006 and 2011 Censuses of Population and Housing, as well as the 2009–10 Survey of Income and Housing. Information about farm businesses and agricultural production comes from a range of sources, including the ABS 2011 Agricultural Census, and Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) Agricultural Commodities Statistics, 2011.

The data on farmers from the 2006 and 2011 Census and the 2009–10 Survey of Income and Housing is based on the *Australia and New Zealand Standard Classification of Occupations* (ANZSCO). Data on farmers from the 1981 Census is based on the *Classification and Classified List of Occupations* (CLO). While there are some differences between these two classifications, and it is not possible to directly map CLO categories onto ANZSCO, the considerable degree of overlap at the broad level (e.g. farmers and farm managers) is sufficient for the comparisons contained in this article.

In this article, *farmers* are those people who were employed during the week prior to the Census of Population and Housing and who reported that their main occupation was a farmer or farm manager.

Farmers and farm managers plan, organise, control, coordinate and perform farming operations in agricultural establishments. Tasks performed typically include planning and coordinating the operation of hatcheries and crop production; breeding and raising livestock; monitoring and maintaining the health of stock; identifying and controlling environmental toxins, weeds, pests and diseases; organising and conducting farming operations such as maintaining buildings, water supply and equipment; managing business capital, monitoring market activity and planning production to meet contract requirements and market demand.

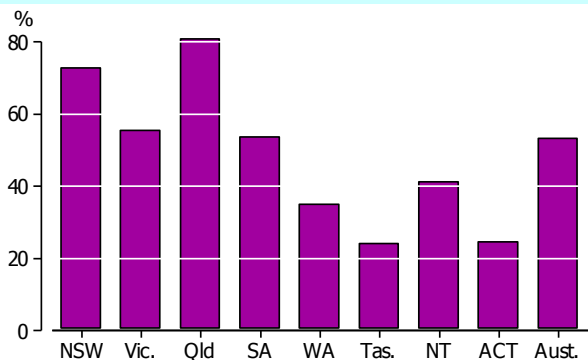
Farming families are those families where the family reference person and /or their spouse or partner reported that their main occupation was a farmer or farm manager.

For any distribution (e.g. age) the *median* value is that which divides the relevant population into two equal parts, half falling below the value, and half above it.

other grain growing (9%) or specialised sheep farming (8%). Other common types of farming businesses included dairy cattle farming (6%), mixed sheep-beef cattle farming (5%) and grape growing (4%).³

Despite agricultural production being increasingly concentrated in large farms in recent decades,² the majority of Australia's farms are comparatively small. In 2010–11, just over half (55%) had an estimated value of

Proportion of land used for agriculture by state and territory – 2011



Source: ABS [Agricultural Commodities](#), Australia, 2010-11 (cat. no. 7121.0)

agricultural operations of less than \$100,000. There were, however, a small number (7,700 or 6%) of large farms with estimated agricultural operations in excess of \$1 million.³ This reflects the diverse nature of farming in Australia ranging from small, often family-owned businesses, to very large (family and corporate) businesses. In all, the value of agricultural production across both large and small farms in Australia in 2010-11 was \$46 billion,⁴ with the value added by the agriculture industry accounting for 2.4% of Gross Domestic Product (GDP).⁵

The majority of farms were also small in terms of land area, with around a third covering less than 50 hectares (36%), and a similar proportion (36%) between 50 and 500 hectares. Conversely, there were a small number (100) of massive farms that occupied more than 500,000 hectares, which is more than twice the land area of the Australian Capital Territory. The total area of agricultural land in 2011 amounted to 410 million hectares or just over half (53%) of the nation's landmass.³

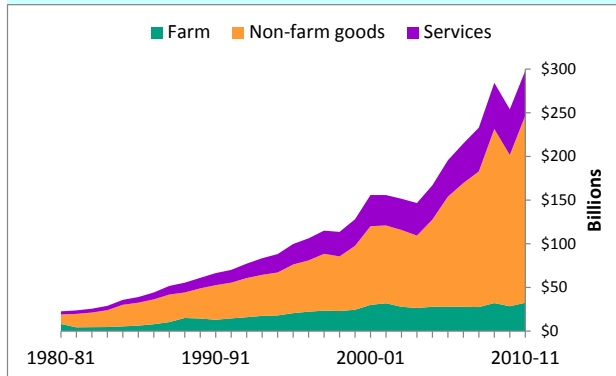
The proportion of land devoted to agriculture varied across states and territories. In Queensland, for example, agriculture occupied the vast majority (81%) of the state, while in Tasmania just under a quarter (24%) of all land was used for agriculture.

In 2009, 60% of Australia's farm produce was exported overseas, helping feed 40 million people.

Feeding the world

A sharp increase in global food prices in recent years has focused attention on the adequacy and affordability of global food supplies. With the challenge likely to become more pressing over time, Australia's role as a net food exporter will be critical. In 2009, Australian farms

Value of Australian exports(a), by sector – 1980-81 to 2010-11



(a) Balance of payments basis.

Source: ABARES [Agricultural commodity statistics](#) 2011

produced 93% of the total volume of food consumed in Australia. After catering for the needs of the Australian population, 60% of Australia's farm produce was exported, helping feed some 40 million people outside Australia each day.⁶

A growing export market

Agricultural produce has traditionally been among Australia's biggest export commodities. In the three decades to 2010-11, the value of Australian farm exports rose from \$8.2 to \$32.5 billion - an average increase of 5% per year. Even stronger growth in exports of non-agricultural goods and services (by an average of 10% per year)⁷ has seen the proportion of Australia's exports coming from the farm sector fall from 36% in 1980-81 to 11% in 2010-11.⁷

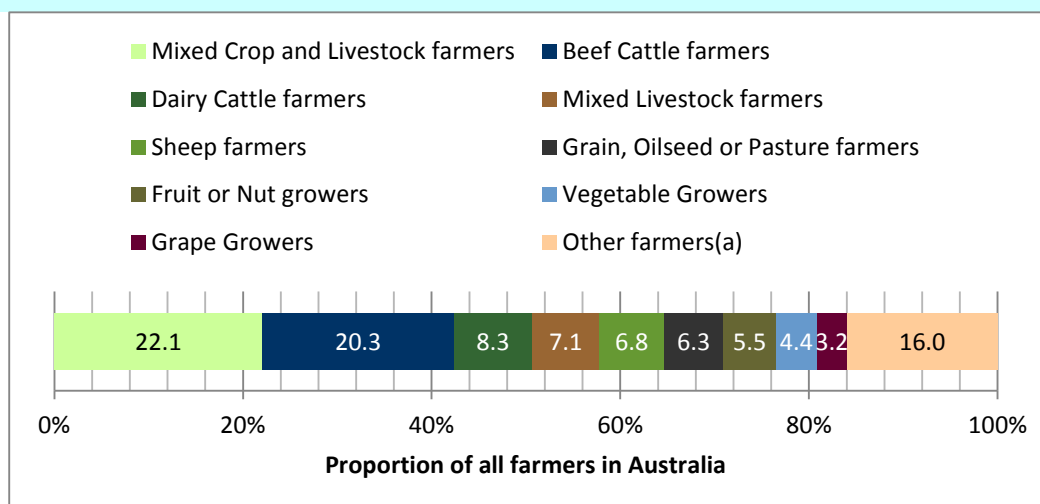
...what are we exporting and where?

Of the total value of farm exports in 2010-11, 54% came from crop exports including wheat (17%) and wine (6%), while 46% came from livestock exports such as beef and veal (13%) and wool (9%).⁷ The majority of Australia's farm exports go to countries in Asia. While China's demand for Australia's mineral exports is well documented, in recent years it has also emerged as the largest market for our agricultural goods. In 2010-11, 14% of the total value of agricultural exports went to China (up from 7% a decade earlier). A further 13% went to Japan and 8% to Indonesia. Australian farmers also exported to countries beyond our immediate region such as those in the Middle East (10% of agricultural exports), the European Union (8%), and the United States (7%).⁷

Farmers in Australia

In 2011, there were 157,000 farmers in Australia. Around half of these were mixed crop and livestock farmers (22%), beef cattle farmers

Farmers in Australia – 2011



(a) Includes sugar cane growers, poultry farmers, flower growers and apiarists, etc.

Source: ABS 2011 Census of Population and Housing

(20%) or dairy farmers (8%). Among the less common types were sugar cane growers (2%), flower growers (1%) and apiarists (i.e. bee keepers) (less than 1%). There were also 223 goat farmers and 56 deer farmers.

The number of farmers in Australia has been declining for many decades as small farmers sell up to large-scale farming operations, and fewer young people take over family farms.² In fact, there were 19,700 fewer farmers in Australia in 2011 than in 2006, a fall of 11% over five years. Over the 30 years to 2011, the number of farmers declined by 106,200 (40%), equating to an average of 294 fewer farmers every month over that period. Evidence suggests that events such as major droughts have a big impact on the farming workforce. For example, there was a decline of 15% in just 12 months in the midst of the 2002–03 drought.²

Men and women on the land

The traditional masculine image of the farmer is reflected in the fact that men made up the majority (72%) of farmers in Australia in 2011. Women did, however, account for a sizable minority of the nation's farming workforce (28% or 44,700). The proportion of female farmers has fallen slightly in recent decades (from 30% in 1981), even as the proportion of women in other occupations has increased (from 37% in 1981 to 47% in 2011).

The contribution that women make to the nation's farm sector is not simply measured by the number who report farming as their main job. It is also necessary to take into account the many other women who live in families where their partner is a farmer. In 2011, this included around 35,100 women who had a job outside the farm, helping supplement farm income while also supporting the operation of the farm

through other means including unpaid domestic work, with more than half (57%) doing 15 or more hours per week. Equally, there were around 16,000 women in farming families who were not employed in paid work, but most (79%) spent 15 or more hours per week doing unpaid domestic work.

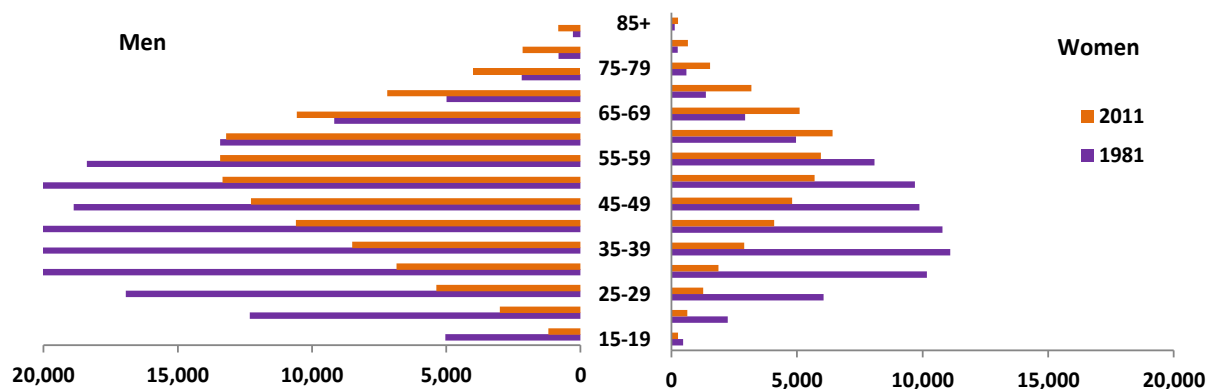
An ageing workforce

Australia's farmers tend to be considerably older than other workers. In 2011, the median age of farmers was 53 years, compared with 40 years for people in other occupations. This is partly due to the fact that farmers are more likely to continue working well beyond the age at which most other workers retire. In 2011, almost a quarter (23%) of farmers were aged 65 years or over, compared with just 3% of people in other occupations. The tendency of farmers to work beyond the traditional retirement age may reflect the decline in younger generations taking over family farms.²

In 2011, nearly a quarter (23%) of farmers were aged 65 years or over, compared with just 3% of other workers.

The age profile of farmers has changed markedly over the past few decades. The median age of farmers increased by nine years between 1981 and 2011, while the median age of other workers increased by just six years. Over the same period, the proportion of farmers aged 55 years and over increased from 26% to 47%, while the proportion of farmers aged less than 35 years fell from 28% to just 13%.

Age profile of farmers – 1981 and 2011



Source: ABS Census of Population and Housing

Most farmers are home grown

In terms of national origin, there tends to be less diversity among farmers than among the rest of the Australian population. In 2011, only 11% of Australian farmers were born overseas, compared with 26% of the total population. The proportion of Australian farmers born overseas has remained fairly steady over recent decades, (10% in 1981), while the proportion of the total population who were born overseas has risen five percentage points.

Of the 17,000 farmers in 2011 who reported being born overseas, the most common place of birth was the UK (20%), followed by countries in Southern and South Eastern Europe (17%), South-East Asia (16%), and New Zealand (12%).

Family life on the farm

In 2011, there were 93,300 farming families. Almost half (48%) of these comprised a couple living by themselves (compared with 38% of other families), many of whom were likely to have had older children no longer living at home.

Of those families with children living at home, farming families were slightly larger on average than other families (4.0 people compared with 3.7). Close to a third (29%) of farming families with children had three or more children, compared with one fifth (20%) of other families.

One parent families were much less common among farming families (3%), than among other families (16%). This may suggest that separation and divorce is less common among farming families. Indeed, of those people who had been married, farmers were much less likely than other people to be divorced or separated (8% compared with 18%). However, the relative infrequency of one parent farming families may also reflect the fact that lone parents (who are predominantly women) tend to leave the farm after separating. The other parent (usually the father) who stays on the

farm by themselves becomes a lone person, no longer classified as a farming family. Of the male farmers who were living by themselves in 2011, close to a third (30%) were either divorced or separated.

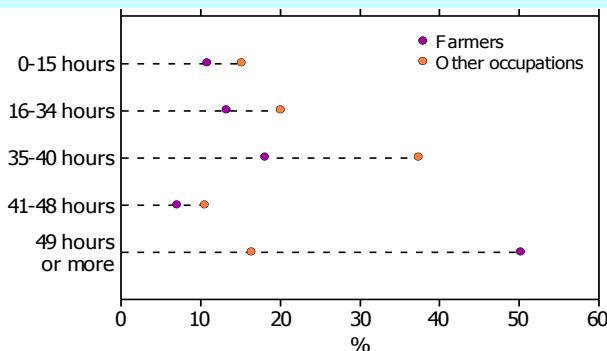
Working life on the farm

Farming as a vocation tends to be characterised by a high degree of self-employment and long working hours. In 2011, half (50%) of farmers worked 49 hours or more a week. Only 17% of other workers put in such long hours. More than half (56%) of Australia's farmers were self-employed owner managers (compared with 15% of other workers), with a further 17% working as employees managing farms owned by someone else.

In 2011, half (50%) of farmers worked 49 hours or more a week, compared with just 17% of other workers.

Although people who are self-employed generally work longer hours than others, this only goes part of the way to explaining the working hours of farmers. Even when comparing just among the self-employed, farmers were still much more likely to work

Weekly hours worked by occupation – 2011



Source: ABS 2011 Census of Population and Housing

Equivalising income and wealth

To enable comparison of the relative economic wellbeing of households of different size and composition, measures of income and wealth in this article have been adjusted or equivalised to take account of these differences. For a lone person household, the equivalised value is equal to the original value. For a household containing more than one person, it is an indicator of the level that would be needed by a lone person household to enjoy the same level of economic wellbeing as the household in question.

long hours, with 56% farmers working 49 hours or more a week, compared with 30% of self-employed people in other occupations. This may in part reflect the nature of farm work which can necessitate tending to crops and animals at various times of the day and night.

...income and wealth

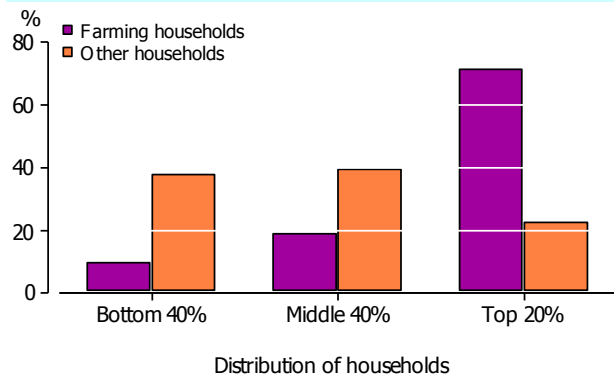
Despite working such long hours, the average weekly disposable income of farmers in 2009–10 (\$568) was considerably lower than that of people working in other occupations (\$921). However, the fact that most farmers own and manage their own businesses means it can be difficult to analyse their personal financial circumstances in isolation from the financial arrangements of the farm. Losses from farm income, for instance, can be deferred over subsequent years and profits are often reinvested into the business.

While the reported income of farmers might have been relatively low, it is important to recognise that income is only one aspect of economic wellbeing. Wealth, in the form of bank accounts, shares, superannuation or property, is another important component, and can be drawn upon to smooth and support consumption over time, including during periods of low income. Indeed, wealth is particularly crucial for farming families given that farming income is often at the mercy of climatic conditions. The average equivalised net worth (taking into account both assets and liabilities) of farming households in 2009–10 was \$1.3 million, much higher than the average across other households (\$393,000). However, such high levels of wealth are not enjoyed by all farming households. In fact, 10% of farming households could be classified as having relatively low levels of wealth (i.e. in the lowest 40% of the wealth distribution). However, the bulk of farming households (71%) were in the top 20% of the wealth distribution. The high levels of wealth explain why, despite relatively

Low economic resources

People with low economic resources are those in households in the lowest 40% of both equivalised adjusted disposable household income and equivalised household net worth.

Equivalised household net worth by household type – 2011



Source: ABS 2009-10 Survey of Income and Housing

low income, only a fraction (5%) of farming households are classified as having low economic resources, compared with a fifth (21%) of other households.

Education

With the operation of farm businesses becoming increasingly complex, many farmers are coming to see themselves less as traditional farmers and more as managers with the same skills and responsibilities as any business manager.⁸ This approach has seen growing numbers of farmers pursuing formal educational qualifications.

Over the three decades to 2011, for instance, the proportion of Australian farmers with non-school qualifications more than doubled, from 15% to 38%. The proportion of farmers with a certificate-level qualification doubled over this period, while the proportion with a bachelor degree or above increased six-fold.

While the trend towards formal education among farmers mirrors the shift across all occupations, the increase among farmers in proportional terms has outstripped that among other occupations. That said, farmers were still less likely than people in other occupations to hold non-school qualifications.

Non-school qualifications by occupation



Source: ABS Census of Population and Housing

This increasing prevalence of non-school qualifications among farmers is partly due to the entry of younger generations of farmers. For example, in 2011 half of farmers aged 25–44 years had non-school qualifications, compared with just a third of those aged 45 and over.

Looking ahead

With the global population expected to rise from around 7 billion in 2012 to 9.1 billion by 2050, the United Nations Food and Agriculture Organisation estimates that food production worldwide will need to increase by 70%.⁹ With much of this increased demand coming from our own region, particularly China and India, Australian farmers are well placed to contribute to the challenge and capitalise on the associated commercial opportunities.

The recent white paper *Australia in the Asian Century* suggests that our farm sector will be transformed by the changes occurring in Asia, and lists as a national objective that “Australian food producers be recognised globally as innovative and reliable producers of more and higher-quality food and agricultural products, services and technologies to Asia.”¹⁰

These opportunities come in the context of challenges relating to water and land management at a time of climatic change and the likelihood of more intense extreme weather events.¹¹ That said, Australia’s farmers have a long history of embracing new technologies and innovative practices, and strong productivity growth,¹² all of which bodes well for this Year of the Farmer and beyond.

Endnotes

- 1 Australian Year of the Farmer – Objectives, viewed 29 October, 2012. <www.yearofthefarmer.com.au>.
- 2 Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, Canberra.
- 3 Australian Bureau of Statistics, 2010–11, Agricultural commodities, Australia, cat. no. 7121.0, <www.abs.gov.au>.
- 4 Australian Bureau of Statistics, 2010–11, Value of agricultural commodities produced, cat. no. 7503.0, Table 2. <www.abs.gov.au>.
- 5 Australian Bureau of Statistics, 2010–11, Australian system of national accounts, cat. no. 5204.0, Table 5. <www.abs.gov.au>.
- 6 Australia and food security in a changing world (2010) Prime Minister’s Science, Engineering and Innovation Council.
- 7 ABARES, Agricultural commodity statistics 2011.
- 8 Cary, Webb & Barr (2002). *Understanding landholders’ capacity to change to sustainable practices: Insights about practice adoption and social capacity for change*. Canberra: Bureau of Rural Sciences.
- 9 *How to feed the world in 2050 – Global agriculture towards 2050*, 2009, Food and Agriculture Organization of the United Nations.
- 10 Australian Government, 2012, *Australia in the Asian Century*, viewed 29 October 2012, <www.asiancentury.dpmc.gov.au>.

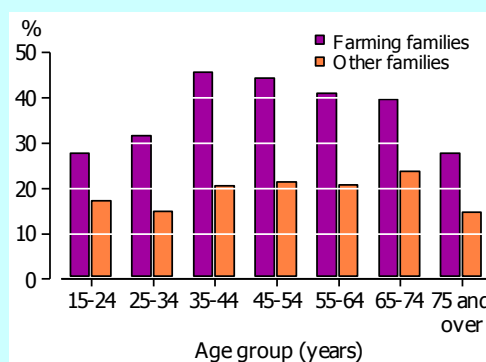
Farming communities

People in farming families are typically known for having a greater sense of connectedness to their local community than many others. This is reflected in the comparison of volunteering rates with people in farming families more than twice as likely as those in other families to do voluntary work for an organisation or group (39% compared with 19%) in the 12 months to August 2011.

This may be partly explained by the fact that volunteering is more common in smaller communities which rely on volunteers to carry out essential functions such as fire fighting. The rate of volunteering is certainly much higher among those who live in smaller communities (27% among those who live in areas of less than 1,000 people, compared with 17% of those who live in cities larger than one million people). Nonetheless, people in farming families were more likely to volunteer than others, regardless of the size of the area in which they live.

Similarly, the age profile of people in farming families is skewed towards the age range in which people are most likely to volunteer (i.e. 35–74 years). However, the higher rate of volunteering among those in farming families is apparent across the age spectrum.

Volunteering rates by family type – 2011



Source: ABS 2011 Census of Population and Housing

- 11 Garnaut Climate Change Review – Update 2011, Update paper 4: *Transforming rural land use*, viewed 13 November 2012. <www.garnautreview.org.au>.
- 12 Australian Bureau of Statistics, 2012, *Year of the farmer*, Year Book Australia, cat. no. 1301.0. <www.abs.gov.au>.

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