



Australian Government
Bureau of Rural Sciences

COUNTRY MATTERS

2008 SOCIAL ATLAS OF RURAL AND REGIONAL AUSTRALIA



EMPLOYMENT

Changing employment in rural and regional Australia

For more information

The 2008 Country Matters: Social Atlas of Rural and Regional Australia is an online tool available at www.brs.gov.au/socialatlas. The Atlas enables you to create and download a customised regional profile containing key social and economic information for any region.

The Atlas has five companion booklets that provide a summary of the Atlas and detailed analyses on four social themes:

- 2008 Country Matters: Social Atlas of Rural and Regional Australia — Summary Booklet
- Education and training in rural and regional Australia — people in country areas rising to the challenge
- Changing employment in industries in rural and regional Australia
- Social fabric of rural and regional Australia
- Drought in rural Australia — exploring the social impact in three case study regions.

HOW DO I GET A COPY?

These booklets and a copy of the Atlas are available for download from the Bureau of Rural Sciences shop at www.brs.gov.au/shop.

Introduction

This release of *2008 Country Matters: Social Atlas of Rural and Regional Australia* (the Atlas) includes information from the Australian Bureau of Statistics (ABS) *Census of population and housing* (ABS 1996, 2001 and 2006). The data contained in the Atlas provide information for many critical social and economic issues affecting rural and regional people, industries and communities. Information from the Atlas is used to provide analytical commentary on changes in employment in country areas, particularly employment in agriculture, forestry and fishing (referred to collectively as 'the agriculture industry').

The agriculture industry has been subjected to change from a number of sources, including trade reform, world market prices, industry restructuring, impacts of drought, and changes in water availability and access. These impacts are cumulative and are changing the level and nature of employment in the agriculture industry, and the day-to-day lives of people in rural areas and small towns. Employment in agriculture has a direct impact on the sustainability and survival of many small towns located throughout Australia.



Box 1 Terms used

- Major urban centres — population clusters of 100 000 people or more, including capital cities.
- Regional centres — population clusters of 1000 to 100 000 people.
- Small towns — population clusters of 200 to 1000 people.
- Rural areas — less than 200 people.
- Country — includes all the areas outside the capital cities.
- Statistical local area — fundamentally, SLAs are local government areas.
- Place of usual residence — the data are based on the person's place of usual residence on Census night. This means that some people could live in rural areas, but work in a small town or regional centre, explaining why there are numbers of people working in retail, health, manufacturing and government services in rural areas.

This thematic study analyses the characteristics of the labour market in country Australia, particularly employment in the agriculture industry. Box 1 contains some of the specific terms used in this thematic study based on the terminology of the Atlas.

Levels of participation in the labour force in rural areas

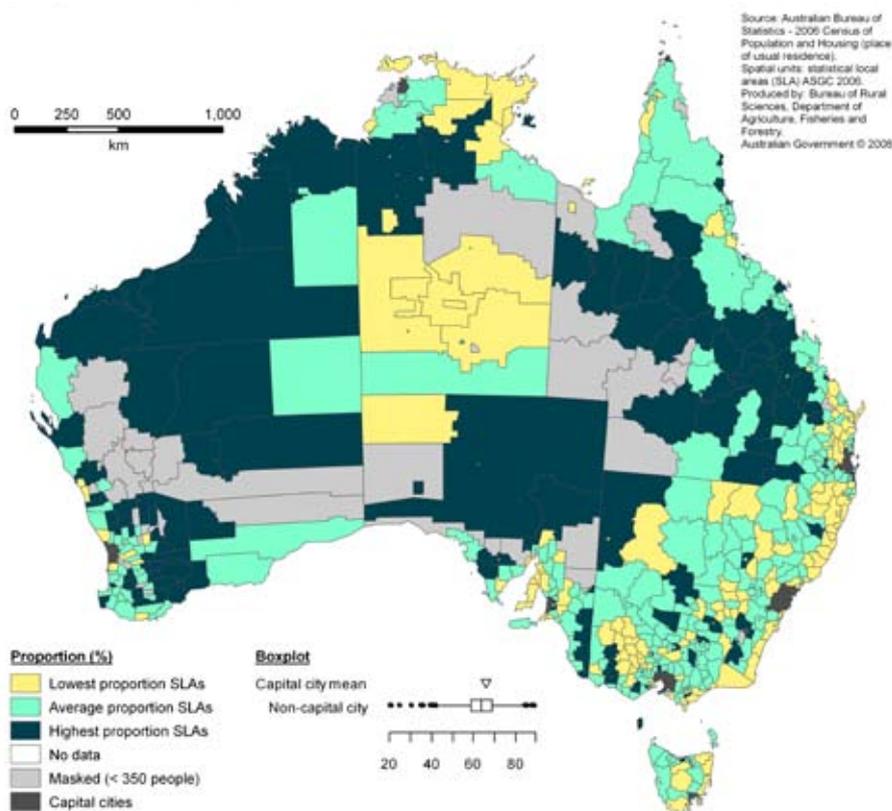
Participation in the labour force is the number of people either employed or unemployed expressed as a proportion of the working age population. Attaining high levels of participation and a supply of suitable labour in the labour force is critical for meeting the needs of industry. It also affects the social prospects for individuals and their families and affects the functioning of many communities throughout Australia. As more people join the labour force, the pressure of the current skills shortages will ease, and the social and financial circumstances of individuals and families will improve.

AREAS WITH HIGH LEVELS OF LABOUR FORCE PARTICIPATION

In 2006, the Australian labour force participation rate was 64.6%, increasing from 63.0% in 2001 and 60.4% in 1996. However, in rural areas, levels of participation

in the labour force are already very high with fewer opportunities for the rate to increase because of an ageing population and people choosing not to move to rural areas to live. In 2006, 67.5% of the working-age population in rural areas was in the labour force — a level that was considerably higher than the Australian average of 64.6%. However, the labour market and employment conditions were very different in the small towns scattered throughout rural areas. The level of labour force participation in small towns was 58.4%, which was lower than that of regional centres and major urban centres because of an older age profile and lack of employment opportunities.

Map 1 illustrates the higher-than-average labour force participation in inland and country areas. High levels of labour force participation occurred in some remote areas of Australia, particularly in rural Queensland, South Australia and Western Australia. The highest



Map 1 Participation rate (%) in the labour force in each statistical local area, 2006

levels of participation (over 85%) occurred in the remote areas of Roxby Downs (central South Australia) and Weipa (Gulf of Carpentaria, Queensland); both these areas have a strong mining industry. The highest levels of participation in non-remote regions occurred in Bungil (near Roma, 83.2%), Lake Grace (83%) and Kent (82.2%), both near Esperance in Western Australia.

AREAS WITH LOW LEVELS OF PARTICIPATION IN THE LABOUR FORCE

Areas with the lowest labour force participation included some remote Indigenous communities. The non-remote areas with low levels of participation include Victor Harbour (south of Adelaide, 44.2%), Hervey Bay (north of Sunshine Coast, 44.4%), Great Lakes (around Forster-Tuncurry on the central coast of New South Wales, 45.1%), Nanango (near Kingaroy, 46.1%), and Queenscliff (near Geelong, 46.2%). Many of these areas are coastal and a substantial component of their population is retired and no longer in the labour force. Some rural areas and non-coastal areas with low levels of participation (less than 56.0%) include areas west of Bendigo and around Moe in the Latrobe district of Victoria, around Dubbo, Cootamundra and Coolamon in New South Wales, and around Kingaroy in Queensland.

REASONS FOR LABOUR FORCE PARTICIPATION PATTERNS IN COUNTRY AREAS

Labour force participation in rural areas differs from that of urban locations for several reasons. In many rural areas, the existing population is ageing without an infusion of younger people (those younger than 45 years) into the labour supply to help create opportunities for future higher levels of participation in the labour force. In addition, the population in most agriculture-dependent areas is decreasing while the age of the working population is increasing. The mature-age population (aged 45–64 years) in rural areas has a labour force participation level more than 10.0% higher than the Australian average (61.1% in rural areas, compared with 50.7% nationally). Most mature-age people in rural areas continue to work well into their 60s.

As can be seen from Map 1, areas already exceeding the Australian average labour force participation rate of 64.6% include most of Queensland, Western Australia, South Australia and western New South Wales. Areas with low levels of participation, where the labour supply could be increased by higher participation rates, include most of Victoria, inner western New South Wales, Tasmania, and areas around Perth, Western Australia.

In many small towns, the need for workers in the agriculture industry has decreased, as farms have become larger, more mechanised, and more reliant on specialised contract labour instead of local labour. These changes have flowed on to associated businesses and services in small towns. Employment levels have also decreased due to a lack of diversity in the type of work available in many small towns and communities. Participation levels for people living in small towns are lower than the national average for every age cohort. For example, 46.5% of the mature-age group (45–64 years) are in the labour force compared with the Australian average of 50.7%.

Finding suitable employment for people who live in small towns is often a problem, frequently because the younger people have moved out and the older age groups remain. However, there is an opportunity to increase the level of labour force participation in small towns across Australia. For example, people living in townships located close to regional centres or along the coast have greater opportunities to work in other industries, including tourism, hospitality and recreation-related industries than those living in more isolated parts of the country.

UNEMPLOYMENT

Unemployment is defined as those people in the working age-population (15–64 years) who are in the labour market (that is, want to participate actively in the labour force), but are not currently employed.

Box 2 Employment patterns in country areas

- In rural areas, levels of participation in the labour force are already very high with fewer opportunities for the rate to increase due to the older age profile of the population and the lack of people choosing to move to rural areas to live.
- The areas with the lowest level of participation include some remote Indigenous communities and non-remote areas that have high numbers of retired people or rural and farming communities. The retirement areas of Victor Harbour, south of Adelaide (44.2%) and Hervey Bay north of the Sunshine Coast (44.4%) have the lowest levels of participation.
- People living in many small towns have lower levels of labour force participation because of their older age structure and a lesser range of industries and occupations.

Box 2 summarises the general pattern of employment in country areas.

While unemployment can be thought of as a 'wasted resource' that could be used to help businesses and industry develop and grow, it is also an indicator of social disadvantage, because the severity and level of unemployment is correlated closely with poverty and social exclusion.

Table 1 shows that unemployment rates usually decrease with increasing age. This is because, as people mature, they gain experience and accumulate skills, education and training that help them find suitable employment. Table 1 also shows that unemployment rates in rural areas are lower than in urban centres, but unemployment rates in small towns are generally the highest in Australia.

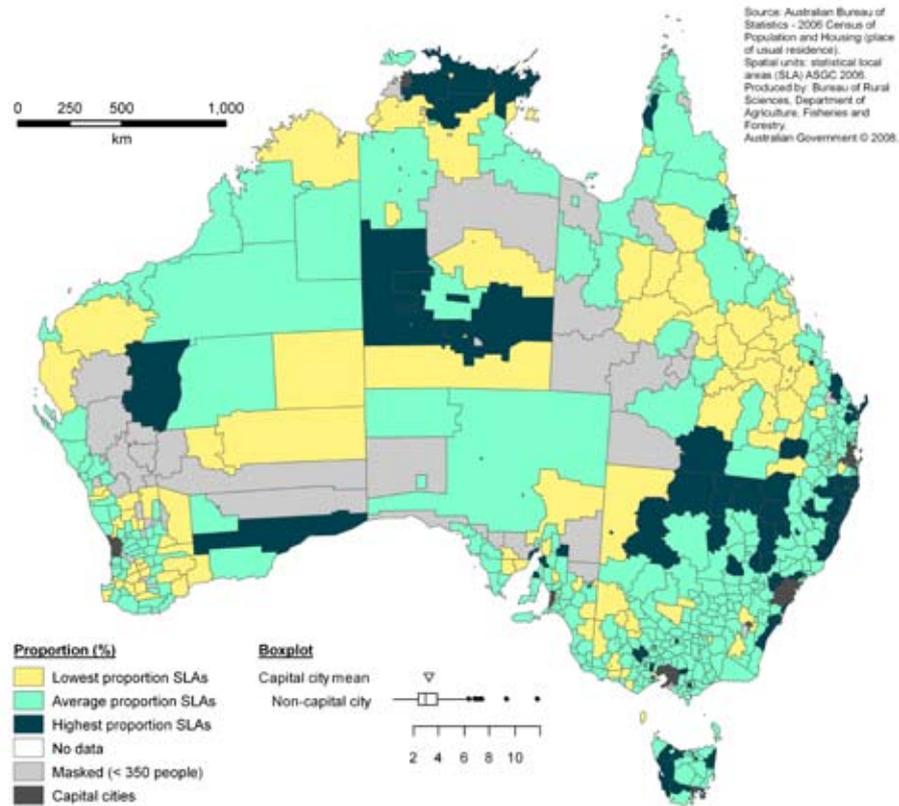
Finding and engaging in work in small towns is becoming increasingly difficult, and this is affecting levels of poverty and disadvantage for some families and communities.

Due to significant improvements in the labour market across Australia, in 2006 the national unemployment rate was 5.2%, down from 7.3% in 2001 and 9.2% in 1996. Levels of improvement in unemployment rates were similar in both urban centres and rural areas, and many industries are now under-supplied with, or mismatched for, skilled and unskilled workers.

Map 2 shows unemployment levels across Australia in 2006.

	Young people (%)	Prime working age (25–44 years) (%)	Older working age (45–64 years) (%)	Total Ages (%)
Australia	10.2	4.7	3.6	5.2
Major urban centres	10.0	4.4	3.5	5.1
Regional centres	11.2	5.6	4.2	6.1
Small towns	10.9	6.0	4.8	6.2
Rural areas	8.6	3.9	3.0	4.1

Table 1 Unemployment rates in urban and rural areas, 2006



Map 2 Unemployment rates in each statistical local area, 2006

The lowest levels of unemployment (less than 2.5%) were located throughout inland Queensland, remote Northern Territory, southern New South Wales, western Victoria and most parts of Western Australia. Approximately average rates of unemployment (2.5–3.5%) were concentrated along the east coast of New South Wales, most of Victoria and southern Queensland, northwestern New South Wales, Tasmania, around Bendigo in Victoria, and central Australia. The highest rates (over 7.0%) were in some remote regions and the non-remote areas of Clarence Valley (in northern New South Wales, 7.4%), Nambucca (north coast of New South Wales, 7.1%), and George Town (in northern Tasmania, 6.1%).

Box 3 summarises the pattern of unemployment in country Australia.

Box 3 Pattern of unemployment in country Australia

- Unemployment rates in rural areas are lower than in urban centres, but unemployment rates in small towns are generally the highest in Australia.
- High rates of unemployment occur in the northern New South Wales areas of Clarence Valley (7.4%) and Nambucca (7.1%), and George Town in northern Tasmania (6.1%).

Employment by industry across rural and regional Australia

Total employment in Australia over the decade from 1996 to 2006 increased by an average of 2.3% each year. Growth was highest in major urban centres, increasing by an average of 2.9% each year. Small towns experienced good employment growth (increasing by 2.5% each year), but this was from a much smaller employment base, and was partly due to the departure of younger people, which left the remaining population to fill employment gaps. Employment growth was much lower in rural areas (increasing by 0.3% each year) and regional centres (increasing by 1.7% each year).

The natural resource base differs across Australia; therefore, geographic regions rely on different industries for employment. Figure 1 shows employment in each industry in small towns and rural areas across Australia in 2006 and indicates much lower levels of employment in small towns with the dominance of agriculture in the rural areas.

These data are based on a place of usual residence basis, which means that many people could live in rural areas but work in a small town or regional centre. This accounts for the numbers of people working in retail, health, manufacturing, and government services.

There is no dominant industry in small towns. Instead, employment levels are similar across a range of local industries (retail, manufacturing activities, accommodation, business, etc), and small towns often contain a number of government services, such as health and education.

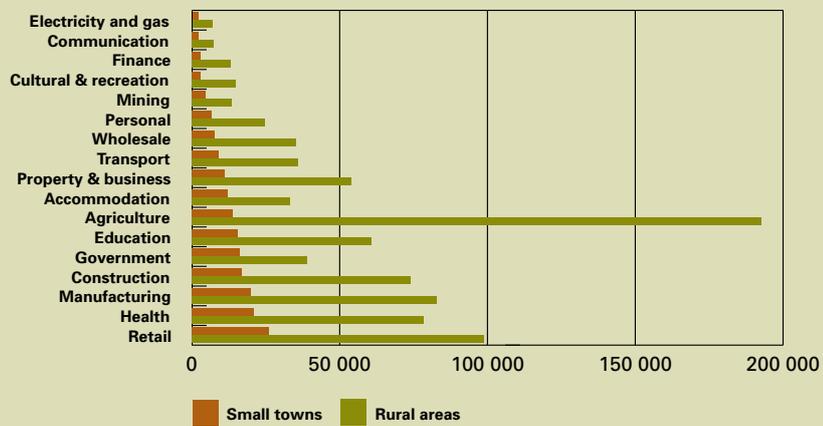


Figure 1 Number of people employed in industries, small towns and rural areas, 2006

Status of employment in the agriculture industry

In 2006, the agriculture industry made up 3.1% of total employment in Australia, down from 3.9% in 2001 and 4.4% in 1996. The total number of people employed in agriculture in Australia decreased from 321 400 people in 2001 to 284 300 people in 2006, with this pattern of decline consistent across the continent (the average annual percentage decrease was 2.3%). Most of the employment in the agriculture industry was located in rural areas (67.7%), with 18.4% in regional centres, and only 4.9% in small towns (see Figure 2).

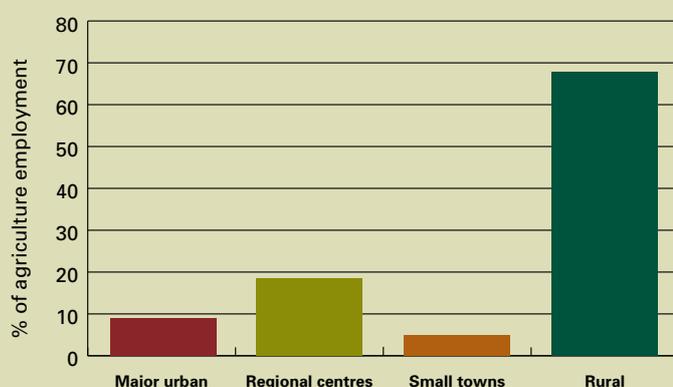
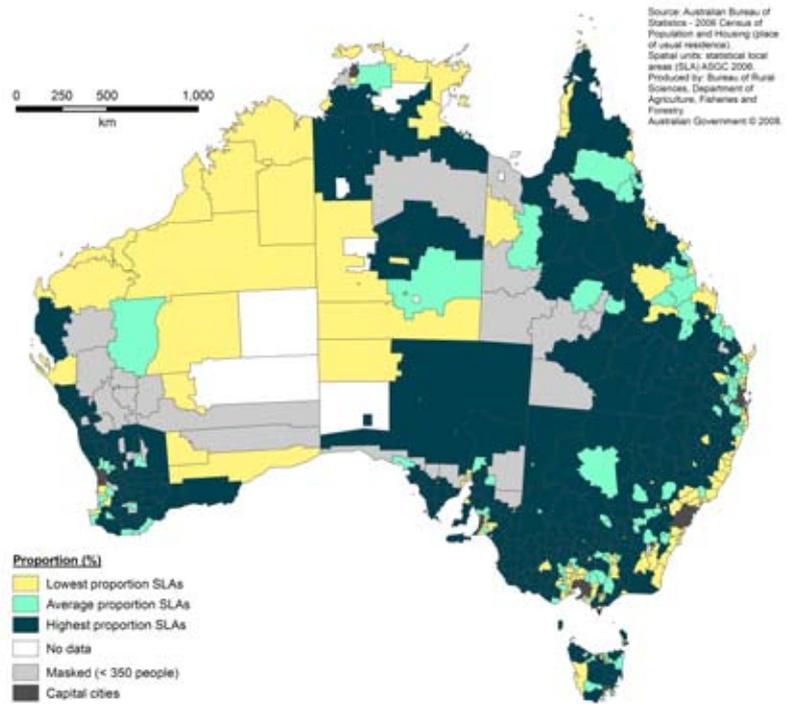


Figure 2 Employment in agriculture in urban and rural areas, 2006

Map 3, shows the proportion of total employment in the agriculture industry across Australia in 2006 and illustrates the high dependence on agriculture throughout most of inland Australia. The highest levels of employment in agriculture occurred in:

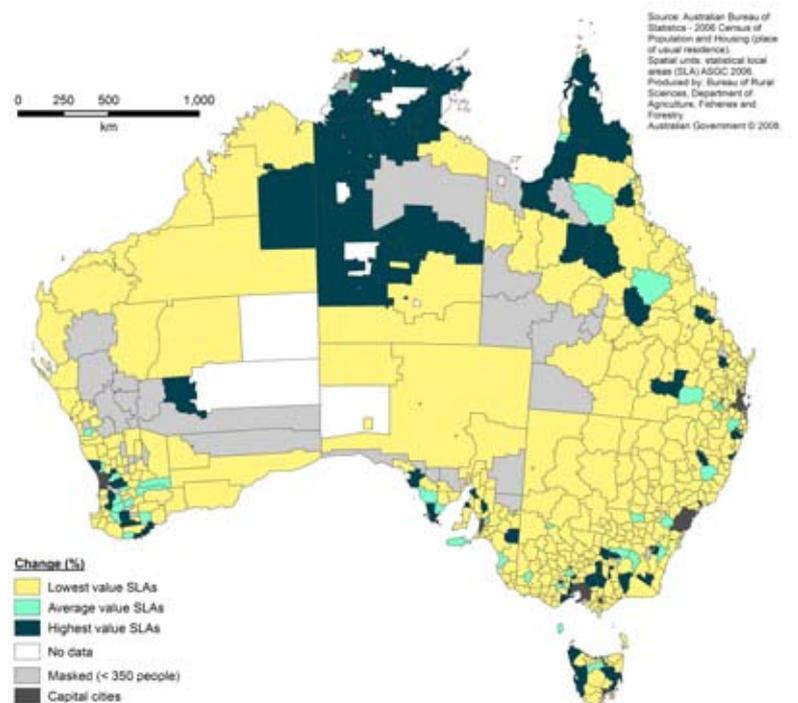
- The Mallee and Wimmera areas of Western Victoria
 - most of South Australia
 - The western areas and Riverina area of New South Wales
 - Queensland
 - The agricultural areas surrounding Perth in Western Australia
 - Parts of Tasmania
- Very high levels of dependence on agriculture occurred in:
- Conargo (in the southern Riverina of New South Wales, 66.7% of total employment)
 - West Arthur (near Perth in Western Australia, 63.0%)
 - Taroom (inland from Gladstone in Queensland, 54.7%)
 - Lake Grace (southwest Western Australia, 54.6%)
 - Waggamba (near St George in southern Queensland, 50.1%)
 - Carrathool (in the Riverina in New South Wales, 50.1%)
 - Loddon North (in central Victoria, 49.5%)
 - Mildura (on the Murray River, Victoria, 49.6%).



Map 3 Proportion of area employed in agriculture, fishing and forestry, 2006

Map 4, below, illustrates that few areas experienced employment growth in agriculture, with most areas throughout Australia experiencing a decline between 2001 and 2006. Generally, growth occurred in remote areas with small populations, while there were moderate decreases in employment on the north and south coasts of New South Wales, around Melbourne, and in parts of Queensland and Western Australia.

The proportion of people living in rural areas employed in the agriculture industry fell substantially from 26.4% of total employment in 1996, to 21.3% in 2006, possibly because of the drought. However, this decrease could also have been due to increased agricultural productivity as farms introduce new technology and methods, including larger scale operations that require fewer employees.



Map 4 Change in employment in agriculture, forestry and fisheries in Australia, 2001–06

Figure 3 shows the percentage change in the number of people employed in agriculture for all states and territories from 2001 to 2006. Employment in agriculture decreased in all states and territories with only Tasmania and the Northern Territory experiencing decreases of less than 10.0%.

Box 4, below, summarises the pattern of employment by industry type across country Australia.



Figure 3 Change in number of people employed in agriculture, 2001–06, (%)

People employed in the occupation of farming

This section analyses the people aged 15 years and over who reported in the Census that they worked as a farmer or farm manager in aquaculture, crop, livestock and mixed crop and livestock farmers. The occupation classification differs from the industry classification, which could include occupations such as labourers, or construction and retail workers working on-farm or off-farm.

In 2006, 176 900 people reported they were farmers or farm managers. The highest concentration was along the east coast, throughout Victoria, and in southwest Western Australia. The areas that had the largest number of farmers were located in Moira north of Echuca in New South Wales (1474 farmers), Corangamite west of Geelong (1249 farmers), Mildura on the Murray River (1193 farmers), Gannawarra near Swan Hill on the Murray River (1138 farmers) and Griffith in western New South Wales (1061 farmers).

Box 4 Employment by industry type across country Australia

- Total employment growth was higher in urban and regional centres and much lower in small towns and rural areas.
- Employment in rural areas is dominated by the agriculture industry, in contrast to small towns, which have employment in a range of local industries.
- Employment in agriculture is decreasing across Australia due to productivity and technological advances, reducing the demand for labour, but also due to the impact of the drought.

AGE PROFILE OF PEOPLE EMPLOYED IN FARMING

As illustrated in Figure 4, farmers have a high age profile, with 55.0% aged over 50 years, in contrast to all other occupations (only 25.1% aged over 50 years).

QUALIFICATIONS OF PEOPLE EMPLOYED IN FARMING

Farmers have lower levels of post-secondary school qualifications (37.5%) compared with all other occupations (58.4%). Reasons for this could include:

- farmers' remoteness from education institutions
- the older age profile of farmers
- the past nature of farming, which relied on experimental learning and knowledge being gained and shared between generations.

Regarding the latter point, there is now a greater need for farmers to adopt new technologies and innovations, and consequently to obtain education and training qualifications. Young farmers now have similar levels of post-secondary school qualifications to people in other occupations. However, older farmers (who have been farming for many years) have much lower levels of education (see Figure 5).

Map 5, below, shows that remote areas and most of central coastal Queensland have low proportions of farmers who have attained post-secondary school qualifications. High proportions of farmers with qualifications are located mostly throughout eastern New South Wales, Tasmania, and in areas close to Melbourne. People in these locations are closer to education institutions.

Age profile, farmers and all other occupations, 2006

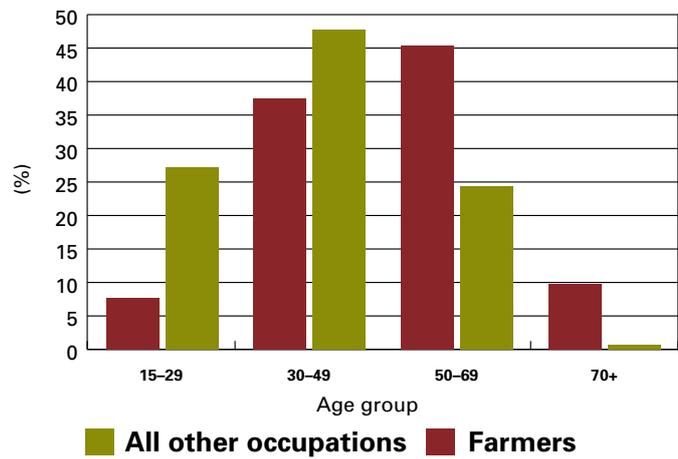


Figure 4 Age profile of farmers versus other occupations, 2006

Occupations with qualifications, farmers and all other occupations, 2006

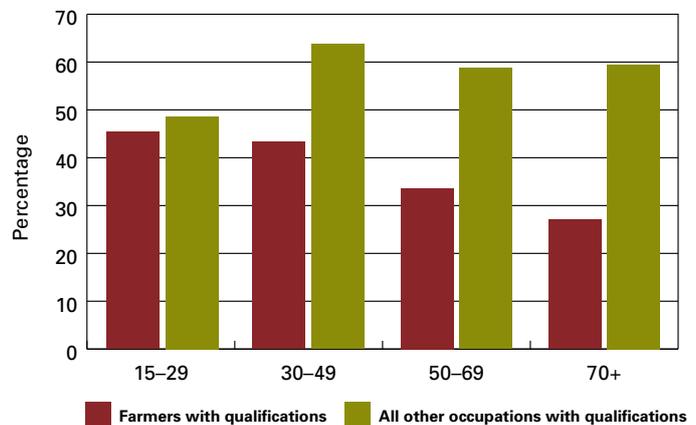
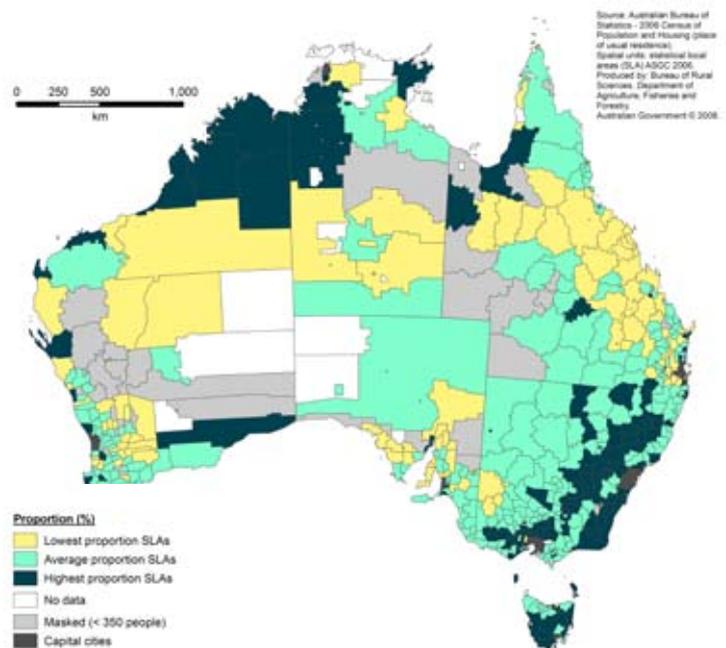


Figure 5 Qualifications of farmers versus other occupations, 2006



Map 5 Proportion of farmers with post-secondary school qualifications in each statistical local area, 2006

The advent of the internet and access to information and services, including education and training, will allow people in remote areas to improve their qualifications without the need to travel long distances to attend education institutions in regional centres and major urban centres. However, people living in rural areas with access to the internet lagged in education attainment compared with their urban counterparts. In 2006, 42.3% of farmers who had access to the internet had attained post-secondary school qualifications (higher than for those that did not have access to the internet), but this was considerably lower than that for all other occupations (61.1%).

As Figure 6 shows, differences in education attainment for farmers and other occupations vary across age groups. Younger farmers aged 15 to 29 years, who represent the future agriculture industry, have similar levels of attainment as those in other occupations. While the biggest gap exists in the older age groups, the differences in attainment levels between farmers and other occupations is expected to dissipate over time.

People employed in the mining industry

In contrast to the decrease of employment in agriculture, the number of people employed in the mining industry across Australia grew dramatically from 72 700 people in 2001 to 105 800 people in 2006. Most of these increases occurred in major urban centres and regional centres (see Figure 7). Smaller increases in the mining industry occurred in the rural areas (3800 people), but this was important for country people by sometimes providing an alternative source of income for those affected by decreasing employment in agriculture.

The boom in mining in some rural areas has tended to draw skilled people from the agriculture industry because mining has higher wages for skilled and qualified people and more generous working conditions. This has made it difficult for some agricultural areas to attract workers to the agriculture industry — an issue that will become more critical as regions move into a drought-recovery period. A continued growth in mining is also likely to exacerbate the already difficult task of retaining agricultural workers and may limit further entrants to the agriculture industry.

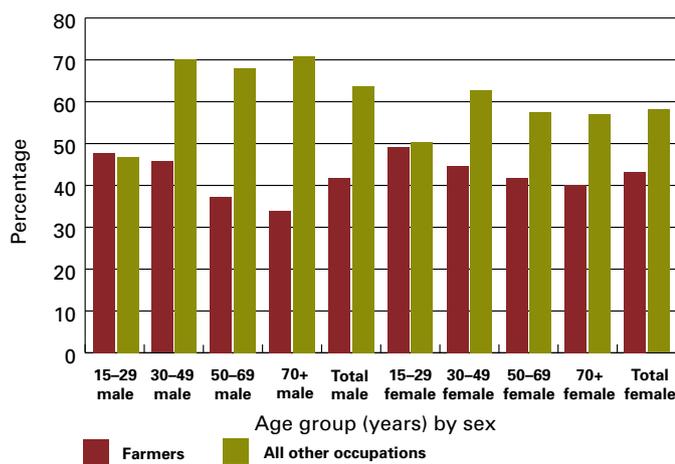


Figure 6 Proportion of farmers who have post-secondary school qualifications and access to the internet versus people in other occupations (regional and rural areas), 2006

Diversification of industries

Increasing industry diversification in an area increases a community's social and employment resilience, helping it to overcome difficulties experienced in any one of the industries operating in that area. Table 2 shows the change in employment across urban centres and rural areas from 2001 to 2006. The data are based on a place of usual residence basis, which means that many people could live in rural areas but work in a small town or regional centre. This explains why there are numbers of people working in retail, health, manufacturing, and government-related services in rural areas.

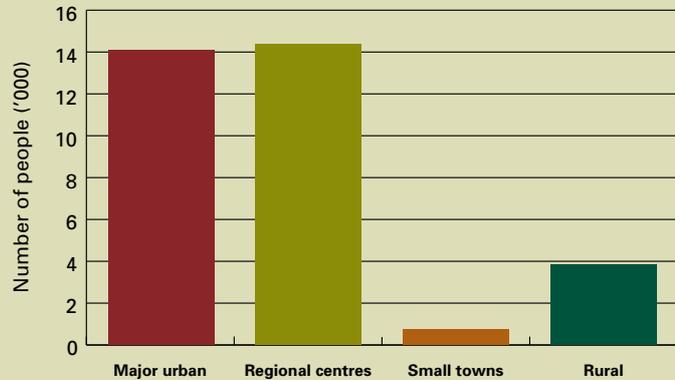


Figure 7 Change in employment in mining in urban and rural areas, 2001–06

	Major urban	Regional centres	Small towns	Rural	Total
Agriculture	-4 222	-6 655	-1 849	-24 384	-37 110
Mining	14 103	14 369	744	3 823	33 039
Manufacturing	-18 377	11 171	750	-483	-6 939
Electricity and gas	7 662	1 825	375	923	10 785
Construction	94 996	37 175	3 177	15 197	150 545
Wholesale	11 194	-6 966	-664	-3 767	-203
Retail	71 328	18 050	1 525	3 585	94 488
Accommodation	20 694	3 577	1 041	673	25 985
Transport	38 938	5 940	882	4 040	49 800
Communication	-12 624	-2 195	-215	-753	-15 787
Finance	30 775	3 288	413	975	35 451
Property and business	47 192	10 601	1 371	1 505	60 669
Government	89 782	27 461	2 009	7 449	126 701
Education	65 865	15 195	1 237	2 778	85 075
Health	125 771	33 713	4 178	10 460	174 122
Cultural and recreation	1 385	-1 013	74	-828	-382
Personal	19 128	4 138	316	1 381	24 963
TOTAL	638 822	176 775	16 688	24 844	857 129

Table 2 Change in the number of people employed, industries, urban and rural, 2001–06

Table 2 shows the relatively low growth that has occurred in total employment in rural areas, compared with the higher growth in regional centres and major urban centres. The number of people employed in agriculture in rural areas decreased by 24 400 people; there were also decreases in other industries in small towns. The largest increase of employment in rural areas was in construction due to builders and other tradespersons living in rural areas but often working in small towns and regional centres. Similarly, in the health sector, many health professionals and other employees worked in small towns but lived in rural areas. In the mining sector, people living in some rural areas were attracted to nearby employment in mining operations.

For small towns, the largest decrease was for people who lived in the small towns but worked in the surrounding agriculture industry. Employment in this industry decreased because of the drought and productivity improvements (therefore requiring fewer employees). The largest increase in employment in small towns was due to the increase in government services for health (increasing by 4200 people due to the ageing population) and other government service delivery (increasing by 2000 people), and education (increasing by 1200 people). Construction employment in small towns also increased by 3200 people, and was partly due to increasing construction activity, which often occurred in regional centres while the construction labour force travelled from nearby towns.

CONCENTRATION OF EMPLOYMENT

Concentration of employment in an area's top three industries provides an indication of industry diversity (or lack of) and can signal a general resilience to, or capacity to manage, changing conditions (such as drought or industry restructuring). Rural areas have concentrated levels of employment in a smaller number of industries compared with urban centres. Industry concentration levels in rural areas in 2006 are higher than they were in major urban centres a decade ago.

Table 3 summarises the concentration of employment in the three major industries in 1996 and 2006, for urban and rural areas.

Table 3 illustrates the importance of retail and manufacturing employment throughout all areas of Australia.

During the decade 1996 to 2006, there was little change in the concentration of employment. In the major urban areas, concentration in the top three industries has declined due to more diversification of employment. In particular, employment in the manufacturing industry has decreased. Concentration of employment in regional centres and small towns has remained relatively constant, with employment in health services increasing between 1996 and 2006, most probably in response to the ageing population. In rural areas, the proportion of people employed in the dominant industry (agriculture) decreased substantially from 26.4% in 1996 to 21.3% in 2006.

Region	1996	2006
Major urban centres (including cities)	Retail (14%) Manufacturing (14%) Property and business (12.1%)	Retail (14.2%) Property and business (12.5%) Manufacturing (11.3%)
Regional centres	Retail (16.2%) Manufacturing (12.3%) Health (10.3%)	Retail (16.3%) Health (11.3%) Manufacturing (10.8%)
Small towns	Retail (13.3%) Manufacturing (11.7%) Health (9.9%)	Retail (13.2%) Health (10.6%) Manufacturing (10.1%)
Rural areas	Agriculture, forestry and fishing (26.4%) Retail (10.5%) Manufacturing (9.8%)	Agriculture, forestry and fishing (21.3%) Retail (11%) Manufacturing (9.2%)

Table 3 Largest three industries in urban and rural areas, 1996 and 2006

Note: Data are based on place of enumeration basis

GROWTH IN DIFFERENT EMPLOYMENT INDUSTRIES

In rural areas, the main employment sectors experiencing growth during the decade 1996 to 2006 were mining (discussed earlier), construction (which experienced strong employment growth from 58 900 people employed in 2001, to 74 100 people in 2006), government administration (increased employment from 31 400 to 38 900), and health (increased from 68 000 to 78 500 people). Government administration and health depend on government funding and employment location policies and programs.

Figure 8, right, shows that there were low employment growth and little industry diversification in rural areas from 2001 to 2006.

Figure 8 shows that all the major non-agricultural industries in rural areas increased at a much lower rate than the national average. Employment in manufacturing industries decreased in rural areas (despite this industry being a considerable source of employment) from 83 200 people employed in 2001 to 82 700 in 2006. Similarly, employment in the culture and recreation industry (which links to national growth sectors of tourism and leisure) decreased from 15 700 people employed in 2001, to 14 900 people in 2006. Box 5 summarises the pattern of employment by industry type in country areas.

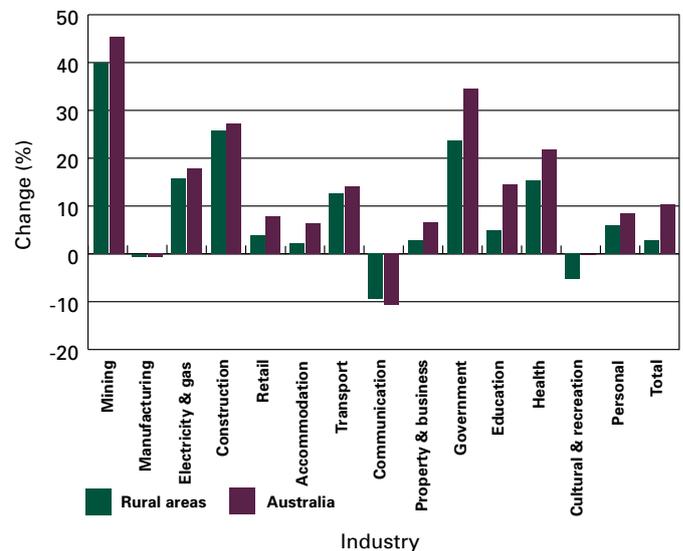


Figure 8 Change in employment in rural areas versus total Australia, 2001–06

Conclusions

Future employment levels in the industries located in rural and regional Australia will be affected by a wide range of global, national and local issues. Any changes will affect the 800 non-capital city areas across Australia. Approximately 9.0% of Australia's population lives in rural areas and up to one-third of the population lives in regional centres and small towns (with population clusters of up to 100 000 people). People living in these areas do not have the range of employment and career options that are available in the larger urban centres and cities; levels of job security and future employment prospects are not always the same; and there are often less generous employment conditions than in urban areas. These differences affect the work life and social circumstances of individuals and families, and can affect the healthy functioning of communities.

Rural areas are beginning to experience the challenges of an ageing population and labour force to a much greater extent than urban areas. Many rural areas have declining populations as young people and families leave for larger regional centres and cities for better education, work and lifestyle opportunities. This affects the volume of labour and the skills available for existing businesses and industries in rural areas, and decreases opportunities for future change. It also places a disproportionate burden on the remaining older-age population in rural areas.

The rate of efficiency and productivity improvements will continue to be high as the agriculture industry restructures to accommodate larger operations and adopts improved methods of production and new technologies. This will increase the pressures on future employment levels, and demand higher skill requirements for the industry. These challenges are already being experienced through difficulties in retaining skilled workers, recognition of the need to re-skill and train the labour force, and difficulties in securing an adequate supply of both skilled and unskilled seasonal labour (particularly in geographically isolated parts of Australia).

The agriculture industry will also need to respond to major drivers such as climate change, availability of water, and increased fuel, transport and production costs. Increased levels of education and training and new methods and technologies will be required to

Box 5 Employment by industry type in country areas

- Rural areas have a concentration of employment in a smaller number of industries compared with major urban centres.
- Concentration of employment in regional centres and small towns has remained relatively constant over the decade to 2006, although employment in health services has increased in response to the ageing population.

respond and manage these issues. Industry diversification and regional development is important for the people living and working in rural and regional areas, in terms of their personal development and quality of life, and to ensure that agriculture (and other industries) have an adequate supply of suitably skilled workers.

This study demonstrates that there has been little diversification of employment in rural and regional areas to different industries, resulting in less resilience in many areas to changes in industries, particularly employment levels in agriculture.

REFERENCES

ABS (Australian Bureau of Statistics), 2006, 2001 and 1996, Census of population and housing, ABS, Canberra.



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