



Australian Government
Department of Education, Employment
and Workplace Relations



Employment Outlook for Agriculture, Forestry and Fishing



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Introduction

The Agriculture, Forestry and Fishing industry has experienced an employment downturn in recent years, mainly due to the effects of the drought. In addition to environmental issues, a plateau in private investment and a stronger Australian dollar have affected the industry's growth and competitiveness.

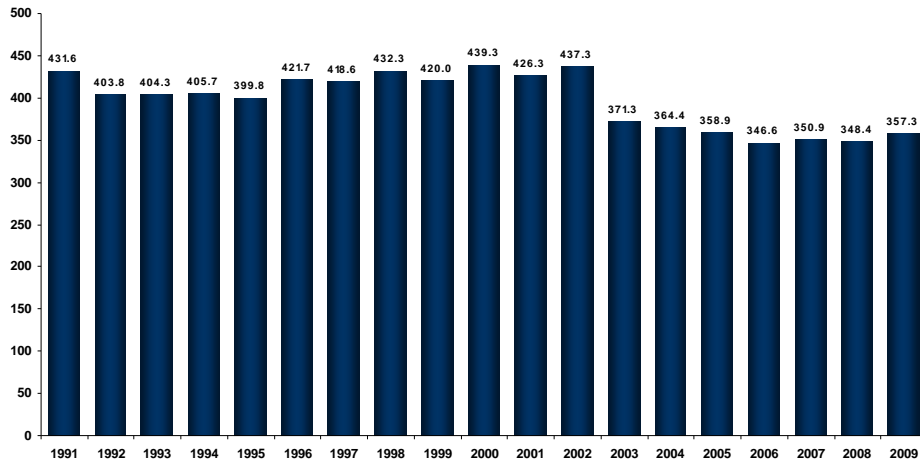
In February 2009, the Agriculture, Forestry and Fishing Industry employed around 357 300 people, or 3.3 per cent of the total workforce. Agriculture, Forestry and Fishing is roughly divided into fifteen sectors: Nursery and Floriculture Production, Mushroom and Vegetable Growing, Fruit and Tree Nut Growing, Sheep, Beef and Grain Farming, Other Crop Growing, Dairy Cattle Farming, Poultry Farming, Deer Farming, Other Livestock Farming, Aquaculture, Forestry and Logging, Fishing, Hunting and Trapping, Forestry Support Services, Agriculture and Fishing Services.

The discussion below focuses on employment characteristics, trends and prospects in the Agriculture, Forestry and Fishing industry, and highlights specific growth sectors. The analysis of characteristics includes workforce ageing, employment share by gender, educational profile, weekly earnings, average hours worked, regional and occupational employment.

Employment Growth

In the 10 years to February 2009, employment in Agriculture, Forestry and Fishing fell by 62 700 (or 14.9 per cent) to 357 300 (see Figure 1). This equates to a decline, on average, of 1.6 per cent per annum, the largest decline of the 19 broad Australian and New Zealand Standard Industrial Classification (ANZSIC) industries.

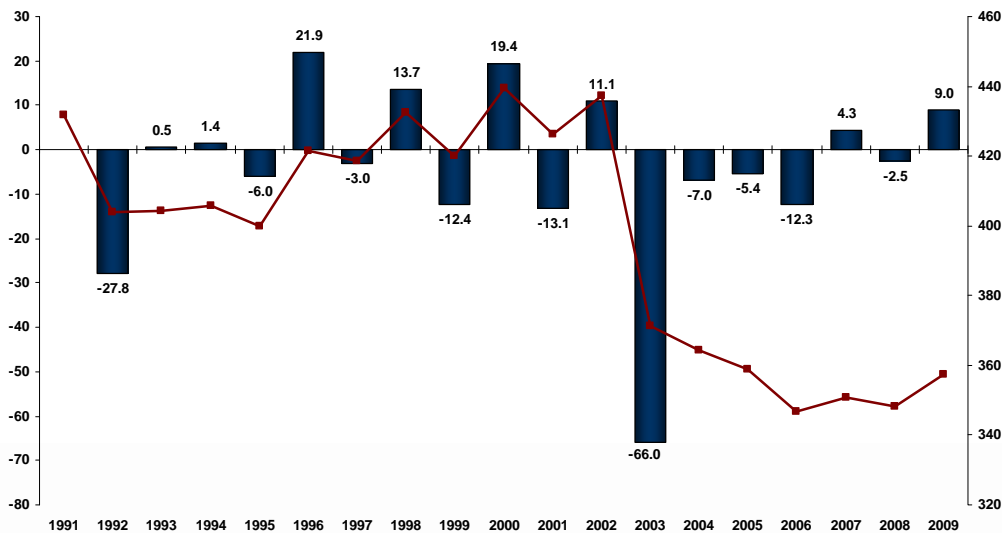
Figure 1: Employment Level ('000) - February 1991 to February 2009



Source: ABS Labour Force Survey (DEEWR trend data)

Looking back at long-term trends, employment in Agriculture, Forestry and Fishing fell by 66 000 in 2003, the largest annual fall in the past 18 years (see Figure 2). Employment levels began recovering during 2007 (up by 4300). Although there has been upward movement in employment, there has been no significant employment recovery following this sharp decline.

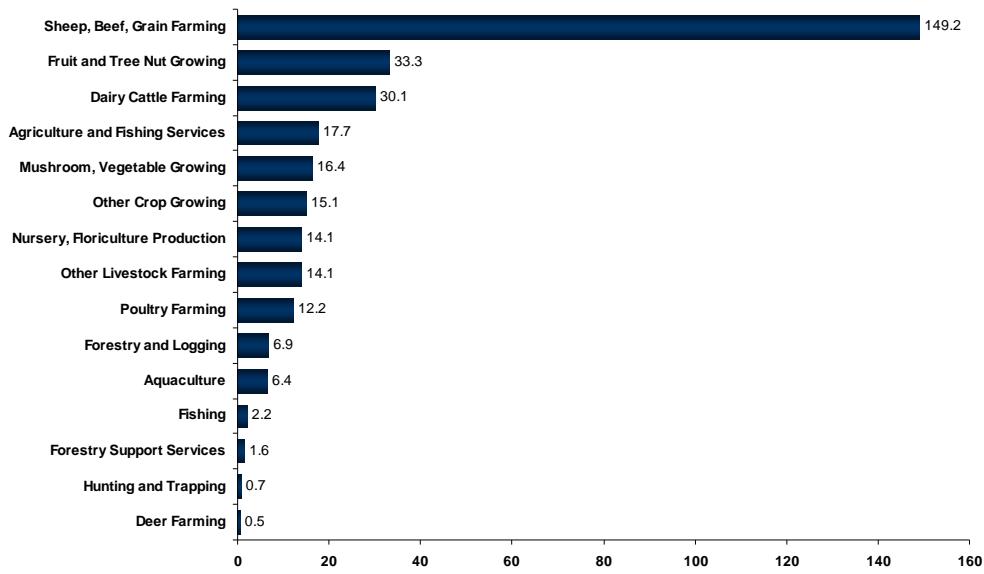
Figure 2: Employment Level (line RHS) and Annual Change ('000) - year to February (cols LHS)



Source: ABS Labour Force Survey (DEEWR trend data)

When employment in the Agriculture, Forestry and Fishing industry is broken down into specific sectors, the main contributors to employment can be identified. The Sheep, Beef Cattle and Grain Farming sector dominates employment in the Agriculture industry, accounting for 149 200 people (or 46.5 per cent) of industry employment as at February 2009 (see Figure 3). Fruit and Tree Nut Growing is the second largest source of employment, employing 33 300 workers (or 10.4 per cent). Dairy Cattle Farming (30 100 or 9.4 per cent), Agriculture and Fishing Services (17 700 or 5.5 per cent), Mushroom and Vegetable Growing (16 400 or 5.1 per cent) and Other Crop Growing (15 100 or 4.7 per cent) employ only a small percentage of total employment in the industry.

Figure 3: Agriculture, Forestry and Fishing Sectors - Employment Levels ('000) - February 2009



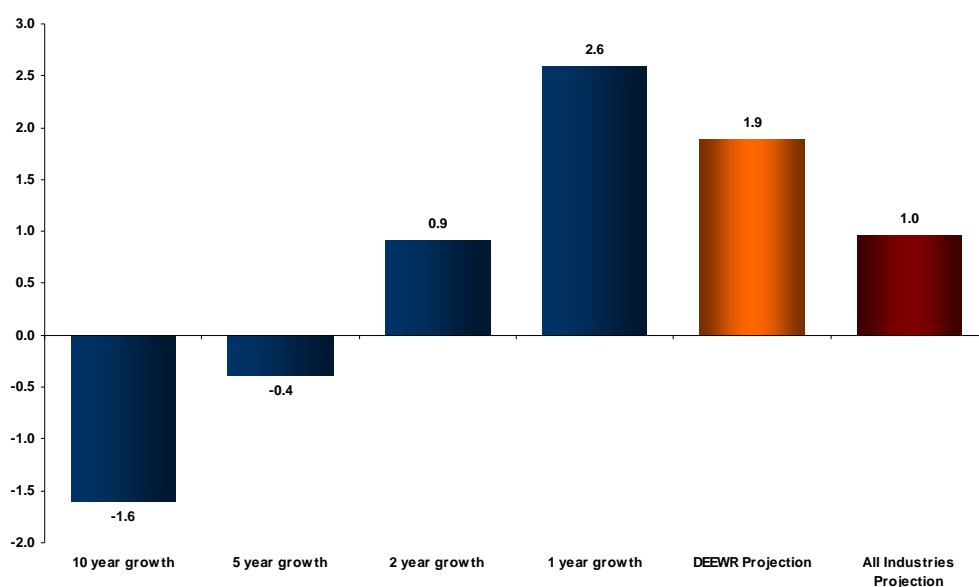
Source: ABS Labour Force Survey (DEEWR trend data)

Employment Prospects

The Department of Education, Employment and Workplace Relations (DEEWR) prepares annual updates of employment projections for industries for the next five years. These are based in part on the Monash model developed by the Centre of Policy Studies at Monash University, but also take into account recent employment trends and prospective industry developments. It should be noted that a certain degree of uncertainty is attached to these employment projections, especially for sectors within the broader Agriculture, Forestry and Fishing industry.

An improvement in employment within Agriculture, Forestry and Fishing is expected (see Figure 4), however, future gains are likely to be limited. In the five years to 2013-2014, employment in the Agriculture, Fishing and Forestry industry is expected to grow at a rate of 1.9 per cent per annum, which equates to around 35 100 new jobs. Employment across all industries is forecast to grow at an annual average rate of 1.0 per cent over the same period.

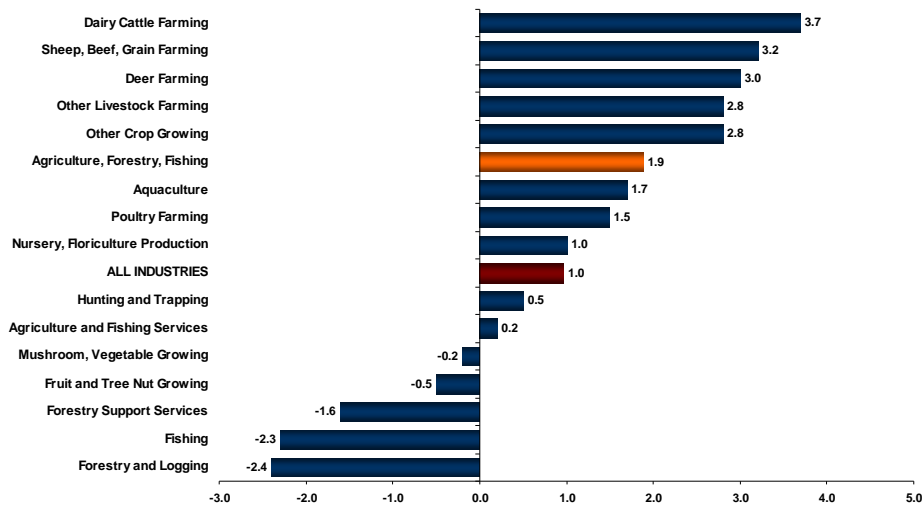
Figure 4: Recent and Projected Employment Growth (% pa) - February 2009 (past) and 5 years to 2013-2014 (projected)



Source: ABS Labour Force Survey (DEEWR trend data)

Ten of the fifteen sectors Agriculture, Forestry and Fishing sectors (see Figure 5) are projected to experience positive employment growth over the five years to 2013-2014. Dairy Cattle Farming is expected to have the strongest employment growth within the industry (up by 3.7 per cent per annum), followed by Sheep, Beef and Grain Farming (3.2 per cent per annum) and Deer Farming (3.0 per cent per annum). The largest decline is projected for Forestry and Logging (2.4 per cent per annum).

Figure 5: Projected Employment Growth (% pa) to 2013-2014



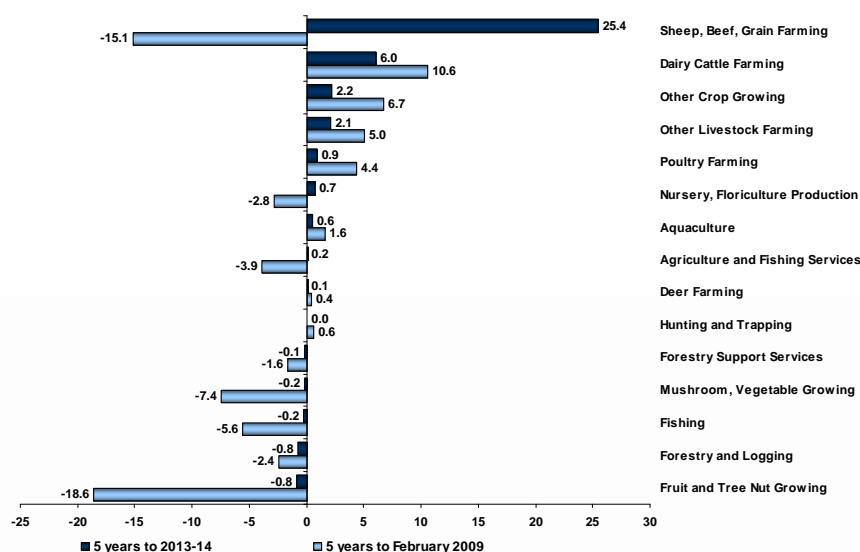
Source: DEEWR projections

In the five years to February 2009, Dairy Cattle Farming experienced the largest employment growth (up by 10 600), followed by Other Crop Growing (6700) and Other Livestock Farming (5000, see Figure 6).

The largest employment decline occurred in Fruit and Tree Nut Growing (down by 18 600), followed by Sheep, Beef and Grain Farming (15 100). These large declines may be attributed to the effects of the drought. For some farmers, a short term solution to the lack of rain has been to sell stock and leave the industry, or not replace workers who leave.

Looking ahead, in the five years to 2013-14, the largest employment growth is expected to occur in Sheep, Beef and Grain Farming (25 400), followed by Dairy Cattle Farming (6000) and Other Crop Growing (2200).

Figure 6: Agriculture, Forestry, and Fishing Sectors - Recent and Future Employment Growth ('000) 5 years to February 2009 (past) and to 2013-14 (projected)

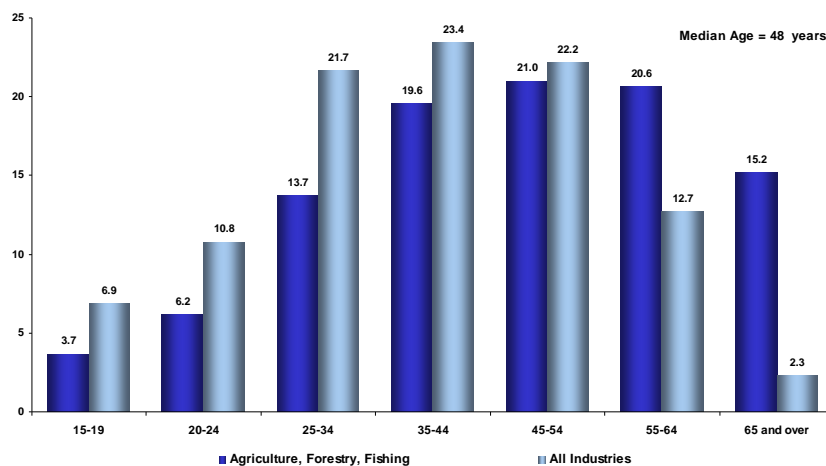


Source: ABS Labour Force Survey (DEEWR trend data)

Workforce Ageing

The Australian workforce has become skewed to older age groups as a result of an ageing population, and this trend is evident in Agriculture, Forestry and Fishing. The Agriculture, Forestry and Fishing industry has a high share of mature age workers aged 55 years and over (35.8 per cent) and, in comparison with all industries, has a relatively small share of workers aged less than 35 years (23.6 per cent compared with 39.4 per cent for all industries, see Figure 7).

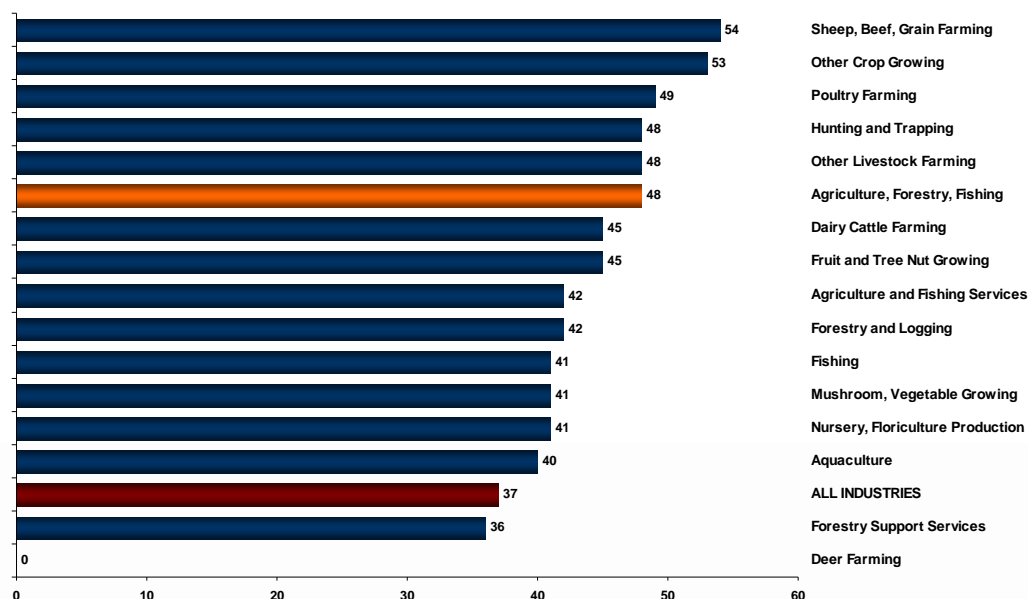
Figure 7: Employed by Age compared with All Industries – (% share of employment) - 2008



Source: ABS Labour Force Survey

In 2008, Agriculture, Forestry and Fishing had the highest median age of all 19 broad ANZSIC industries (48 years compared with 37 years for all industries). The Sheep, Beef and Grain Farming sector recorded the highest median age (54 years) within the industry (see Figure 8). Forestry Support Services is the only sector with a median age below the average for all industries (36 years).

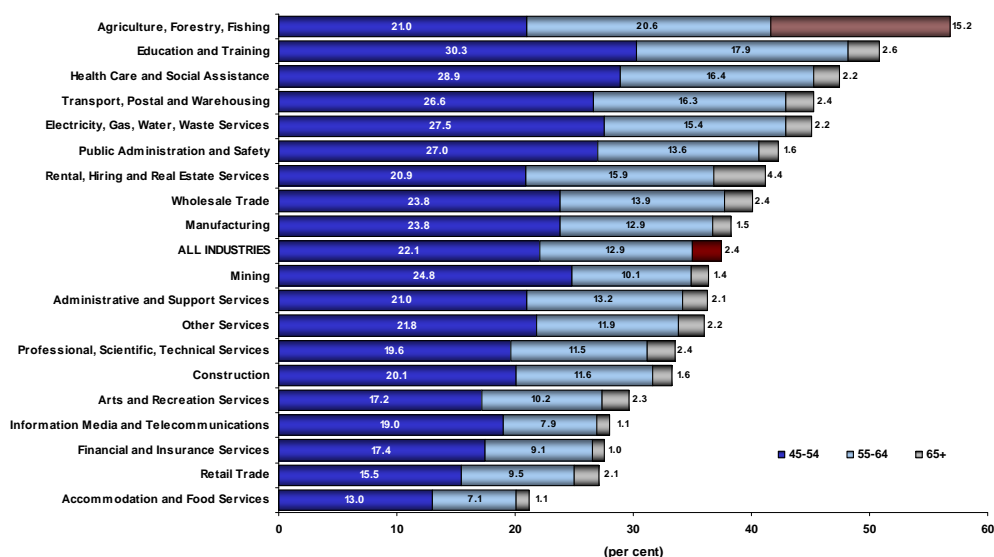
Figure 8: Agriculture, Forestry and Fishing Sectors - Median Age in years - 2008



Source: ABS Labour Force Survey

Of the 19 broad industry groups, Agriculture, Forestry and Fishing has the highest proportion of workers aged 45 years and over (56.8 per cent or around 202 900 workers), compared with the average for all industries (37.4 per cent). The industry also has the highest share of workers aged 65 years and over (15.2 per cent or around 54 300 workers) compared with just 2.4 per cent for all industries (see Figure 9). The share of younger workers, by contrast, is low for youth aged 15 to 24 years (industry share of 9.9 per cent compared with 17.6 per cent share for all industries) and even more so for workers aged 25 to 34 years (industry share of 13.7 per cent compared with 21.9 per cent share for all industries).

Figure 9: Mature Age Workers (45+ years) % share of employment – 2008

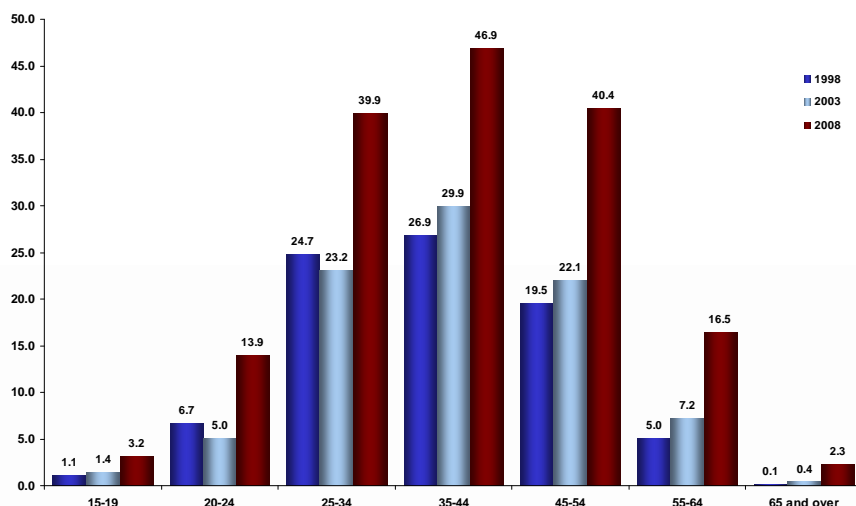


Source: ABS Labour Force Survey

Figure 10 shows employment by age group for three calendar years: 1998, 2003 and 2008. This provides a guide to changes in the employment mix by age group in the industry. As the Australian workforce experiences an increase in the median age of the population, it is important that there is a supply of prime age and mature age workers entering the workforce.

In the past five years, reflecting the employment recovery from the drought, employment in the industry increased for all age groups. The largest increase in employment over this period was for those aged 45 to 54 years (up by 20 900).

Figure 10: Employment by Age ('000) - 1998, 2003 and 2008

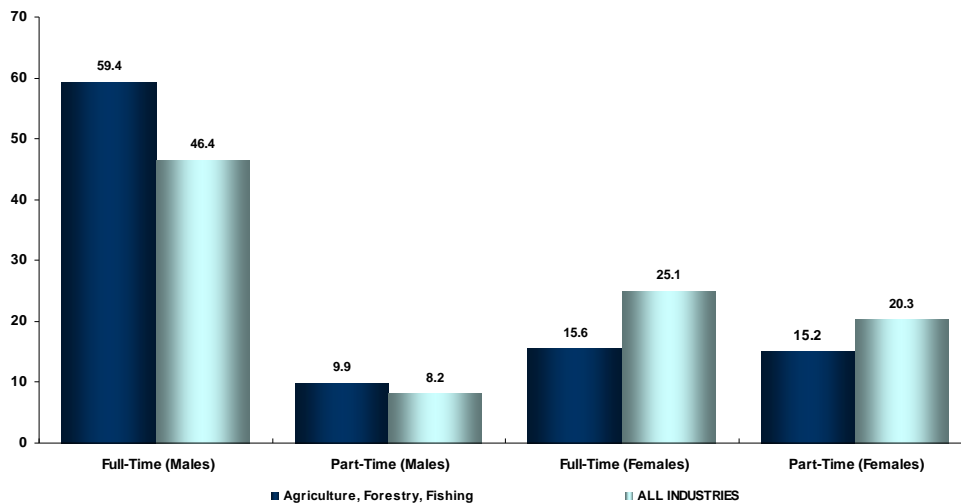


Source: ABS Labour Force Survey

Employment by Gender and Full-time/Part-time

More than half (59.4 per cent) of all employees in Agriculture, Forestry and Fishing are male workers employed full-time (see Figure 11). In the year to February 2009, the male share of employment in the industry was 69.3 per cent, compared with the average for all industries of 54.6 per cent. Further, 25.1 per cent of workers in the industry were employed on a part-time basis, compared with the average of 28.5 per cent for all industries.

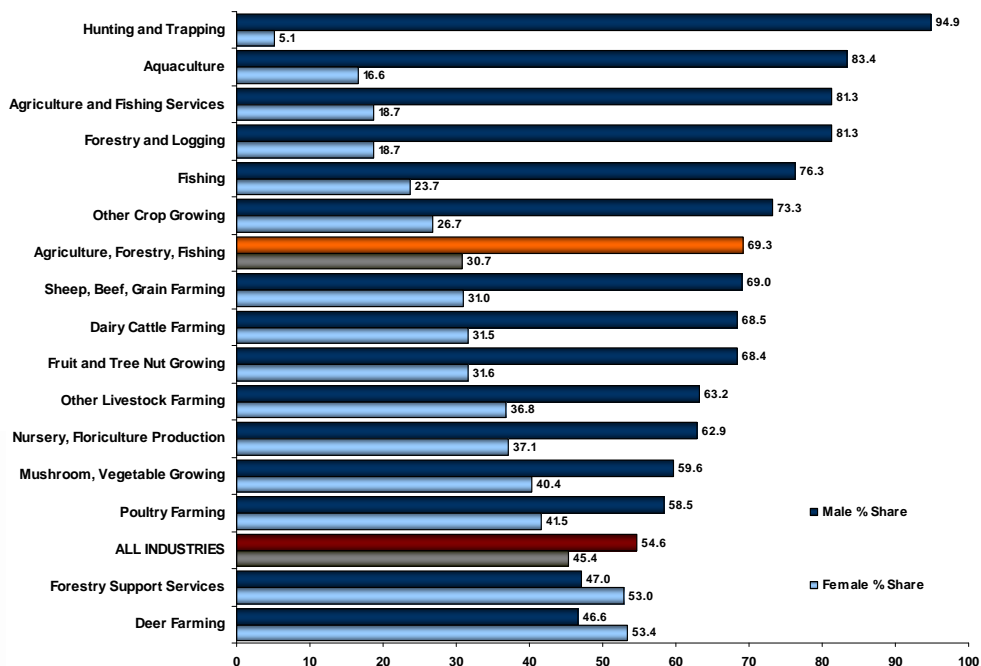
Figure 11: Employment by Gender and Full-time/Part-time – year to February 2009 (% share)



Source: ABS Labour Force Survey

Male employment has the majority share in 13 of the 15 sectors within Agriculture, Forestry and Fishing (see Figure 12). Female employees are most apparent in Deer Farming (53.4 per cent) and Forestry Support Services (53.0 per cent). The dominant male employment in the industry may be attributed, in part, to the demanding hours and physical work, as well as the rural nature of the industry.

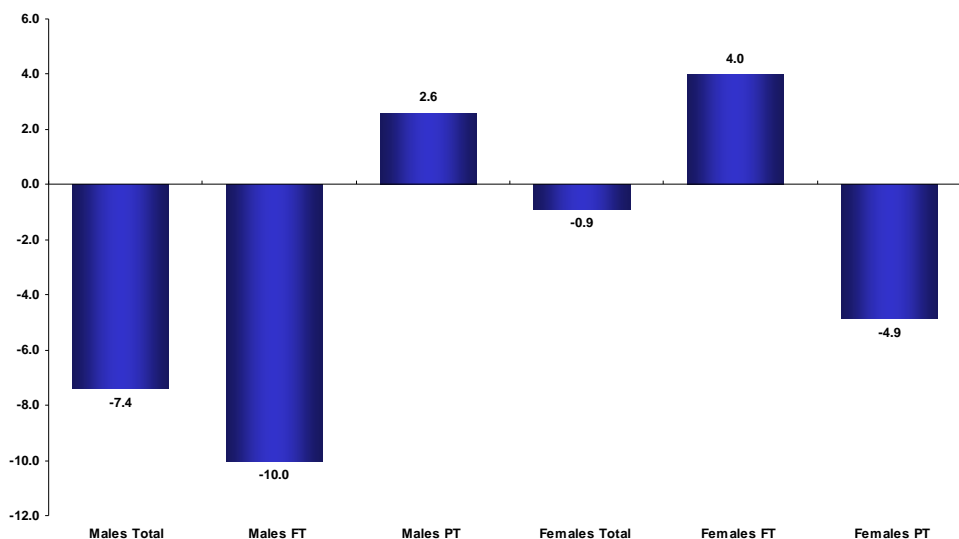
Figure 12: Agriculture Forestry and Fishing Industry Sectors - Employment by Gender year to February 2009 (% share)



Source: ABS Labour Force Survey

In the five years to February 2009, male and female employment in Agriculture, Forestry and Fishing has fallen (down by 7400 and 900 respectively). However, full-time employment for females rose (up by 4000) and part-time employment for males increased slightly (up by 2600) over the same period.

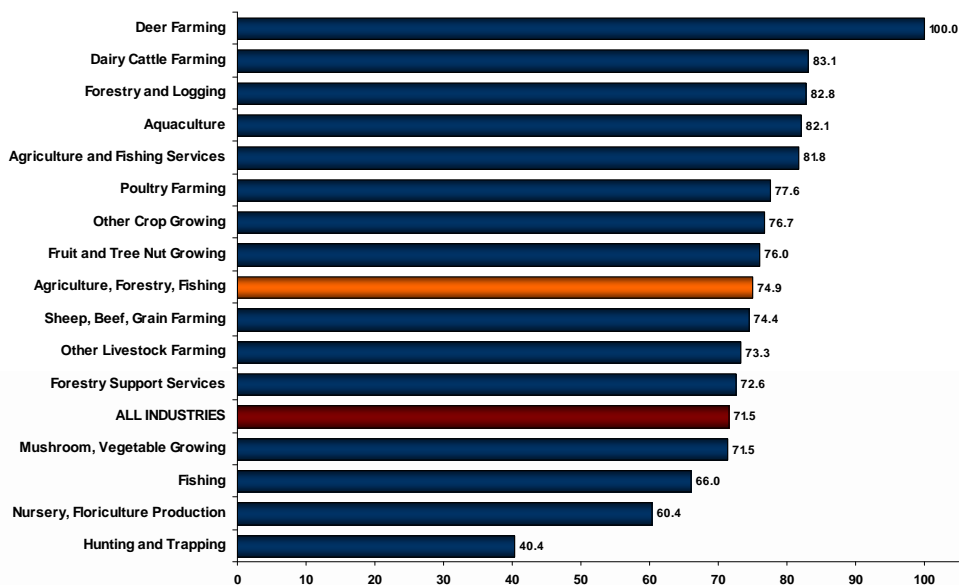
Figure 13: Employment Growth by Gender (5 years) Full-Time / Part-Time ('000) year to February 2009



Source: ABS Labour Force Survey

The majority of the Agriculture, Forestry and Fishing industry sectors have a higher full-time employment share than all industries (71.5 per cent, see Figure 14). The highest full-time employment share can be found in Deer Farming (100.0 per cent), followed by Dairy Cattle Farming (83.1 per cent) and Forestry and Logging (82.8 per cent). The lowest share of full-time employment was apparent in Hunting and Trapping (40.4 per cent).

Figure 14: Information, Media and Telecommunications Sectors - % working full-time year to February 2009

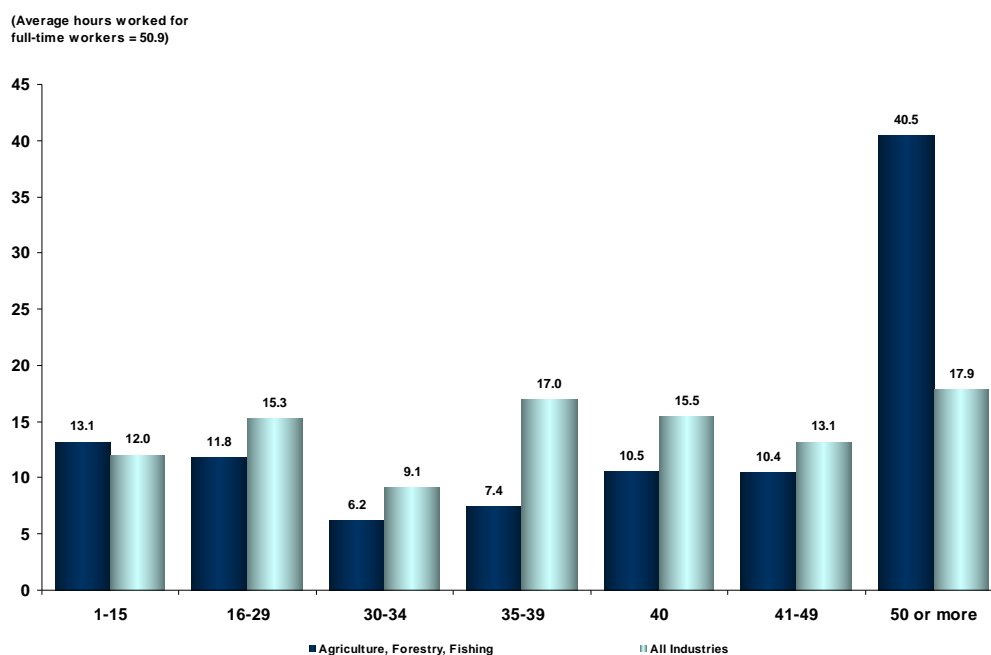


Source: ABS Labour Force Survey

Hours Worked

Agriculture, Forestry and Fishing has the highest average full-time weekly hours of all 19 broad ANZSIC industry groups (50.9 hours compared with 41.3 hours for all industries). Working hours in the Agriculture, Forestry and Fishing industry can vary widely (see Figure 15). During planting and harvesting seasons, agricultural workers are often required to work longer than a typical 40 hour week. A higher than average proportion (40.5 per cent) of those employed in Agriculture, Forestry and Fishing work more than 50 hours a week.

Figure 15: Hours of Work - year to February 2009 (% share)



Source: ABS Labour Force Survey

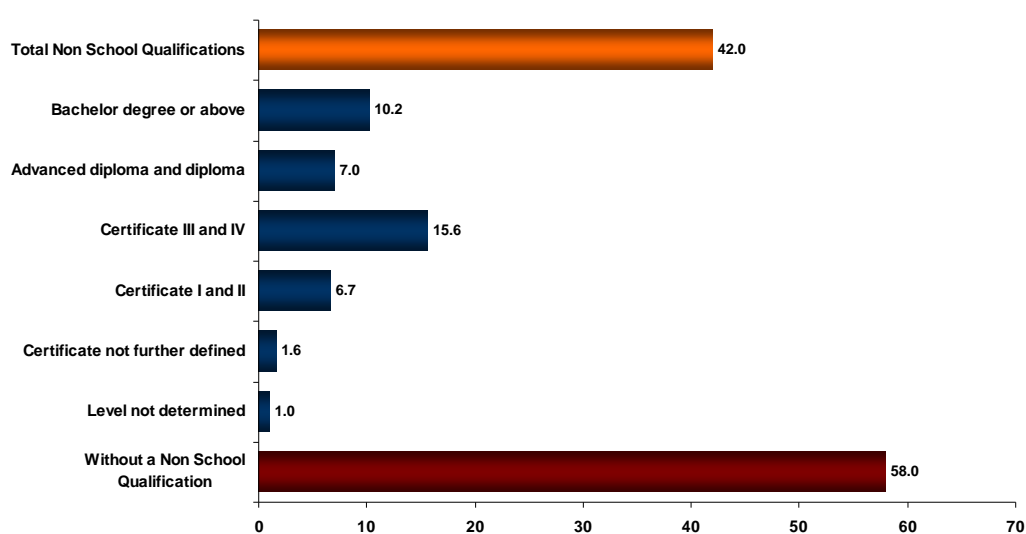
Employment Characteristics

Educational Profile

The Agriculture, Forestry and Fishing industry employs a large number of workers with relatively low levels of educational attainment. Although formal qualifications are becoming more important in the industry, 58.0 per cent of workers from the industry had no post school qualifications in May 2008 (see Figure 16), compared with 39.8 per cent for all industries. In part, this reflects the older age profile in the Agriculture, Forestry and Fishing industry with stronger emphasis now on formal training for the industry.

More than two fifths (42.0 per cent) of workers in the industry had completed a non-school qualification, including 15.6 per cent with a Certificate III or IV qualification.

Figure 16: Educational Attainment (% share of employment) - May 2008

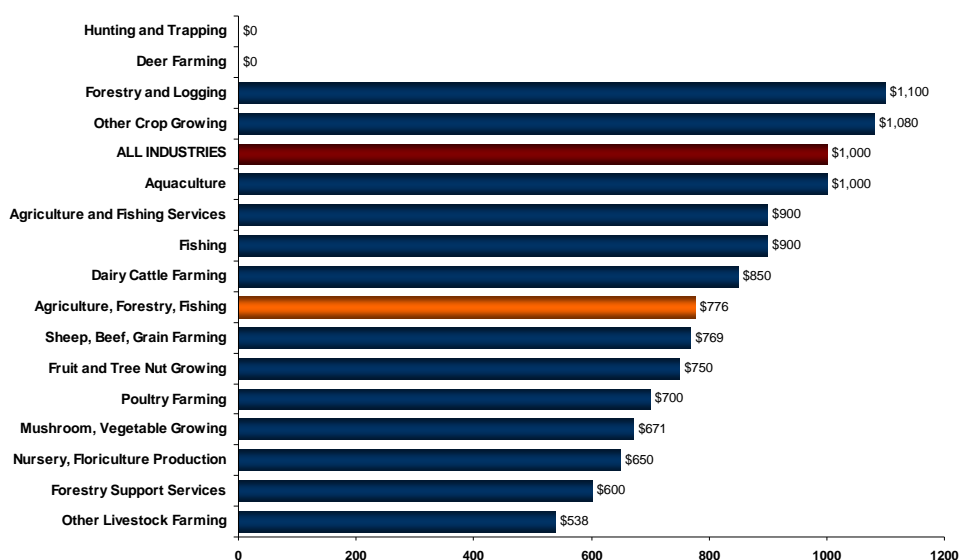


Source: ABS Education and Work, cat. no. 6227.0

Median Weekly Earnings

In August 2008, median weekly full-time earnings in the Agriculture, Forestry and Fishing industry was \$776, which was well below the median weekly full-time earnings for all industries of \$1000 (see Figure 17). Lower than average earnings are due in part to the low level of skill required for many of the jobs in the industry and to the seasonal nature of the work. It is also important to note that these earnings data are for full-time employees only, and do not reflect the earnings of own account workers¹ or employers in the industry. Median weekly full-time earnings within the Agriculture, Forestry and Fishing industry ranged from \$1100 for Forestry and Logging, down to \$538 for Other Livestock Farming.

Figure 17: Agriculture Forestry and Fishing Industry Sectors - Median weekly earnings (Full-time and before tax) - August 2008



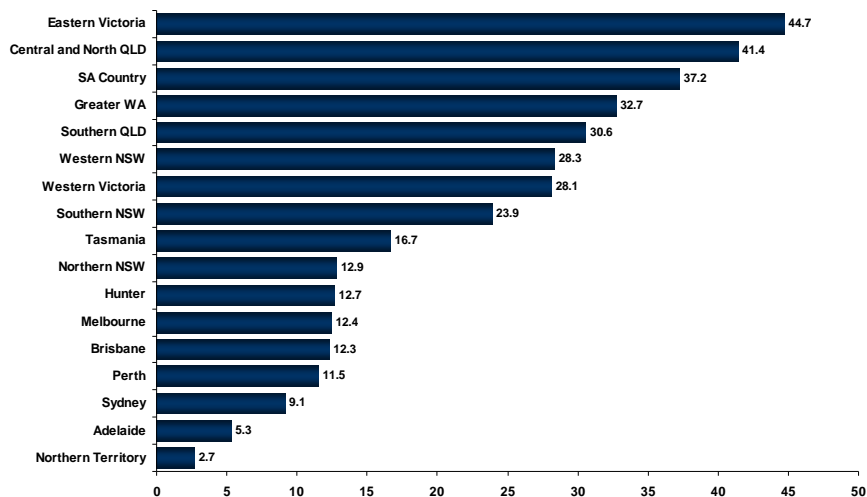
Source: ABS Employee Earnings, Benefits and Trade Union Membership, Cat. no. 6310.0

¹ The Australian Bureau of Statistics (ABS) defines an own-account worker as a person who operates his or her own unincorporated economic enterprise or engages independently in a profession or trade, and hires no employees.

Main Employing Regions

In the year to February 2009, the largest number of workers in Agriculture, Forestry and Fishing were employed in Eastern Victoria (44 700), followed by Central and North Queensland (41 400), South Australia Country (37 200), Greater Western Australia (32 700) and Southern Queensland (30 600), reflecting the rural nature of the industry (see Figure 18).

Figure 18: Main Employing Regions ('000) – year to February 2009

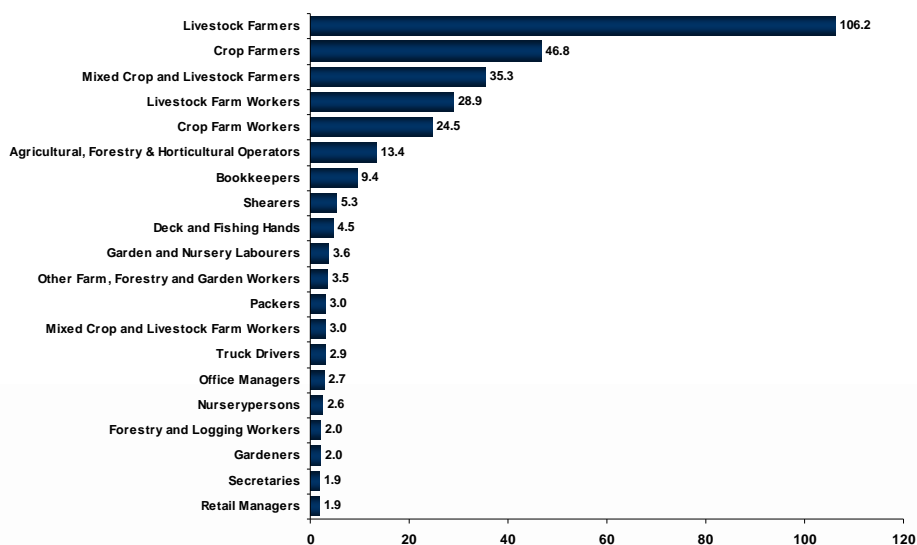


Source: ABS Labour Force Survey

Main Employing Occupations

Agriculture, Forestry and Fishing is dominated by four large occupations - Livestock Farmers (106 200), Crop Farmers (46 800), Mixed Crop and Livestock Farmers (35 300) and Livestock Farm Workers (28 900). Together, these occupations make up 60.8 per cent of the Agriculture, Forestry and Fishing industry.

Figure 19: Top 20 Employing Occupations ('000) - year to November 2008



Source: ABS Labour Force Survey

Further information on occupations is available on the Job Outlook website (www.joboutlook.gov.au)

For further information on the Agriculture, Forestry and Fishing industry (or other industries), visit the SkillsInfo website at www.skillsinfo.gov.au. SkillsInfo provides a range of skills related information for industries and regions. The website offers a broad range of information on employment, careers, education and training and skills issues - including workforce ageing, skills in demand, labour force data, ICT and employability skills, as well as quick links to skills information. Data are sourced mainly from the ABS Labour Force Survey.

SkillsInfo also brings together a large collection of links to external industry and skills related websites.

