

# Agricultural Consultant/Scientist ANZSCO 2341-11, 12

Australia  
March 2018

Current labour market rating: **Shortage**  
Previous labour market rating (April 2017): **No Shortage**

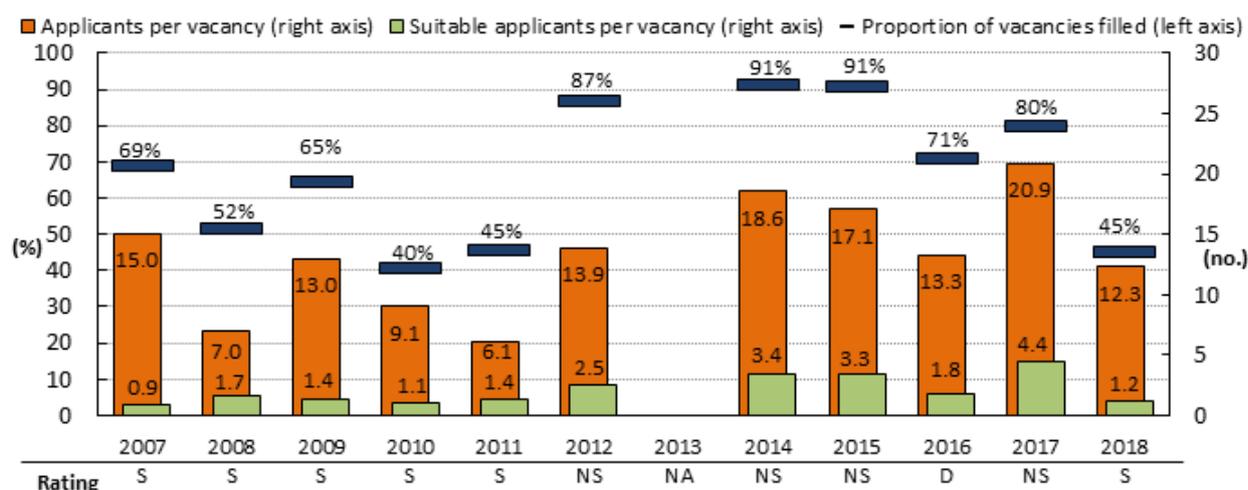
## Comments

The demand for these workers has strengthened in recent years and shortages are now apparent, with many employers having difficulty attracting suitable candidates for their vacancies. New supply has also increased through rising agricultural science graduate numbers, but candidates are often regarded as unsuitable because they lack the required experience. Nevertheless, these graduates continue to have strong employment outcomes, with the vast majority able to find a job after graduation.

## Survey results<sup>1</sup>

- Shortages of agricultural consultants and scientists re-emerged in 2018, evident for the first time since 2011 (Figure 1).
- Only 45 per cent of surveyed vacancies were filled in 2018, the lowest proportion since 2011.
  - Around two thirds of surveyed employers had at least one unfilled vacancy.
- Although employers attracted relatively large fields of applicants, few were regarded as suitable.
  - On average, there were 12.3 applicants per vacancy, 5.4 of whom held relevant qualifications.
  - Despite this, there were just 1.2 suitable applicants, on average, per vacancy, with most employers unable to attract any suitable applications.

**Figure 1: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Agricultural Consultant/Scientist, Australia, 2007 to 2018**



Source: Department of Jobs and Small Business, Survey of Employers who have Recently Advertised  
Key to ratings: S = Shortage D = Recruitment difficulty NS = No shortage NA = Not assessed

<sup>1</sup> The methodology underpinning this research is outlined at [Skill Shortage Research Methodology | Department of Jobs and Small Business - Document library, Australian Government](#) and can also be accessed by the QR code.



- Some employers reported that it is difficult to fill positions in regional areas (where most surveyed vacancies were located). A number of employers noted that some regional vacancies remained unfilled because potentially suitable applicants were unable or unwilling to relocate to the place of employment.

### Employer requirements

- Surveyed employers included consultancies, commercial farms and government and private organisations engaged in agricultural research and development.
- Employers typically sought applicants with a bachelor's degree or higher qualification in agricultural science or a closely related field.
- Applicants were also often required to have work experience relevant to the role, even for new graduate positions.
  - Employers generally required applicants to have experience in a particular agricultural specialisation, such as experience in specific crops, livestock, agricultural techniques or research areas.

### Unsuitable applicants

- Around 45 per cent of applicants did not hold relevant qualifications.
- In addition, around 80 per cent of qualified applicants were regarded as unsuitable, most commonly because they lacked the required experience.

### Demand and supply trends

- The demand for agricultural consultants and scientists has strengthened in recent years. While new supply has also increased following rising training numbers, graduate employment outcomes remain strong, with around 60 per cent able to find employment in a related field after graduation.

### Demand

- Employment and internet vacancy numbers for agricultural and forestry scientists<sup>2</sup> have risen in recent years, suggesting there is strong demand for these workers.
  - The number of vacancies advertised on the internet for these workers has increased strongly since the recent low in 2014, to reach an historically high level in February 2018.<sup>3</sup>
  - Employment data for these occupations are variable, but suggest that employment has grown over the past five years to around 8,600 in February 2018.<sup>4</sup>
- The demand for this occupation has been supported by recent strong activity in the agricultural sector.
  - The gross value of Australia's agricultural production peaked in 2016-17 at \$63.5 billion, up by 8.2 per cent from 2015-16.<sup>5</sup>

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<sup>2</sup> Census data suggest that Agricultural Consultants and Scientists represent around 78 per cent of this group

<sup>3</sup> Department of Jobs and Small Business, Internet Vacancy Index, February 2018, 12 month moving average

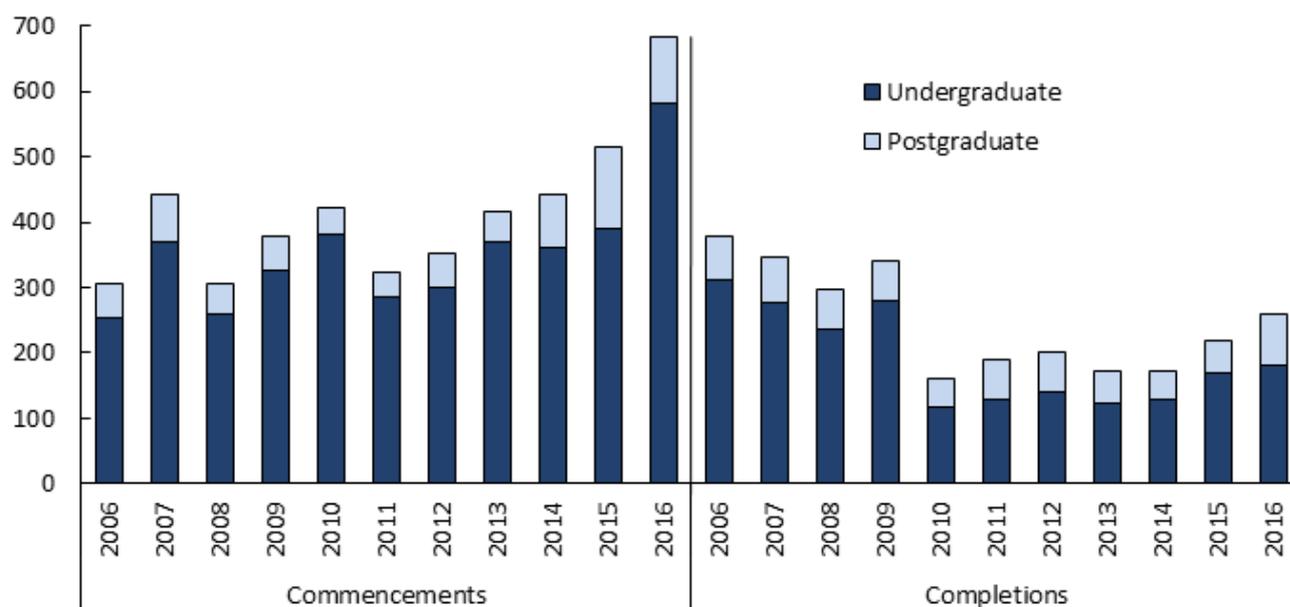
<sup>4</sup> ABS, Labour Force, February 2018, Department of Jobs and Small Business trend

<sup>5</sup> Australian Bureau of Agricultural and Resource Economics and Sciences, Agricultural Commodities, March Quarter 2018, data are in 2017-18 Australian dollars

## Supply

- The number of students undertaking higher education training in agricultural science (the main pathway to employment in this profession) has risen in recent years (Figure 2).<sup>6</sup>
  - Commencements more than doubled over the five years to 2016, to an historical peak.
  - Completions also rose over the past five years, but remain below the level a decade ago.

**Figure 2: Higher education commencements and completions, Agricultural Science, Australia, 2006 to 2016**



Source: Department of Education and Training, Higher Education Student Data Collection, 2016, custom table, domestic students

- Despite rising numbers of people completing agricultural science courses, graduate employment outcomes remain strong.
  - In 2017, 87.5 per cent of agricultural science bachelor degree graduates were employed full-time four months after graduating, well above the average for all graduates (71.8 per cent).<sup>7</sup> Around 60 per cent were employed as either a science professional or a farmer.

## Outlook

- The Australian Bureau of Agricultural and Resource Economics and Sciences expects that the gross value of farm production will fall slightly in 2017-18 (but remain historically high) before growing steadily over the following few years.<sup>8</sup>
- The Department of Jobs and Small Business projects subdued employment growth for agricultural and forestry scientists over the five years to May 2022 (up by 0.6 per cent, compared with 7.8 per cent across all occupations).<sup>9</sup>

<sup>6</sup> Department of Education and Training, Higher Education Student Data Collection, 2016, custom table, domestic students

<sup>7</sup> QILT, Graduate Outcomes Survey, 2017, custom data. The full-time employment outcome refers to the number of graduates in full-time employment four months after graduation as a proportion of those available for full-time employment

<sup>8</sup> Australian Bureau of Agricultural and Resource Economics and Sciences, Agricultural Commodities, March Quarter 2018

<sup>9</sup> Department of Jobs and Small Business, Occupation Employment Projections to May 2022