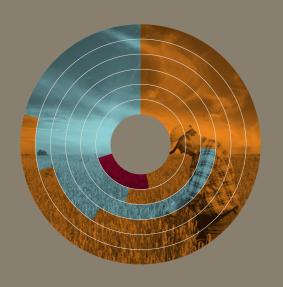
February 2015

# Diversity in Australia's agricultural workforce



#### About this information sheet

The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) has developed this information sheet to inform policy and decision makers about the diverse people and communities that contribute to Australian agriculture.

Unless otherwise specified, this information sheet uses data from the 2006 and 2011 Australian Bureau of Statistics' Census of Population and Housing. For further information, or for assistance interpreting these statistics, please contact ABARES.

#### Who are Australia's agricultural employees?

The agriculture industry in Australia includes a number of diverse sub-industries. This information sheet defines the agriculture industry as<sup>1</sup>:

- · Sheep, beef cattle and grain farming
- · Fruit and tree nut growing
- Dairy cattle farming
- · Mushroom and vegetable growing
- · Nursery and floriculture production
- · Other crop growing
- Poultry farming
- Deer farming
- · Other livestock farming.

While the industry also includes agricultural support services, this category is counted together with fishing support services in the ABS Census data, and is therefore not represented here<sup>2</sup>.

In 2011, 219 269 people were directly employed in the agriculture industry, representing two per cent of all employed people in Australia. The number of people working in the agriculture industry decreased between 2006 and 2011 by 11 per cent. In 2006, there were 246 603 people working in the agriculture industry, which accounted for three per cent of the Australian workforce.

#### Industry categories are classified by Australian Bureau of Statistics (ABS) using the Australian New Zealand Standard Industrial Classification (ANZIC) 2006, Revision 1

#### Statistics of interest

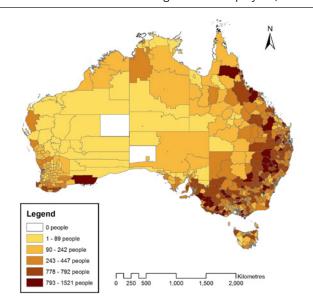
In 2011:

- One per cent (2 690 people) of people directly employed in the agriculture industry identified as Indigenous.
- Approximately eight per cent of agricultural employees (18 404 people) were from culturally and linguistically diverse backgrounds.
- Women represented 31 per cent of employees (68 514 people) in the agriculture industry
- Young people accounted for 14 per cent (31 205 people) of the total agricultural workforce.

The ABS industry classification o52 Agriculture and Fishing Support Services contains agriculture support services and fishing support services together in one category, which means employment figures for agriculture support services cannot be reported separately.

The majority of agriculture industry employees live in rural and regional areas of eastern Australia (Map 1). In 2011, 89 per cent of agriculture industry employees lived outside a capital city.

MAP 1 Place of residence of all agricultural employees, 2011

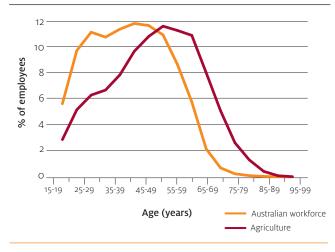


Note: Data include employees in all agricultural industries and are presented by Statistical Local Area.

Source: ABS Census of Population and Housing

The largest proportion of agriculture industry employees (12 per cent) were aged between 50 and 54 years (Figure 1). The median age of agriculture industry workers was 50 years, which was older than the median age of the general Australian workforce (40 years).

FIGURE 1 Age distribution of agriculture industry employees and the general Australian workforce, 2011

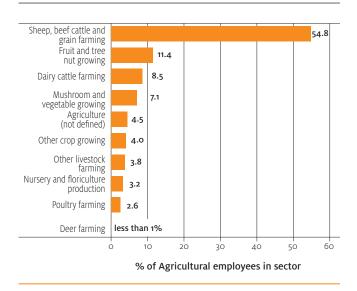


Source: ABS Census of Population and Housing

#### **Sub-industry and occupation**

In 2011, 55 per cent of all people working in agriculture were employed in sheep, beef cattle or grain farming (Figure 2).

FIGURE 2 Employment in agriculture sub-industries, 2011



Source: ABS Census of Population and Housing

Most people who worked in agriculture were employed as:

- Managers (67 per cent; 146 302 people)
- · Labourers (21 per cent; 44 989 people)
- Technicians and trade workers (four per cent; 8 003 people)

In 2011, 157 144 people in Australia said that their occupation was a farmer or farm manager<sup>3</sup>. Their median age was 53, compared with 50 for all agricultural employees. Ninety two per cent of farmers or farm managers were living outside a capital city.

#### **Income and work status**

In 2011, the largest proportion of agriculture industry employees (19 per cent) earned \$400-\$599 a week. This is similar to the median personal Australian weekly income of \$577. However, it is slightly lower than wages in the fisheries and forestry industries. In comparison, the largest proportion of workers in the fisheries and forestry industries earned \$600-\$799 a week.

A greater proportion of agriculture industry employees (74 per cent) worked full time, compared with the general Australian workforce (68 per cent).

#### **Education**

Agriculture industry employees tend to have lower levels of formal education than the general Australian workforce (Table 1). In 2011, 38 per cent of agriculture industry workers held a post-school qualification, which in most cases was a certificate level qualification.

3 People who said their occupation was a farmer or farm manager were also employed in other industries apart from agriculture, such as, food product manufacturing; beverage and tobacco manufacturing; grocery, liquor and tobacco wholesaling; construction and road transport.

TABLE 1 Comparison of completed formal qualifications of agricultural employees and the general Australian workforce

Completed qualification	% of agricultural employees	% of Australian workforce
Year 12 or equivalent	38	59
Certificate	20	22
Diploma/Advanced diploma	8	10
Bachelor degree	8	18
Graduate diploma/Graduate		
certificate	1	2
Postgraduate degree	1	5

Note: Achieving year 12 or equivalent does not preclude other qualifications Source: ABS Census of Population and Housing

#### Indigenous agricultural employees

The term 'Indigenous' refers to both Aboriginal and Torres Strait Islanders. An Indigenous person is someone who (ABS 2010):

- is of Aboriginal or Torres Strait Islander descent
- identifies as being of Aboriginal or Torres Strait Islander origin, and
- is accepted as such by the Indigenous community with which the person associates.

#### Indigenous agricultural employees

In 2011, one per cent of people directly employed in the agriculture industry identified as Indigenous (2 690 people). Of the agriculture, fisheries and forestry industries, agriculture employs the highest number of Indigenous people. However, there was a higher percentage of Indigenous employees in the fishing industry (three per cent) and forestry industry (two per cent).

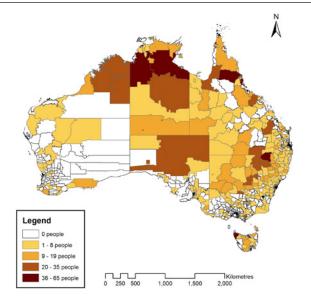
In 2011, 23 per cent of Indigenous agriculture industry employees were women compared with 31 per cent for non-Indigenous agricultural employees.

Indigenous employees tended to be younger than other agriculture workers. In 2011, the median age of Indigenous agriculture workers was 38 years, compared with 50 years for the entire agriculture industry. Young Indigenous people (15-30 years old, inclusive) accounted for 36 per cent of the Indigenous people employed in agriculture.

#### **Location of employees**

In 2011, 67 per cent of Indigenous people in Australia lived in regional and remote areas. As can be seen in Map 2, a large number of Indigenous people working in agriculture live in Northern and Central Australia.

MAP 2 Place of usual residence of Indigenous agriculture industry employees, 2011



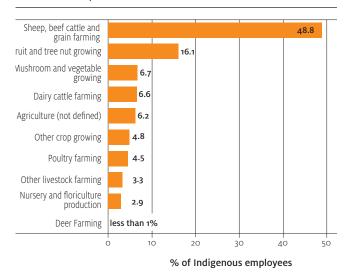
Note: Data incorporate Indigenous employees from all agriculture industries and are presented by Statistical Local Area.

Source: ABS Census of Population and Housing

#### **Sub-industry and occupation**

Almost half (49 per cent) of the Indigenous people who worked in the agriculture industry in 2011 worked in sheep, beef cattle and grain farming (Figure 3).

FIGURE 3 Indigenous employment in agriculture sub-industries, 2011



Source: ABS Census of Population and Housing

Indigenous people make significant contributions to agriculture that are not captured by official statistics. One area in particular is the burgeoning 'bush foods' sub-industry, which includes the production of quandongs, riberries and lemon myrtle leaves. Indigenous people are involved at all stages of bush foods production, from wild harvest and cultivation of native produce, through to food processing and cultural tourism that shares bush food knowledge (CSIRO 2005).

Most Indigenous agricultural workers were employed as:

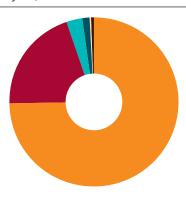
- · Labourers (56 per cent; 1 494 people), or
- Managers (27 per cent; 721 people)

Between 2006 and 2011, the number of Indigenous managers increased by 99 people.

#### **Education**

Indigenous agriculture industry employees tend to have lower levels of formal education than all employees in the agriculture industry. In 2011, approximately 20 per cent of Indigenous agriculture industry workers indicated they had completed year 12 or equivalent. Twenty five per cent of Indigenous agriculture industry employees had completed post-school education, most of whom held certificate level qualifications (Figure 4). Low levels of formal education may help account for why Indigenous people hold fewer management level positions in the agriculture industry (Prime Minister's Report 2012).

FIGURE 4 Educational attainment of Indigenous agriculture industry employees, 2011





Source: ABS Census of Population and Housing

#### Indigenous agricultural programs

The Indigenous Land Corporation (ILC) is an Australian government agency responsible for assisting Indigenous people with acquiring and managing land to achieve economic, environmental, social and cultural benefits. The ILC has a variety of agricultural programs such as the Indigenous Pastoral Program in the Northern Territory and Merriman Station in NSW.

## People from CALD backgrounds in the agriculture industry

A person from a Culturally and Linguistically Diverse (CALD) background is someone who identifies '...as having a cultural or linguistic affiliation by virtue of their place of birth, ancestry, ethnic origin, religion, preferred language(s) spoken at home, or because of their parents' identification on a similar basis'.

### Victorian Multicultural Strategy Unit (2002) in The Australian Psychological Society Ltd (2008)

It is a personal judgement whether people identify themselves as being from a CALD background. This information sheet uses 'language spoken at home' as an indicator of a CALD background<sup>4</sup>. This method captures both first and second generation Australians.

### Agriculture industry employees from CALD backgrounds

People from CALD backgrounds represented approximately eight per cent (18 404 people) of agricultural employees in 2011. CALD people are not as well represented in the agricultural workforce as they are in the fishing (18 per cent) and forestry (15 per cent) industries.

Official statistics are likely to underestimate the contribution of workers from CALD backgrounds because they do not include temporary and seasonal workers, and because CALD employees may:

- be unable to complete data collection forms because of language and literacy barriers
- not be recognised as part of the agricultural 'community'
- be working in isolation because of socio-cultural norms (for example, shyness and mistrust of authority), or spending most of their time 'on the farm'

In 2011, CALD employees tended to be younger than other agriculture industry workers. The median age of agriculture industry workers from CALD backgrounds was 43 years, compared with 50 years for the entire agriculture industry.

ABS data show that women from CALD backgrounds:

- represented 39 per cent of all CALD people employed in agriculture
- represented 10 per cent of all women employed in agriculture
- were more likely to be employed as labourers (45 per cent) than non-CALD women (22 per cent).

Most agriculture industry employees from CALD backgrounds were born<sup>5</sup> in:

- Mainland South-East Asia (21 per cent)
- Southern Asia (16 per cent)
- · Southern Europe (12 per cent), or
- Chinese Asia, including Mongolia (10 per cent)
- 4 Based on the 2011 Census question 'Does the person speak a language other than English at home?' The analysis excludes English and Indigenous Australian languages (for Indigenous peoples participation in the agriculture industry, see *Indigenous agriculture employees*.)
- 5 Country of birth categories are classified by ABS using the Standard Classification of Countries (SACC) Second Edition, Revision 1.

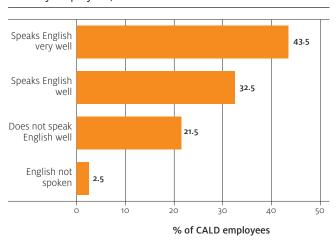
#### **English proficiency**

In 2011, most agriculture industry employees from CALD backgrounds were proficient in English, with 76 per cent of workers reporting that they spoke English well or very well (Figure 5). CALD workers in the agriculture industry may not be literate in their native language or English, which can affect their ability to access information about the agriculture industry and employment opportunities.

The most common languages spoken at home by employees from CALD backgrounds were:

- Italian (18 per cent)
- Mon-Khmer (15 per cent)
- Indo-Aryan (12 per cent)

FIGURE 5 Proficiency in spoken English by CALD agriculture industry employees, 2011

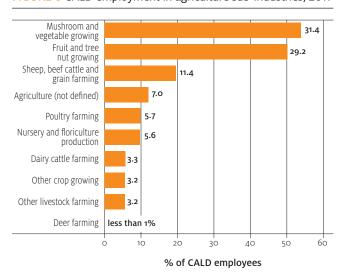


Source: ABS Census of Population and Housing

#### **Sub-industry and occupation**

CALD employees were best represented in the mushroom and vegetable growing and fruit and tree nut growing sectors, where they made up 31 per cent and 29 per cent respectively of all employees in these sectors (Figure 6).

FIGURE 6 CALD employment in agriculture sub-industries, 2011

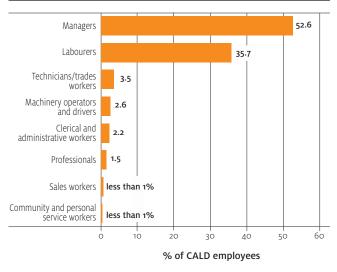


The majority of agricultural workers form CALD backgrounds were employed as (Figure 7):

- · Managers (53 per cent; 9 689 people), or
- Labourers (36 per cent; 6 565 people)

Research indicates that employees from CALD backgrounds are generally involved in decision-making roles at the farm level but are not well represented at the industry level (Kancans et al 2010). Representation in decision-making roles can differ according to time of migration (new or late arrivals) and generation (first or second) (Kancans, Stenekes & Benedictos 2010).

FIGURE 7 Occupation of people with a CALD background working in the agriculture industry, 2011



Source: ABS Census of Population and Housing

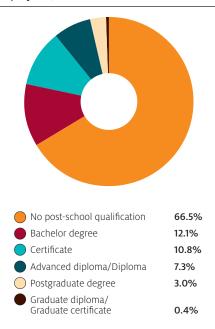
#### **Working holiday visas**

In 2007-2008, a survey of working holiday visas found that 41 per cent of all people (8 040 people in total) on this type of visa had worked on a farm (Tan et al. 2009). Most of these people came from Korea, Germany, the UK or France.

#### Education

In 2011, 34 per cent of CALD people who worked in the agriculture industry had a certificate level or higher post-school qualification. This is slightly lower than the industry average of 38 per cent.

FIGURE 8 Educational attainment of CALD agriculture industry employees, 2011



Source: ABS Census of Population and Housing

#### Women in the agriculture industry

Agriculture has been largely dominated by male workers according to census data, however the nature of family-farm agricultural production is that women make significant yet often unrecognised paid and unpaid contributions to agricultural businesses and communities (Alston 2000).

#### Women in the agriculture industry

The number of women working in agriculture decreased from 78 714 in 2006 to 68 514 women in 2011. This occurred in the context of a shrinking overall agricultural workforce, which declined by 27 334 workers between 2006 and 2011 (from 246 603 to 219 269 people).

In 2011, the proportion of women working in the agriculture industry was 31 per cent (68 514 women). Women represented a greater percentage of the agricultural workforce than of the fishing (28 per cent) and forestry (19 per cent) workforces.

The median age of women working in the agriculture industry in 2011 was 50 years. Young women (15 to 29 years of age) accounted for 13 per cent of women in the agriculture industry workforce, while 17 per cent of women working in the agriculture industry were over the age of 65.

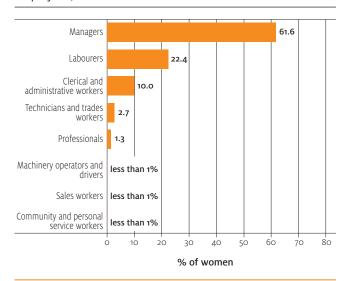
Women contribute to agriculture in several ways:

- On-farm income: in 2005-06 it is estimated that women contributed \$8,558 million to the agriculture industry in onfarm income (RIRDC 2009). This is 33 per cent of all on-farm income.
- Off-farm income: in 2005-06 it is estimated that women provided 84 per cent of all off-farm income (RIRDC 2009).
  In dollar terms, this equates to \$2 715 million (ABARE 2007).
- Household work: it is estimated that in 2005-06, women contributed \$11 282 million in housework to the agriculture industry (RIRDC 2009).
- Volunteer and community work: it is estimated that in 2006, women's voluntary contributions to their communities was valued at almost \$1 046 million (RIRDC 2009). Women contributed 62 per cent of all voluntary work in the agriculture industry.

#### **Occupation**

Women made up 29 per cent of all managers in the agriculture industry in 2011. However, the numbers of women managers in agriculture decreased between 2006 (49 270 women managers) and 2011 (41 982 women managers).

FIGURE 9 Occupation of female agriculture industry employees, 2011

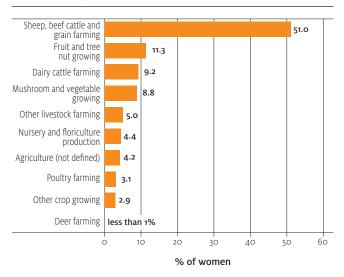


Source: ABS Census of Population and Housing

#### **Sub-industry and occupation**

Fifty one per cent of women working in the agriculture industry worked in sheep, beef cattle and grain farming (Figure 10). This is similar to the proportion of all people who work in the agriculture industry. Women represented 29 per cent of the sheep, beef cattle and grain farming workforce.

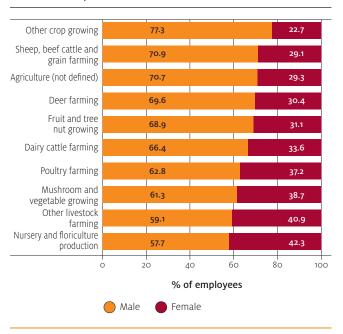
FIGURE 10 Female employment by agriculture sub-industries, 2011



Source: ABS Census of Population and Housing

Women represented 42 per cent of the total workforce in nursery and floriculture production and 41 per cent of all people who worked in other livestock farming (Figure 11).

FIGURE 11 Gender representation in agriculture sub-industries, 2011



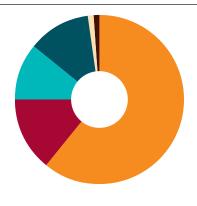
Source: ABS Census of Population and Housing

#### **Education**

In 2011, the percentage of women working in agriculture with a certificate level or above qualification is 39 per cent (Figure 12). This is close to the industry average.

There is an emerging trend where an increasing number of women are achieving qualifications in agriculture, including agricultural science, wool science and animal husbandry. In 2006, there were 17 958 women who had completed a post-school qualification in agriculture. This had increased to 22 310 by 2011, which is an increase of 24 per cent over 5 years. This compares with an increase of five per cent for men holding post-school qualifications in agriculture over the same period.

FIGURE 12 Educational attainment of women working in the agriculture industry, 2011





Source: ABS Census of Population and Housing

## Young people in the agriculture industry

In this information sheet young people are defined as those aged between 15 and 29 years.

The contribution of young people to the agriculture industry either through paid or unpaid work, is central to an innovative and sustainable future for agriculture. The median age of farmers  $^6$  increased from 52 years in 2006 to 53 years in 2011 and many farmers are approaching retirement age when they may exit the industry.

#### Young agricultural employees

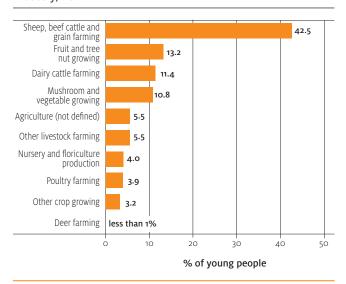
Young people accounted for 14 per cent (31 205 people) of the total agricultural workforce in 2011. Young people represented a smaller proportion of the agricultural workforce than they did in the fishing (20 per cent) and forestry industries (21 per cent). Twenty seven per cent of young agricultural employees were women.

<sup>6</sup> The ABS occupational classification includes farmers and farm managers.

#### **Sub-industry and occupation**

More young agricultural employees (43 per cent) worked in sheep, beef cattle and grain farming than any other subindustry (Figure 13). This compares with 55 per cent of all people who work in the agriculture industry.

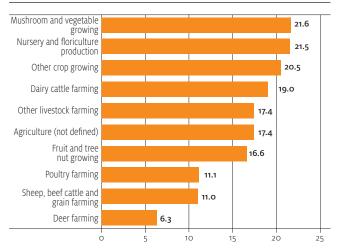
FIGURE 13 Young people in agriculture sub-industries as a percentage of all young employees in the agriculture industry, 2011



Source: ABS Census of Population and Housing

The 3 381 young employees who work in the mushroom and vegetable growing sector represented 22 per cent of all people who work in this sector. Similarly, the 1 223 young employees who work in the poultry farming sector represented 22 per cent of all people who work in this sub-industry.

FIGURE 14 Young people as a percentage of all employees in agriculture sub-industries, 2011



% that young people represent of all people employed in sub-industry

Most young people work as:

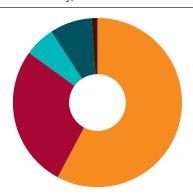
- · Labourers (50 per cent; 15 447 people), or
- Managers (33 per cent; 10 354 people)

In 2011, a significant number of people (44 098 persons) contributed unpaid labour in family businesses in the agriculture industry, including 2 399 people who were 30 years of age or less (six per cent of total contributing family workers).

#### **Education**

In 2011, 42 per cent of young people had post-school certificate level or higher qualifications (Figure 15). This is higher than the industry average of 38 per cent.

FIGURE 15 Educational attainment of young people working in the agriculture industry, 2011





Source: ABS Census of Population and Housing

Source: ABS Census of Population and Housing

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