



Australian Government

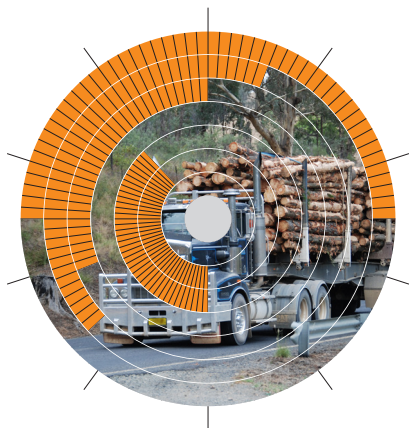
Department of Agriculture, Fisheries and Forestry
ABARES

Australian forest and wood products statistics: socio-economic indicators, trends to 2011

Research by the Australian Bureau of Agricultural
and Resource Economics and Sciences

JUNE 2013





This report was first published in
*Australian Forest and Wood Products
Statistics: September and December
Quarters 2012* on 6 June 2013.

© Commonwealth of Australia 2013.

Ownership of intellectual property rights

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia (referred to as the Commonwealth).

Creative Commons licence

All material in this publication is licensed under a Creative Commons Attribution 3.0 Australia Licence, save for content supplied by third parties, logos and the Commonwealth Coat of Arms.



Creative Commons Attribution 3.0 Australia Licence is a standard form licence agreement that allows you to copy, distribute, transmit and adapt this publication provided you attribute the work. A summary of the licence terms is available from creativecommons.org/licenses/by/3.0/au/deed.en. The full licence terms are available from creativecommons.org/licenses/by/3.0/au/legalcode.

This publication (and any material sourced from it) should be attributed as: ABARES 2013, *Australian forest and wood products statistics, September and December quarters 2012*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, June. CC BY 3.0.

Cataloguing data

ABARES 2013, *Australian forest and wood products statistics, September and December quarters 2012*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, June.

ISSN 1449 1850

ISBN 978-1-74323-132-6

ABARES project: 115062/43373

Internet

Australian forest and wood products statistics, September and December quarters 2012 is available at daff.gov.au/abares/publications.

Contact

Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)

Postal address GPO Box 1563 Canberra ACT 2601

Switchboard +61 2 6272 2010

Facsimile +61 2 6272 2001

Email info.abares@daff.gov.au

Web daff.gov.au/abares

Inquiries regarding the licence and any use of this document should be sent to: copyright@daff.gov.au.

The Australian Government acting through the Department of Agriculture, Fisheries and Forestry represented by the Australian Bureau of Agricultural and Resource Economics and Sciences, has exercised due care and skill in the preparation and compilation of the information and data in this publication. Notwithstanding, the Department of Agriculture, Fisheries and Forestry, ABARES, its employees and advisers disclaim all liability, including liability for negligence, for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying upon any of the information or data in this publication to the maximum extent permitted by law.

Notice

The detailed statistical tables can only be viewed in Excel workbooks that are linked in appendix A and are available on the ABARES website.

Acknowledgments

This report was prepared by the ABARES Forest and Land Economics and Social Sciences sections. ABARES acknowledges co-funding for production of this report by Forest and Wood Products Australia (FWPA) and the Department of Agriculture, Fisheries and Forestry.

Socio-economic indicators— trends to 2011

This issue of AFWPS presents socio-economic indicators for the forestry sector drawn from the 2011 ABS Census of Population and Housing. These build on and update the indicators presented in the AFWPS March and June quarters 2012, which reported data from the 2006 census.

Many regions have, in recent years, undergone significant structural change in the forest industry. Information on the socio-economic characteristics of employees in the forestry sector (combined forest and wood product industries) and the communities in which they live provides a basis for the community, government and industry to understand, monitor and manage the implications of changes in the forestry sector.

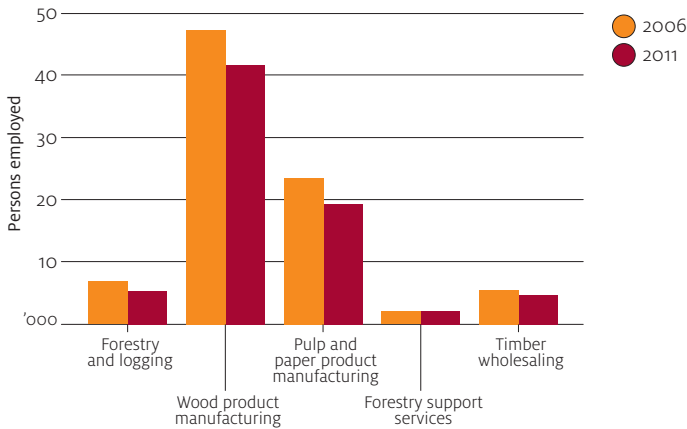
Employment trends

Jobs creation is a key contribution of the forestry sector to the community, providing income and skills development. The direct employment generated by Australia's forestry sector fell by just over 14 per cent, from 85 254 to 73 267 people employed, between 2006 and 2011. Employment fell in all states and territories except the Northern Territory, where employment grew; however, compared with the rest of Australia overall forestry sector employment in the territory remains very small.

Declines in employment occurred in all subsectors of the forestry sector nationally, except for forestry support services in which employment increased by 6 per cent (Figure 12). Forestry and logging employment declined by 21 per cent, with declines recorded across all states and territories. This decline was largely driven by two main factors:

- The entry of several plantation companies in the managed investment scheme sector into administration or receivership, with some loss of employment associated with transition to new businesses managing the plantation estate (Dare & Schirmer 2012; Schirmer et al. 2011).
- A decline in logging employment largely as a result of reduced volume of timber harvested from native forests (Table 6). This has led to a fall in logging employment likely to be disproportionately larger than the overall decline in total volume of wood harvested (native forest and plantation derived), because native forest harvesting typically requires more labour per unit harvested than the plantation sector (Schirmer 2012).

FIGURE 12 Forestry sector employment, by subsector, 2006 and 2011



Note: Data taken from Table 68 of this publication.
Data source: ABS

Employment in manufacturing wood products; and pulp, paper and converted paper products, fell by 11.9 per cent and 17.6 per cent, respectively. Several factors have driven the decline in employment in wood product manufacturing, including ongoing rationalisation of mills, particularly in the native forestry sector and a reduction in number of plantation mills (Burns & Burke 2012). Decline in pulp and paper manufacturing employment has resulted from closures of some plants and processing lines—notably closure of two Tasmanian Paper sites (Schirmer et al. 2011). This is reflected in the decline of 58.2 per cent in pulp and paper manufacturing employment in Tasmania between 2006 and 2011.

While employment in forestry support services grew nationally from 2006 to 2011, some states and regions experienced declines. Tasmania had the most rapid employment decline (almost halving from 229 in 2006 to 124 in 2011) as a result of reduced hardwood plantation development. Falls in forestry support services employment also occurred in regional areas where prior to 2006 there had been rapid expansion of hardwood plantations under Managed Investment Schemes—particularly Central Victoria, South West Western Australia and the Green Triangle.

Communities undergoing structural change, including employment changes, are likely to be better positioned to respond if they support a range of industries that may provide alternative opportunities. The economic diversity index provides a comparison of this diversity of industry sectors, between local areas within forestry reporting regions, and is discussed in the next section.

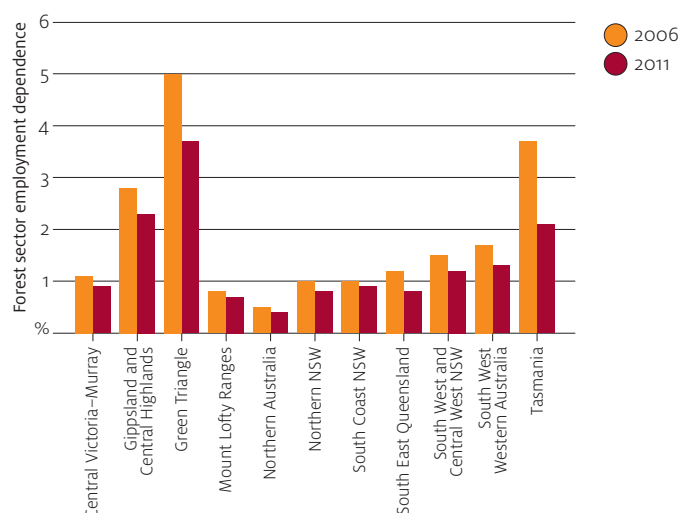
Community dependence on the forestry sector

The percentage of the total workforce directly employed in the forestry sector in a given area is an indication of that community's employment dependence on the forestry sector at a point in time. Changes in dependence may be caused by broader change in economic diversity of an area, or change in employment in a specific sector. Care is needed when interpreting changes in this indicator over time as changes in forestry sector employment and total employment both affect the measure.

Nationally, forestry sector employment dependence declined from 1.0 per cent in 2006 to 0.7 per cent in 2011—due to both growth in total size of the workforce across Australia and decline in the size of the forestry sector workforce in most regions. At state scale, in 2011 Tasmania had the highest forestry sector employment dependence, at 1.7 per cent followed by South Australia at 0.9 per cent and Victoria at 0.88 per cent.

At regional scale, the Green Triangle region had the highest forestry sector employment dependence of 3.7 per cent in 2011, down from 5.0 per cent in 2006. Regional Tasmania (excluding Hobart), had the largest fall in dependence, from 3.7 per cent in 2006 to 2.1 per cent in 2011 (Figure 13). Large employment centres such as Mt Gambier (Green Triangle), Tumut (Southern NSW) and Nannup (South West Western Australia) continued to have forestry sector dependence levels above 10 per cent in 2011. With declines in employment since 2006 all statistical local areas in Tasmania have fallen below 10 per cent employment dependence. In capital cities, which tend to have lower dependence on the forestry sector due to greater industry diversity, a decline in dependence is also evident, most notably in Hobart, which fell to 1.1 per cent in 2011

FIGURE 13 Forestry sector employment dependence, by forestry region, 2006 and 2011



Note: Forest sector reporting regions are an aggregation of statistical local areas in an area with substantial forest sector employment. Data taken from Table 69 of this publication.
Data source: ABS

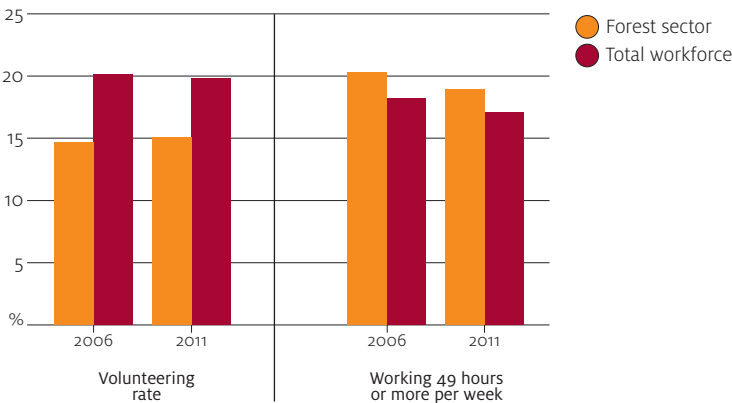
Contribution of industry to community

Workers in the forestry sector are typically less likely to spend time doing voluntary work with an organisation or group than members of the workforce as a whole in Australia. In 2011, 15.1 per cent of forestry sector workers volunteered in the 12 months before the census, compared with 19.8 per cent of the total workforce. However, the gap between the forestry sector and the rest of the workforce has narrowed slightly. The volunteering rate increased in the forestry sector workforce by 0.4 percentage points between 2006 and 2011, while it decreased by 0.3 percentage points in the total workforce (Figure 14).

The percentage of forestry sector workers working long hours (49 hours or more per week) fell from 20.3 per cent to 18.9 per cent between 2006 and 2011. This mirrored a similar sized decline in the total workforce (from 18.2 per cent to 17.1 per cent), but forestry sector workers remained slightly more likely to work long hours than other members of the workforce.

Community participation in volunteering, community events and other community-based activities can influence the wellbeing of the community. Working long hours is one factor that may limit people’s ability to take part in community activities; although some people working long hours do strongly participate in their community.

FIGURE 14 Australian volunteering and long working hours indicators, 2006 and 2011

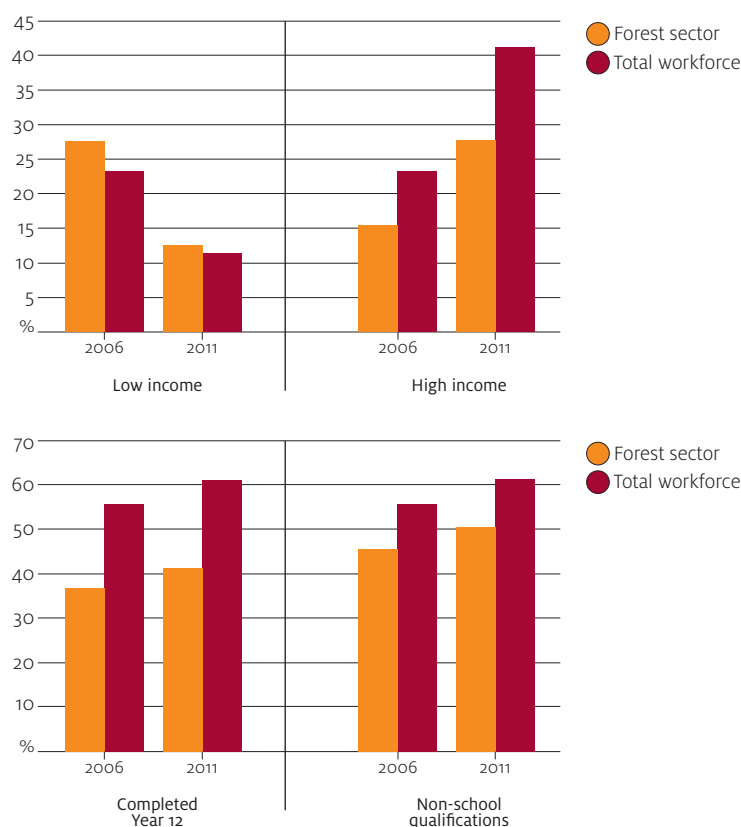


Note: % is percentage of employed persons in industry category (forest sector or total workforce). Data taken from Table 70 of this publication.
Data source: ABS

Workforce characteristics—wellbeing and diversity

The workforce characteristics of the forestry sector changed between 2006 and 2011. Forestry sector workers are slightly more likely to earn a low income (defined as less than \$600 per week) than other members of the employed workforce, but between 2006 and 2011 the percentage of forestry sector workers on low incomes fell by 15.0 percentage points, more than the fall of 11.9 percentage points in the total workforce. This indicates a comparative growth of workers in the 'middle' category between low and high incomes. However, the percentage of forestry sector workers on relatively high incomes (greater than \$1250 per week) increased between 2006 and 2011 by 12.3 percentage points, while it increased by 17.9 percentage points in the total workforce (Figure 15).

FIGURE 15 Australian income and educational attainment indicators, 2006 and 2011



Note: Low income defined as full-time workers who earned <\$600 per week. High income defined as full-time workers who earned >\$1250 per week (except defined as >\$1300 per week in 2006; ABS income categories changed in 2011). The forest sector often provides training not recognised through formal educational qualifications, therefore some skills workers have attained will not be recorded in ABS census statistics. Data taken from Table 70 of this publication.

Data source: ABS

In 2011 forestry sector workers remained less likely to have completed Year 12 or equivalent (41.3 per cent) than those in the workforce as a whole (61.2 per cent). While the percentage of forestry sector workers who had completed high school increased by 4.6 percentage points between 2006 and 2011, the increase was greater in the total workforce (5.5 percentage points). The percentage of workers holding non-school qualifications, such as certificate, diploma or degree, also increased in the forestry sector and overall workforce. Education attainment is one factor that can influence wellbeing and achievement, and can be a measure of industry opportunities.

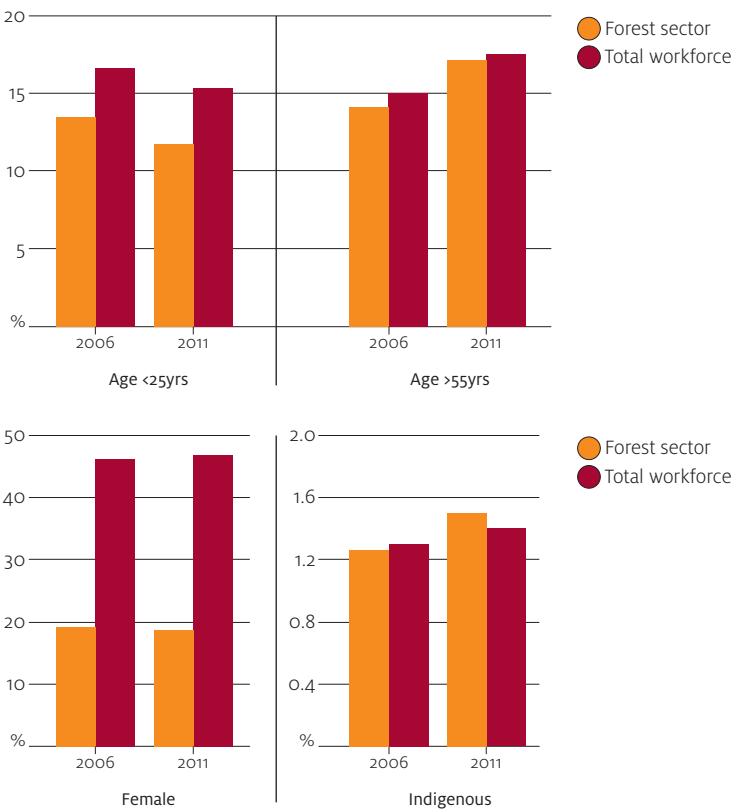
A high level of workforce diversity can provide a work environment that fosters innovative ideas and addresses disadvantage. Indicators include age profile, female and Indigenous employment, and employment of people with a disability. Australia's forestry sector workforce is ageing more rapidly than the employed workforce overall. In both the forestry sector and the total workforce the percentage of workers younger than 25 years decreased and the percentage older than 55 years increased between 2006 and 2011. The degree of change was slightly greater in the forestry sector (Figure 16). For example the percentage of forestry sector workers older than 55 years rose by 3.1 percentage points, compared with a rise of 2.5 percentage points in the total workforce. This overall finding may mask substantial differences in different parts of the industries. Similarly, the 'gender gap' is not closing in the forestry sector. Between 2006 and 2011 the percentage of females employed in the forestry sector declined slightly from 19.2 per cent to 18.7 per cent. This participation level remains lower than in the total Australian workforce, where female employment rose from 46.2 per cent to 46.8 per cent over the same period.

The proportion of Indigenous workers in the forestry sector increased from 1.3 per cent to 1.5 per cent nationally between 2006 and 2011, compared with an increase from 1.3 per cent to 1.4 per cent in the total workforce. In several regions, the proportion of Indigenous workers was substantially higher in the forestry sector compared with other industries—in particular in Northern Australia, where 7.5 per cent of the forestry sector workforce is Indigenous, compared with 5.7 per cent of the total workforce. Other regions with relatively higher Indigenous employment were South Coast New South Wales (3.0 per cent in forestry sector compared with 1.8 per cent in total workforce), Northern New South Wales (3.9 per cent compared with 2.6 per cent) and regional Tasmania (4.9 per cent compared with 3.4 per cent). In capital cities Indigenous employment rates were higher in the total workforce than in the forest sector.

Representation of people with a disability in the workforce is slightly higher in the forestry sector than the total workforce. Levels nationally were largely unchanged between 2006 and 2011, staying at about 0.8 per cent in the forestry sector and 0.6 per cent in the total workforce.

Social indicators at local and regional scales in this issue are based on statistical local area boundaries, used by ABS until the 2011 census. In subsequent issues of AFWPS, indicators will be updated and based on spatial units of the new Australian Statistical Geography Standard (ASGS). For full explanations of indicator calculations and limitations, see the accompanying tables and footnotes.

FIGURE 16 Australian age profile, female and Indigenous employment indicators, 2006 and 2011



Note: % is percentage of employed persons in industry category (forest sector or total workforce). Indigenous workers are those who identified themselves in the census as Aboriginal, Torres Strait Islander or both. Data taken from Table 70 of this publication.
Data source: ABS

References

Burns, K & Burke, B 2012, *ABARES National Wood Processing Survey: 2010–11*, ABARES research report 12.4, Canberra, June.

Dare, M & Schirmer, J 2012, *Western Australia's forest industry: trends in industry employment and turnover 2006–11*, Technical Report 22, CRC for Forestry, Hobart.

Schirmer, J 2012, *Assessment of the employment and economic consequences of change in access to Tasmania's publicly owned native forests: overview of methodology*, Appendix 2 to Socio-economic report of the Tasmanian Independent Verification Group, 26 February 2012.

Schirmer, J, Dunn, C, Loxton, E & Dare, M 2011, *Socio-economic impacts of forest industry change: a baseline study of the Tasmanian forest industry*, CRC for Forestry Technical Report 214: Interim report, CRC for Forestry, Hobart.

The 'Biosphere' graphic element

The biosphere is a key part of the department's visual identity. Individual biospheres are used to visually describe the diverse nature of the work we do as a department, in Australia and internationally.



**Australian Bureau of Agricultural and Resource
Economics and Sciences (ABARES)**

Postal address GPO Box 1563 Canberra ACT 2601
Switchboard +61 2 6272 2010
Facsimile +61 2 6272 2001
Email info.abares@daff.gov.au
Web daff.gov.au/abares



daff.gov.au/abares