



Department of Education, Employment and Workplace Relations (DEEWR) Submission to the Senate Inquiry into higher education and skills training to support future demand in agriculture and agribusiness in Australia.

The Australian Government and the Department of Education, Employment and Workplace Relations (DEEWR) are committed to supporting the future of agriculture and agribusiness which forms such a vital part of the Australian economy. The Government has many initiatives in place to try and ensure higher education, skills training, industry awareness and government research meets the future demand for agriculture and agribusiness in Australia.

Education

More than half of the workers in the agriculture, forestry and fishing industry do not hold post-school qualifications. A quarter of workers in the industry held vocational education and training qualifications at Certificate III or higher, while 10 per cent of workers held a bachelor degree or higher.

The Government has introduced a range of measures to inform, encourage and support students to consider education and careers related to agricultural science and related disciplines, and to improve access to higher education and vocational education and training for regional Australia.

One third of Australian universities offer places in agriculture-related courses at the undergraduate and postgraduate levels, with most universities offering related courses in business and science fields. Over the past decade, the number of Award completions in the broad field of Agriculture, Environmental and Related Studies has remained relatively stable with 3,561 graduates in 2001, compared to 3,009 graduates in 2010. This stability is due to increases in the number of graduates in the narrow field of Environmental Studies, while the number of graduates in the narrow fields of Agriculture, Fisheries Studies, Forestry Studies, and Horticulture and Viticulture has declined significantly. Table 1 provides DEEWR higher education statistics on the number of domestic students enrolled in, commencing and completing courses in agricultural, environmental and related studies.

The Australian Parliament recently passed the *Higher Education Support Amendment (Demand Driven Funding System and Other Measures) Bill 2011*, which introduces a demand driven funding system for undergraduate places at public universities. From 2012, public universities will no longer be limited by the Government in setting the number of places they can offer in a particular discipline. Instead, the Government will fund Commonwealth supported places for all undergraduate domestic students accepted into an eligible higher education course.



Under the demand driven funding system, higher education providers will decide how many places they will offer and in which disciplines in response to employer and student demand. Industries, such as agriculture, can work with schools, universities, and organisations like the Primary Industry Centre for Science Education (PICSE), to encourage students to undertake courses that meet the needs of the labour market. Currently, Agriculture units of study receive the highest rate of Government higher education funding (\$19,542 per Commonwealth supported place in 2011) through DEEWR's Commonwealth Grant Scheme.

The Primary Industries Education Foundation (PIEF) was established in 2008 and includes representatives from the education and training sector, agriculture sectors and government. PIEF provides national leadership and direction to raise awareness and promote primary industries in schools, including coordinating at a national level, the development and distribution of education information and resources.

The *Job Guide* is written and produced annually for national distribution to every Year 10 student. It has information on more than 500 jobs and provides advice about options regarding university study, vocational training and information about what employers are looking for. The cover of *Job Guide 2012* will feature agricultural themes in recognition of 2012 being the 'Australian Year of the Farmer' and rural related occupations will be highlighted in the book. The *Job Guide* is also available at: <http://www.jobguide.deewr.gov.au>.

DEEWR's annual *Australian Jobs* publication is distributed to all secondary schools, and it includes information about the labour market for the agriculture, forestry and fishing industry. The 2011 edition notes that over the five years to 2015-16, around 27 000 new jobs are expected to be created in the agriculture, forestry and fishing industry in Australia. It also highlights the fact that the agriculture, forestry and fishing industry is a major employer in regional Australia, accounting for around one in every three workers in some areas, and that there are many entry level and professional opportunities in the industry with sound employment prospects. *Australian Jobs* is available at www.deewr.gov.au/australianjobs.

The Government has announced its intention to develop a MyUniversity website by January 2012. The MyUniversity website will be an interactive, searchable website that will allow students to make an informed choice about what and where to study. The website will include a variety of information about Australian higher education providers including: courses; institutional profile information; student and staff statistics; and outcomes-based indicators such as results of student satisfaction surveys and graduate destination surveys.

The Government has committed \$690 million to regional higher education, training and research infrastructure through the Education Investment Fund (EIF), which provides further support to regional students, which in turn supports regional economic growth and wellbeing. The regional priorities round of the EIF will deliver \$500 million to support capital investment in projects in regional higher education and vocational education and training facilities.

In the 2010-11 Budget, the Government provided \$20 million for the establishment of the Rural Tertiary Hardship Fund. The Fund, which will operate until 30 June 2013, provides assistance to students aged under 25 years whose main place of residence is located in a rural or regional area and who face financial hardship in undertaking a course of higher education.

The Trade Training Centres (TTCs) in Schools Program is an important part of the Government's Education Revolution and demonstrates its commitment to the value of technical education in the curriculum of all Australian secondary schools. TTCs allow secondary students from years nine to 12 to access vocational education and training giving them a broader range of options so as to improve Year 12 retention rates and enhance pathways into vocational careers. TTCs are helping to address national skills shortages in traditional trades and emerging industries.

The National Centre for Vocational Education Research compiles extensive data on Vocational Education and Training (VET) enrolments and outcomes. For example, data on students in Agriculture, Environmental and Related Studies is summarised in Table 2. Further detail can be found through the *Australian vocational education and training statistics: students and courses 2010*, which is available at: <http://www.ncver.edu.au/publications/2383.html>. The data indicates that after declining in 2007, the number of students enrolled in VET courses in agriculture, environmental and related studies has since returned to 2006 levels nationally.

Table 1: Domestic students in higher education courses in the field of Agriculture, Environmental and Related Studies by: enrolment, commencement and completion¹

| Domestic Student: All Students enrolled | | | | | | | | | | |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Total(a) | 17,457 | 17,366 | 17,244 | 17,062 | 15,840 | 14,936 | 14,483 | 14,519 | 15,032 | 15,556 |

| Domestic Student: Commencing Students | | | | | | | | | | |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Total(a) | 6147 | 6244 | 6233 | 6170 | 5147 | 4873 | 5061 | 5275 | 5473 | 5615 |

| Domestic Student: Award course completions | | | | | | | | | | |
|--|------|------|------|------|------|------|------|------|------|------|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Total(a) | 3561 | 3473 | 3718 | 3493 | 3297 | 3117 | 2938 | 2861 | 2968 | 3009 |

(a) The data takes into account the coding of Combined Courses to two fields of education. As a consequence, counting both fields of education for Combined Courses means that the totals may be less than the sum of detailed fields of education.

Table 2: Students enrolled in VET courses in the field of Agriculture, Environmental and Related Studies²

| | Enrolments | | | | |
|------------------|------------|--------|--------|--------|--------|
| | 2006 | 2007 | 2008 | 2009 | 2010 |
| Australia | 77,400 | 70,600 | 71,000 | 71,000 | 77,200 |

¹ Department of Education, Employment and Workplaces Relations – Unistats: <http://www.highereducationstatistics.deewr.gov.au/> .

² National Centre for Vocational Education Research: <http://www.ncver.edu.au/publications/2383.html>

Skills

The Government will have an ongoing role in ensuring Australia's skill needs are met by the higher education system. Skills Australia's role has been expanded to advise the Government on the effectiveness of the higher education system in meeting skill needs.

Skills Australia is an independent statutory body, established in 2008 to provide advice to the Government on Australia's current, emerging and future workforce skills needs and workforce development needs. Its role has been expanded to advise the Government on the effectiveness of the higher education system in meeting these skill needs.

On 1 July 2012, Skills Australia will be replaced by a new National Workforce and Productivity Agency that was announced as part of the Building Australia's Future Workforce package in the 2011-12 Budget. The aim of the new Agency is to place industry at the centre of the National Training System. On 21 September 2011, the Minister for Tertiary Education, Skills and Workplace Relations announced that the Government would bring forward some of the work of the new agency as part of the Australian Government Skills Connect initiative. It was also announced that Peter Anderson (Chief Executive, Australian Chamber of Commerce and Industry) and Paul Howes (Secretary, Australian Workers Union), plus an expert economist, would join members of the Skills Australia Board to form the interim Board of the new Agency from October 2011. The Government has tasked the interim Agency Board with the key function of providing advice on funding priorities for industry assistance programs. The interim Agency Board met for the first time on 14 October 2011 to begin this work.

Once the Agency is fully established in July 2012, it will engage directly with industry on workforce development issues and address sectoral and regional industry needs. In particular, the Agency will:

- administer the new National Workforce Development Fund;
- conduct skills and workforce research, including into the quality of jobs and future working life in Australia;
- drive engagement between industry, training providers and government on workforce development, apprenticeships and VET reform;
- develop and monitor sectoral skills and workforce development plans in conjunction with Industry Skills Councils and industry;
- provide independent advice on sectoral and regional skills needs to support workforce planning and productivity, including in small business; and
- promote workforce productivity by leading initiatives for the improvement of productivity, management innovation and skills utilisation within Australian workplaces.

The National Workforce Development Fund assists individual enterprises to increase their workforce capacity by subsidising training for existing and new workers. The Fund will subsidise training for eligible qualifications from the Priority Occupations List including Certificate II, III, IV, Diploma, Advanced Diploma, Vocational Graduate Certificate and Vocational Graduate Diploma, and may also support the delivery of Training Package Skill Sets in some circumstances. Enterprises are required to make a contribution to the cost of training which is determined based on their size.

On 21 September, Senator the Hon Chris Evans, Minister for Tertiary Education, Skills, Jobs and Workplace Relations, announced Skills Connect, which aims to consolidate the Government's skills programs and better target industry and worker training. Skills Connect will allow industry to apply for funding with a whole-of-workforce proposal to meet current and emerging skills needs. Skills Connect will provide access to the following funding for industry this financial year:

- \$50 million through the National Workforce Development Fund (consolidated from the Critical Skills Investment Fund)
- \$29 million through the Accelerated Australian Apprenticeships Program
- \$15 million through the Mentoring Program
- \$15 million through the Workplace English Language and Literacy Program
- \$10 million through More Help for Mature Aged Workers
- \$2.5 million through Experience Plus training.

Skills Connect has been designed with employers in mind. There will be a single entry point to access information about a range of Government funding. Priorities for Skills Connect will be determined following advice from the interim Agency Board.

The Australian Government provides funding to eleven Industry Skills Councils and Auto Skills Australia Ltd to:

- actively support the development and continuous improvement of the high quality training packages and workforce development products and services. Training packages comprise nationally endorsed components for training and assessment for specific industries, industry sectors or enterprises that are used for developing and recognising people's competencies;
- engage in workforce development activities; and
- provide integrated industry advice to government, Skills Australia and enterprises on workforce development and skills needs.

Agrifood Skills Australia (ASA) is the Industry Skills Council covering the rural and related, food processing (including beverages, wine and pharmaceuticals), meat, seafood and racing industries. Funding of nearly \$14.9 million will be provided to ASA for the period 1 July 2011 to 30 June 2014 to undertake its Industry Skills Council role. ASA is utilising this funding to undertake several initiatives that seek to address training, skills and workforce development needs of their industry sectors, including in regional Australia. For example, over 30 Training Package continuous improvement projects (including seed production, performance horse management, indigenous land management, veterinarian nursing, meat retailing) to review standards and qualifications to meet industry skill needs will be undertaken during 2011-2013 and food processors sustainability seminars will be held in Western Australia and South Australia.

Industry Collaboration

Engaging with the agriculture and agribusiness sectors will be a vital part of increasing awareness about issues facing the industry such as labour shortages, skills gaps and the economic impacts.

The Government is investing \$19.1 million over three years to develop a more strategic approach to combating high unemployment in regions. The funding will be used by DEEWR to deploy 34 Regional Education, Skills and Jobs Coordinators (RESJCs) to regional communities to work with local stakeholders, including Regional Development Australia Committees to develop localised plans to improve productivity and participation in regional Australia. RESJCs will engage with local businesses, education and training providers, local and state government, government service providers and community organisations to link programs and projects to achieve maximum benefit and drive the Australian Government's regional education, skills and jobs agenda. The RESJCs will also endeavour to provide communities with greater understanding and awareness of the full range of DEEWR's programs, such as the Workforce Development Fund, the Rural Tertiary Hardship Fund and the range of support available through vocational education and training programs.

The Government has allocated \$45.2 million to extend the Priority Employment Area initiative to 2013, including \$20 million for a flexible funding pool to support new activities in 20 vulnerable areas across Australia. In each of these areas, a Local Employment Coordinator is deployed to work closely with employers, employment services and training providers, local communities and all levels of government to help drive local solutions to local labour market problems. Around 40 Jobs and Skills Expos will also be delivered across Australia to help connect job seekers with employment and training opportunities.

The Government has provided funding for individual projects to encourage better pathways and more information for students to participate in agricultural science. For example, funding of \$3.6 million over 2009—2011 was provided through the former Diversity and Structural Adjustment Fund to the Primary Industry Centre for Science Education (PICSE). PICSE has the goal of attracting students to ongoing science education and primary industry careers.

PICSE collaborates with universities, regional communities and local primary industries, to attract students into tertiary science and to increase the number of skilled professionals in agribusiness and research institutions. PICSE focuses on the sciences of agriculture, aquaculture, ecology, horticulture, fisheries, water security, sustainability, climate change and the environment. It currently has activity centres located in New South Wales, Queensland, South Australia, Western Australia and Tasmania. More information can be found at: <http://www.picse.net/HUB/index.htm>.

Research and Monitoring

DEEWR monitors the labour market for skilled occupations through its ongoing skill shortage research program. Results are published as occupational reports, skill shortage publications and as national, state and territory skill shortages lists on the department's website at www.deewr.gov.au/skillshortages. The focus of the research is on skilled occupations (that is, those which generally require at least three years post-school education and training), mainly professions and trades.

Within agriculture, the research program includes occupations such as agricultural scientist/consultant, agricultural technician and a range of horticulture and animal occupations including shearer and nurseryperson. The basis of the research is a survey of employers who have recently advertised vacancies to determine their success recruiting the skills they need. Where vacancies are not identified, employers are contacted to discuss their recruitment needs and difficulties. The research results for these occupations are for the national labour market and the States and Territories.

Survey results show national shortages have been persistent over recent years for agricultural scientists/consultants, and 2011 research confirms that employers experience significant difficulty recruiting these professionals. While, in general, employers experience less difficulty filling entry and graduate agricultural scientist/consultant positions, a number of employers commented that there are more jobs available than there are students graduating from agricultural degrees. As noted above, there has been a decline in the number of completions in agriculture related disciplines over the last decade.

The labour market for agricultural technicians is less clear, as the occupation includes a widely diverse range of tasks across a number of agricultural sectors making a single rating unhelpful, although it is notable that employers in some locations experience difficulty recruiting. Employers recruiting shearers in 2010-11 filled around 85 per cent of surveyed vacancies and attracted an average of around two suitable applicants per vacancy. Employer experiences varied somewhat from state to state due to seasonal differences but, in general, employers had little difficulty recruiting shearers.

Employer comments suggest there is no shortage of nurserypersons and that turnover is low within the industry with vacancies often filled via word of mouth rather than through traditional advertising. Employers also commented on the high retention rate of qualified nurserypersons. Employers also indicated a strong trend in internal training of staff to the level of a qualified nurseryperson which fulfils labour requirements.

Generally across the agricultural, animal and horticultural occupations, the research shows applicants who were considered by employers to be unsuitable did not have the level of qualification sought or lacked experience. In some trade occupations, employers also mentioned poor quality of work and lack of breadth of skills as reasons for applicants being considered to be unsuitable. Lack of farm and field experience (including harvest and sowing field trials) were the main reasons for agricultural scientist applicants being considered to be unsuitable.

The DEEWR careers and information website Job Outlook (www.joboutlook.gov.au) provides key employment information on trends, characteristics and prospects covering over 350 individual occupations. The industry search option allows users to search by industry category and selecting the agriculture, forestry and fishing industry offers quick access to detailed information on over 20 of the main employing occupations (covering a range of skill levels) within the agriculture, forestry and fishing industry. Job Outlook is updated annually.

The Labour Market Information Portal (LMIP) provides up to date labour market information at national, state, and regional levels. The LMIP offers key employment statistics for agriculture, forestry and fishing in Employment Service Areas (ESAs) including levels of full-time, part-time and gender employment for each region. The LMIP can be found on the DEEWR website at www.deewr.gov.au/lmip.

Looking forward, the 2011 Australian Jobs Report indicates that 373,600 people are employed in the agriculture, forestry and fishing industry across Australia. This is equivalent to 3 per cent of the total workforce. Over the five years to November 2010, employment in the industry rose by 24,900 (or 7.1%). Over the next five years, employment in the industry is expected to grow by 27,400 (or 7.3%).³

³ DEEWR, 2011 Australian Jobs report