

## Rural Skills—A Critical Issue

- 1.1 The need to maintain and enhance the skills of our rural workforce, our farmers and foresters and all who support them, is critical to the economic future of Australia. A skilled workforce, growing to meet the changing demands of rural industries, is vital for our international competitiveness. As Mr Guy Roth, CEO of the Cotton Catchment Communities Cooperative Research Centre, told the committee:

This is a very important issue that you are deliberating on. For the future of rural and regional Australia, the knowledge based economy is going to be very important. How are we going to stay competitive in the world market? Whether it is cotton, beef or whatever, we are going to have to further increase our yields to keep the profitability up. We are going to have to compete with Brazil and China and countries like that. One of the main ways we are going to be able to do that is through innovation, science, research and R&D. We need to put the farmers together. They are great innovators themselves. It has an outcome for the nation and really that is why we have to keep our foot on the accelerator.<sup>1</sup>

- 1.2 Rural industries are currently facing a skills shortage and skills gap as a result of a number of complex and inter-related issues.<sup>2</sup> A report on

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1 Mr Guy Roth, *Transcript of Evidence*, 9 March 2006, p. 21.

2 AFISC, *Industry Skills Report*, June 2005; National Farmers' Federation, *Labour Shortage Action Plan*, 21 September 2005; Rural Industry Working Group, 2001, *Skills needs now and in the future in the rural industry*, p. 9; DEST, *Industry Skills Report*, May 2006; Legislative Council Standing Committee on State Development, *Inquiry into skills shortages in rural and regional NSW*, Legislative Council of New South Wales, May 2006.

the nature and causes of skill shortages released by the Department of Education, Science and Training (DEST) in 2002 stated:

There is an ongoing need for replacement and improvement in the skill base because of the age and gender profile of the workforce, poor technology uptake and a range of education and training needs. It is also important to improve overall career paths and industry appeal.<sup>3</sup>

- 1.3 In addition to the significant and growing shortage of skilled and unskilled people, there are difficulties attracting and retaining young people, and training opportunities are reportedly inadequate and/or hard to access.<sup>4</sup> For instance, the range of jobs available, the quality of skills training and educational opportunities, and pay and conditions in rural and regional areas, are not as attractive as those in cities.<sup>5</sup>
- 1.4 Furthermore, in its report *Australia's farmers: past, present and future*, Land & Water Australia noted that the peak of retirement of the 'baby boomer' generation will occur between 2010 and 2015. This will have a significant impact on the structure of the Australian labour market. The report concluded:
- Demand for labour will remain relatively constant, while labour supply will slow and eventually decrease as a result of declining fertility driven by changing social values...The resulting shortage of labour will mean agriculture will need to compete against improving employment prospects for younger members of farm families.<sup>6</sup>
- 1.5 The seasonal nature of many agricultural industries, and the effect on social security entitlements of casual work, can also contribute to labour shortages in agriculture. This suggests the need for workers who are multi-skilled in a range of seasonal agricultural work, but may also require restructuring of work opportunities. In its 2002 report on the nature and causes of skill shortages, DEST noted that 'solutions to labour shortages in the industry cannot be separated from initiatives to improve career and occupational pathways'.<sup>7</sup>

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3 DEST, *Nature and Causes of Skill Shortages: Reflections from the Commonwealth National Industry Skills Initiatives Working Groups*, November 2002, p. 14.

4 AFISC, Submission no. 105, p. 3.

5 AFISC, Submission no. 105, p. 4.

6 Land & Water Australia, *Australia's farmers: past, present and future*, June 2005, pp. 33–4.

7 DEST, *Nature and Causes of Skill Shortages: Reflections from the Commonwealth National Industry Skills Initiatives Working Groups*, November 2002, p. 15.

- 1.6 Agriculture is continuing to change and is becoming more challenging. In its submission, the South Australian Division of the Australian Institute of Agricultural Science and Technology noted:

Commercial agriculture has become a more intellectually demanding management pursuit in technical, financial, environmental and social terms. New technologies require an appreciation of the background scientific principles for adoption, and a greater capacity to analyse the financial implications and risks.<sup>8</sup>

- 1.7 In its submission, the Agri-Food Industry Skills Council (AFISC) indicated that the future growth and viability of Australia's agriculture industries depends on a skilled and responsive workforce, the ability to attract and retain people, and the availability of better employment and training options in rural and regional Australia.<sup>9</sup>

## The agricultural workforce

- 1.8 Over the last few decades Australia's agricultural sector has been significantly affected by technological advances and innovation as well as changes in consumer demand, the impact of government policies, emerging environmental concerns, and trends in the terms of trade.<sup>10</sup> Within agriculture, there have been many changes with a trend towards fewer but larger farms, and a decline in the area of land in agricultural production.<sup>11</sup>
- 1.9 Despite the changes of recent decades, agriculture remains an important employer in rural and regional Australia and creates significant demand for training and education services in non-metropolitan areas. In 2001, agriculture accounted for almost 14 per cent of non-metropolitan employment,<sup>12</sup> spread across several sectors (see Table 1.1).

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8 South Australian Division of the Australian Institute of Agricultural Science and Technology, Submission no. 111, p. 2.

9 AFISC, Submission no. 105, p. 8.

10 Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, p. xvii.

11 Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, p. xxii. The decline in farm numbers in the last two decades to 2002-03 is about 25 per cent.

12 Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, p. 91.

Table 1.1 Agriculture employment, 2003-04\*

Industry/sector	Number employed 2003-04	Proportion of agriculture's workforce
	<i>'000 persons</i>	<i>%</i>
Agriculture	320	85.5
Horticulture and fruit growing	95	25.3
Grain, sheep and beef cattle	166	44.0
Dairy cattle	20	5.3
Poultry	10	2.6
Other livestock	10	2.7
Other crops	11	2.9
Services to agriculture	25	6.7
Forestry and logging	12	3.2
Commercial fishing	16	4.2
<b>Agriculture, Forestry and Fishing</b>	<b>375</b>	<b>100</b>

\* Employment data based on the average of the four consecutive quarters between August and May.

Source Productivity Commission, 2005, *Trends in Australian Agriculture, Research Paper, p. 88.*  
From ABS (Cat no. 6291.0.55.001)

1.10 The agricultural workforce has a number of distinctive features, including:

- a high proportion of self-employed, family and casual workers;
- long job tenure;
- a relatively old workforce;
- a high proportion of men to women;
- a low incidence of post-school qualifications; and
- low employee wages.<sup>13</sup>

1.11 According to the Productivity Commission, many of these features arise from the continuing dominance of family operated businesses. Specifically, 99 per cent of Australian farms are family owned and

13 AFISC, Submission no. 105, p. 6; Productivity Commission, 2005, *Trends in Australian Agriculture, Research Paper, p. xxxv.*

According to the Productivity Commission, the proportion of the agriculture workforce without post-school qualifications is around 20 percentage points higher than for the workforce generally, while for university training it is more than three times lower than that for the workforce in general.

In 2003, median weekly earnings for full-time paid employees in agriculture were around one third lower than those for all full-time employees, making agriculture workers the lowest paid workers in the economy on average.

- operated,<sup>14</sup> and the agricultural sector makes the greatest use of family labour.<sup>15</sup> This characteristic provides flexibility in the use of labour in terms of hours worked and engagement in off-farm work.<sup>16</sup>
- 1.12 The last 20 years have seen a decline in the proportion of employers, own account workers and contributing family workers employed in agriculture, and an increase in the proportion of employees. This can be partly explained by the trend towards larger farm sizes. However, demographic changes and other influences, such as more family members working off-farm, have also reduced the supply of family labour and increased the need for hired labour.<sup>17</sup>
- 1.13 The agriculture workforce is older than the Australian workforce in general, and the median age of farmers has increased significantly in the last two decades from 47 in 1986 to 51 years in 2001.<sup>18</sup> The findings of Land & Water Australia's report, *Australia's farmers: past, present and future*, suggest that the average age for farmers will continue to increase 'for at most another decade before a gentle decline commences'.<sup>19</sup> The combination of the ageing of the agriculture workforce with other trends, like the population drift away from rural areas, 'will make maintaining current employment levels a difficult task'.<sup>20</sup>
- 1.14 The factors contributing to the ageing of the agricultural workforce reflect that of the ageing of the Australian population in general, as well as the trend of fewer young people entering farming, and low exit rates at traditional retirement age.<sup>21</sup>
- 1.15 The position of women in the rural workforce has also undergone change. The female participation rate in agricultural industries has increased proportionately in the last two decades, rising from 26 to 31 per cent (women employed in full-time agriculture increasing from 12

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14 Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, p. xxxv.

15 Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, p. 99.

16 Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, p. xxxv.

17 Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, p. xxxvii.

18 ABS, 2003, *Living arrangements: Farming families*, 4102.0-Australian Social Trends, 2003, [www.abs.gov.au](http://www.abs.gov.au)

19 Land & Water Australia, *Australia's farmers: past, present and future*, June 2005, p. 24.

20 Rural Skills Australia, Submission no. 71, p. 9.

21 Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, p. xxxvii.

to 15 per cent, while those in part-time employment increased from 14 to 16 per cent).<sup>22</sup>

- 1.16 Despite this, between 1971 and 2001 there was a steady decline in the number of *young* women (aged 20–34) entering agriculture. Specifically, between 1996 and 2001 the number of young women entering agriculture was 70 per cent less than the number entering between 1971 and 1976. Furthermore, the rate of decline in entries of women is approximately double that of men.<sup>23</sup> In her submission, Dr Sandra Welsman observed that ‘across Australia regions have long reported the exodus of youth, especially young women who cannot find interesting, continuing work. They are followed by capable young men’.<sup>24</sup>
- 1.17 *Australia’s farmers: past, present and future* indicated that the ‘changing social role of women and increased expectations of education participation have permanently shifted patterns of entry to farming and retirement from farming’.<sup>25</sup> Moreover, ‘Fewer and fewer farm women identify with the traditional role of “farmer’s wife” and increasingly are likely to identify as a joint farm manager’ or are employed in professions outside rural industry.<sup>26</sup>
- 1.18 Off-farm employment has become increasingly important in maintaining family farm incomes. Women are ‘more likely than men to work off-farm’.<sup>27</sup> A 2005 Productivity Commission research paper, *Trends in Australian Agriculture*, stated that:

Between 1989–90 and 2002–03, the proportion of farm families deriving income from off-farm wages and salary increased from 30 to 45 per cent and average earnings from such

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22 Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, p. 102; Land & Water Australia, *Australia’s farmers: past, present and future*, June 2005, p. 33.

23 Land & Water Australia, *Australia’s farmers: past, present and future*, June 2005, pp. 1, 10–11.

24 Dr Sandra Welsman, Submission no. 12, p. 1. See also Dr Sandra Welsman, *Transcript of Evidence*, 7 September 2005, pp. 4–5.

25 Land & Water Australia, *Australia’s farmers: past, present and future*, June 2005, p. 31.

26 Land & Water Australia, *Australia’s farmers: past, present and future*, June 2005, p. 33; See also Rural Industry Working Group, 2001, *Skills needs now and in the future in the rural industry*, p. 21.

27 Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, pp. xxxvii–xxxviii; Rural Industry Working Group, 2001, *Skills needs now and in the future in the rural industry*, pp. 18, 21.

sources more than doubled, in real terms, rising from \$15 000 to \$33 500 per year.<sup>28</sup>

1.19 Other factors have also contributed to changes in the agricultural workforce. Periodic droughts have a substantial impact on agricultural output, with flow-on effects for employment. The Productivity Commission's *Trends in Australian Agriculture* states that the 2002–03 drought saw the loss of around 70 000 agricultural jobs, or a decline of around 15 per cent. This represents the largest employment shock since reliable statistics became available.<sup>29</sup>

## Education and training of the rural workforce

1.20 The agricultural workforce has a low incidence of post-school qualifications. Specifically, while the proportion of the agricultural workforce without post-school qualifications is around 20 per cent higher than for the workforce generally, university training is more than three times lower than that for the workforce generally (see Table 1.2).<sup>30</sup>

Table 1.2 Educational attainment in the Australian workforce, 1984, 1994, and 2004 (per cent)

Sector	University degree			Other post-school qualifications*			Without post-school qualifications		
	1984	1994	2004	1984	1994	2004	1984	1994	2004
<b>Agriculture, forestry and fishing</b>	<b>2.3</b>	<b>4.5</b>	<b>6.8</b>	<b>23.8</b>	<b>23.8</b>	<b>31.4</b>	<b>73.1</b>	<b>70.0</b>	<b>61.0</b>
Mining	8.1	14.4	17.3	44.8	35.8	46.7	47.1	49.8	35.3
Manufacturing	4.5	7.2	13.1	35.0	36.7	40.3	60.2	55.5	45.8
Services	11.7	16.5	24.3	35.5	32.5	34.1	51.1	48.4	40.7
Total	9.6	14.6	22.4	34.5	32.7	34.9	54.5	50.4	41.9

\* Other post-school qualifications include vocational training and all other non-university diplomas and certificates.

Source Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, p. 106. From ABS (Cat no. 6227.0) and unpublished ABS data.

1.21 Despite the low base of educational qualifications, there has been a strong growth in educational attainment in the agricultural workforce. As Table 1.2 indicates, post-school qualifications gained

28 Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, p. 87.

29 Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, pp. xxi, 87. In comparison, both the 1982–83 and 1994–95 droughts resulted in job losses of around 6000, or a decline of about one per cent.

30 Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, p. 106.

through vocational education and training rather than university is highly significant.<sup>31</sup> On the other hand, as AFISC noted in its submission, 'the number of VET students in agrifood-related courses decreased overall by 3% between 1998 and 2003'.<sup>32</sup>

- 1.22 These features of the agricultural workforce have implications for the policies and programs that can be developed to deliver training and development to improve productivity. There is a need to ensure skilled labour is available for rural enterprises as well as small scale businesses and family farms. In some respects the needs of family farms are similar to the needs of small business.<sup>33</sup> As the Queensland Rural Industries Training Council noted in its submission, these needs must be considered in the design and delivery of education and training packages:

Like many small businesses, the operators of rural enterprises tend to see training needs in terms of their personal needs rather than industry needs.<sup>34</sup>

- 1.23 Long term solutions will require a national integrated approach by governments and industry to ensure effective change in the attraction and retention of a skilled workforce to meet the demands of rural industries.<sup>35</sup> Moreover, skills development cannot be considered in isolation but as a critical driver of an integrated regional development and growth strategy.<sup>36</sup>

## Rural Skills Data

- 1.24 Addressing the specific skills needs of rural industries will also require the collection of comprehensive and consistent national data. The committee is concerned that the allocation of government resources to address Australia's skills shortages may not be either sufficient or appropriately targeted due to the inadequacy of current data collection and analysis.
- 1.25 The Department of Employment and Workplace Relations (DEWR) is the Australian government agency with prime portfolio responsibility

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31 Productivity Commission, 2005, *Trends in Australian Agriculture*, Research Paper, p. 106.

32 AFISC, Submission no. 105, p. 6.

33 Rural Industry Working Group, 2001, *Skills needs now and in the future in the rural industry*, p. 25.

34 Queensland Rural Industries Training Council, Submission no. 28, p. 5.

35 AFISC, *Industry Skills Report*, June 2005, p. 2.

36 AFISC, *Industry Skills Report*, June 2005, p. 9.

for monitoring skills in demand. Skills shortage assessments cover selected trades, professions, and information and communication technology skills, and result in the production of the ‘Skills in Demand List’. However, not all industries and occupations are covered.

- 1.26 The Government of Western Australia, in its submission to the committee, referred to the lack of data on rural industries and the shortcomings of the DEWR approach:

Some preliminary research to identify ‘official’ indicators of skills shortages within the sector of primary industries in Western Australia has revealed that there is limited reliable data available, both at a State and National level. The explanation seems in part to be that the Commonwealth Departments of Employment and Workplace Relations (DEWR) and Education, Science and Training (DEST) do not pick up on skills shortage in primary industries.<sup>37</sup>

- 1.27 The Government of Western Australia stated that the ‘reasoning given is that as employment in these industries is seasonal and because not enough workers hold post compulsory qualifications monitoring cannot be justified’.<sup>38</sup>

- 1.28 This lack of data is regarded by the Government of Western Australia to be ‘an obvious impediment to developing a clear understanding of training needs in the sector’.<sup>39</sup> In evidence before the committee, Mr Bruce Thorpe, of the Western Australian Department of Agriculture, stated:

...there does not seem to be a good process in place to capture data that is relevant for people to make the strategic decisions and investments that are needed to deal with the problem.<sup>40</sup>

- 1.29 A New South Wales parliamentary committee recently reported that the evidence it had seen clearly showed extensive skills shortages in rural and regional NSW across almost all sectors of the economy including agriculture sectors. However, the lack of data made it difficult to assess the problem:

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37 Government of Western Australia, Submission no. 19, pp. 1–2.

38 Government of Western Australia, Submission no. 19, p. 2.

39 Government of Western Australia, Submission no. 19, p. 2.

40 Mr Bruce Thorpe, *Transcript of Evidence*, 20 July 2005, p. 23.

...while the existence of the skills shortage is clear, its extent is largely unknown, due to the haphazard or anecdotal nature of the data. What detailed evidence is available is due largely to locally conducted skills audits, often initiated by RDBs, ACCs or local councils. The DEWR Skills Shortages Survey does not provide comprehensive, disaggregated information to show the extent of the skills shortages at a local or regional level.<sup>41</sup>

1.30 The need for better information was considered by the Senate Employment, Workplace Relations and Education References Committee, which recommended in 2003 that:

The Commonwealth, in conjunction with state and territory governments, develops a new, integrated, nationally consistent approach to the collection and reporting of the complete range of statistical information on the labour market and current and future skill needs. This would entail:

- agreement between all stakeholders on the relevant indicators of skill supply and demand, including underlying drivers, and consistent collection approaches;
- inclusion of information on skill shortages and regional labour markets; and
- inclusion of information on the skill needs of major resource and construction projects, from the earliest possible stage.

The National Centre for Vocational Education Research (NCVER) should be tasked with:

- facilitating this process in consultation with relevant Commonwealth agencies, state and territory governments, the Australian National Training Authority (ANTA) and industry, through industry skill councils; and
- developing a national database for recording the information and for permitting analysis of key trends, to be accessible to stakeholders and to the general public.

Updated information should also be continuously available through a website and disseminated in an annual report on the status of skill formation in Australia.<sup>42</sup>

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41 Legislative Council Standing Committee on State Development, *Inquiry into skills shortages in rural and regional NSW*, Legislative Council of New South Wales, May 2006, p. 32.

42 Senate Employment, Workplace Relations and Education References Committee, *Bridging the skills divide*, Commonwealth of Australia, November 2003, pp. 38–9.

- 1.31 This committee notes that three years later the Government is still to respond to the Senate committee report.
- 1.32 The DEWR 'Skills in Demand List' is not the only source of data available to governments. AFISC completed a national skills report in early 2005 following Australia-wide consultations with industry, enterprises, and government agencies. Specific skills shortages were identified across rural sectors including general farming, meat processing, the seafood industry, food processing and racing.<sup>43</sup>
- 1.33 The Department of Agriculture, Fisheries and Forestry (DAFF) advised the committee that it uses industry skills audits when reviewing and developing its programmes. This includes, for example, the review of skills and workforce issues identified in the AFISC Report.<sup>44</sup>

## Committee Conclusions

- 1.34 The committee believes that governments need to adopt a leadership role in identifying the priorities for the allocation of education and research resources according to skill demand and priority areas. To do so, it is necessary for governments to have comprehensive and consistent national data concerning skills shortages across the labour market and education and training services.
- 1.35 The collection and analysis of such data is essential to the development of appropriate policies and programs to address skills shortages from the local to national levels, and across industries and occupations. As the National Association of Forest Industries advised in relation to their industry, the collection of better data is a necessary first step:
- As a first step, an audit of the wood and paper products industry's current and projected future skills requirements is essential to the development of a strategy to address skills shortages in the industry. The current level of knowledge about the industry workforce is grossly inadequate.<sup>45</sup>
- 1.36 The work of groups such as AFISC is an important contribution, but the committee notes the central significance accorded the DEWR 'Skills in Demand List'. The committee also notes the concerns raised

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43 DEST, Submission no. 116, pp. 4-5; AFISC, *Industry Skills Report*, June 2005.

44 DAFF, Submission no. 115, p. 1.

45 National Association of Forest Industries, Submission no. 103, p. 7.

by the New South Wales Parliamentary Committee on State Development; and the committee agrees with the approach proposed by the Senate committee where it calls for the development of a new approach to the collection and reporting of the complete range of current and future skill needs. It is vitally important that this involve an industry by industry review for all rural sectors and an assessment of all levels of skills.

### Recommendation 1

- 1.37 **The committee recommends that the Australian Government consult with the states, territories and industry bodies to review and revise its Skills in Demand List survey so that it more accurately and comprehensively identifies the labour and skills needs at all levels in all sectors of agriculture and forestry, and that the Skills in Demand List be subject to annual review.**

## Getting people in—changing perceptions of agriculture

- 1.38 Training people in rural skills is vital, but the people have to be there to train. As Mr Arthur Blewitt, CEO of the Agri-Food Industry Skills Council, told the committee, 'worrying about skills is not terribly relevant unless you have people out there who want to work in those areas'.<sup>46</sup> Or as Mr Graham Truscott, General Manager of the Australian Beef Industry Foundation, put it, 'there is a people shortage first and a skills shortage second in the industry'.<sup>47</sup>
- 1.39 One of the critical issues facing Australian agriculture and forestry is convincing people that there are worthwhile careers to be had in those industries. Mr Julian Breheny, a research officer with the Western Australian Farmers Federation, noted that agriculture 'is seen as a sunset career or sunset industry',<sup>48</sup> while Dr Walter Cox, Chairman of the Board, Agricultural Research Western Australia,

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46 Mr Arthur Blewitt, *Transcript of Evidence*, 29 March 2006, pp. 1–2.

47 Mr Graham Truscott, *Transcript of Evidence*, 10 March 2006, p. 26.

48 Mr Julian Breheny, *Transcript of Evidence*, 20 July 2005, p. 8.

stated: 'Currently, agriculture is seen as a second-class career rather than as a first-choice career'.<sup>49</sup>

- 1.40 Part of the problem, as Mr Bruce Thorpe (Western Australian Department of Agriculture) explained, is the perception that agriculture is an industry beset by never-ending problems, such as drought, with the media focus being on casualties rather than success stories.<sup>50</sup> Mr Wayne Cornish, Chair of Rural Skills Australia, noted that industry itself was somewhat to blame for that:

I have to say that industry works very hard on not portraying a very attractive profile, to be frank, so it is somewhat understandable that careers advisers perhaps are not breaking their necks to recommend careers in agriculture and horticulture to young people when the industry itself says the things about itself that it does. That needs to be corrected, and some of us are working on that at the moment.<sup>51</sup>

- 1.41 For the forestry industry, the battle is over the perception that forestry is environmentally damaging and unsustainable. Dr Glen Kile, Executive Director of the Forest and Wood Products Research and Development Corporation, told the committee:

Even today, despite native forestry essentially being reduced to a cottage industry on mainland Australia, you will still see a lot of denigrating comments about forestry and forestry practices. Every artist and entertainer seems to believe it is their right to have a free kick about forestry, which does not help. These things get absorbed into the popular view of things of the world, and all native forestry tends to get equated with deforestation or logging of old growth and these sorts of images are created. That makes it less attractive for people to think about the industry. At those young ages when they are starting to make career decisions, they see forestry being associated with unsustainable practices and things, when actually the opposite is true. There is potential for government to help set a more positive image for that. Unfortunately, native forestry still tends to be a political football at both state and federal levels, as we have seen over

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49 Dr Walter Cox, *Transcript of Evidence*, 20 July 2005, p. 14.

50 Mr Bruce Thorpe, *Transcript of Evidence*, 20 July 2005, p. 24.

51 Mr Wayne Cornish, *Transcript of Evidence*, 10 August 2005, p. 4.

the last four or five years in New South Wales and other states.<sup>52</sup>

- 1.42 Another aspect of the problem was that young people, even those from rural backgrounds, no longer saw their future in agriculture. As Mr Bill Hamill, CEO of Rural Industries Skill Training (RIST), told the committee, most of them want to get off the farm:

I addressed a group of year 9s last year at Hawkesdale – you know where Hawkesdale is – and there were 150 year 9 students who came from all the little schools in the south-west of Victoria. Hawkesdale, for the committee's information, is right in the middle of a primary industries area. It is a little school, but it is surrounded by others, and they all came in for a year 9 vocational education day. I addressed them and asked, 'How many of you are going to pursue agriculture as a career in the future?' I asked in a nice way – I did not say it in those terms – and one hand went up out of 150 students. I said, 'Come on' – joke, joke – 'this is not right.' One hand stayed up. Then we had them in smaller groups, and I asked them in smaller groups. That one hand was still the only hand, because they all wanted to get away, they did not want to live the lives their mothers and fathers lived and all the different reasons. It was a frightening experience, because there was a group of people of whom you would think at least 20 or 30 per cent would want to go back on the farm, but, no, they want to get away.<sup>53</sup>

- 1.43 Two broad solutions were offered to address the image problem suffered by agriculture and forestry – to correct misconceptions within the broader community about the problems and prospects facing those industries; and to raise the profile of agriculture and forestry in schools, starting in primary school.
- 1.44 Correcting the image of agriculture within the wider community was seen as problematic. As Dr Peter Sale, Associate Professor of Agricultural Science at La Trobe University, explained, the mainstream media had little interest in good news stories, and getting funding to spread the word was difficult:

Let us face it, the free press are not going to do it. The press will not tell that positive story. There has to be intervention, I

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52 Dr Glen Kile, *Transcript of Evidence*, 14 November 2005, pp. 3–4.

53 Mr Bill Hamill, *Transcript of Evidence*, 8 February 2006, p. 13.

think, to get the balance because the system will not do it unassisted. We tried two years ago to get funding for a program to document about six to eight real success stories in the rural sector. We were going to use it for the Australian Institute of Agricultural Science and Technology. We were going to beam it across Australia and it was going to be a webcast type device. It was going to spread the word. It was going to let the world know that some exciting things are happening out there and there are some positive things. It is not just doom and gloom. That particular program was not funded, and a second attempt did not fund it. I think we have to get some intervention, otherwise we will just get the one-sided fairly negative story coming across.<sup>54</sup>

- 1.45 Professor Roger Swift, Executive Dean, Faculty of Natural Resources, Agriculture and Veterinary Science at the University of Queensland, also saw problems and the need to find a solution through promoting positive stories with the support of government:

We do not see the go-ahead images of an industry that is thriving. The beef industry is thriving. There are areas in fruit – the sugar industry happens to be thriving at the moment – but you seldom get that. I believe that there is an opportunity for an advertising campaign, not run by government but by AgForce or NFF, and perhaps with support from government funds, to actually talk about the range of job opportunities that might be in Rabobank in a city, not just sitting on the back of a tractor. There is a wide range of opportunities in a very wide range of industries, and many of them with potential to travel overseas.<sup>55</sup>

- 1.46 In evidence before the committee, Mr Colin Cook, South Australian Representative of the Australian Agriculture Training Providers Network, recommended ‘that the government considers a strong national promotion of the role of agriculture to school students’,<sup>56</sup> a call echoed by others. Mr Graeme Harris, vocational education teacher at Farrer Memorial Agricultural High School, stated:

Government has to get the message across that to be involved in agriculture research is a worthwhile, lifelong opportunity. People who attend university and get a degree in agriculture

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54 Dr Peter Sale, *Transcript of Evidence*, 14 November 2005, pp. 48–9.

55 Prof. Roger Swift, *Transcript of Evidence*, 24 May 2006, p. 3.

56 Mr Colin Cook, *Transcript of Evidence*, 14 November 2005, p. 80.

have the potential to earn significant salaries and have a very worthwhile and gainful life.<sup>57</sup>

- 1.47 Mr Hamill emphasised the need to address student perceptions at primary school, because 'by the time you get to years 11 and 12 you have probably got a preconceived view that agriculture is not a way to go. Very few people are going to quickly change their minds in year 11'.<sup>58</sup> He told the committee:

Agriculture is not farming. Agriculture is a dynamic industry, and there are a lot of career paths you can take from agriculture. So we have to address that – and not at year 12 or at university. We have to address it at year 5 and those lower levels by saying: 'This is an industry where you have a future. You can go forward. You can do it.' We have talked to the VFF et cetera about who is going to do it. Everyone keeps saying: 'They'll do it. They should do it.' But who is going to address this change of attitude in the young in the areas of schooling?<sup>59</sup>

- 1.48 One obstacle to overcome was the pervasive attitude in schools and communities that agriculture was for less able students. The committee heard that the current education and training system was in part responsible for the 'dumbing down' of agriculture. For instance, Rural Industries Skill Training stated in its submission:

The impact of the attitude within the school system that those wishing to pursue a skilled trade in agriculture are not intelligent enough to undertake higher education is self fulfilling. Farmers are complaining that skilled farm workers or young people who are capable of being skilled are in very short supply. The people that they are forced to take are not motivated because they see this as a last resort employment opportunity or they have limited intellectual capability which limits their potential to become skilled.<sup>60</sup>

- 1.49 Likewise, in his evidence before the committee Mr Hamill noted:

The key reason for the skills shortage in agriculture generally – and there is a general skills shortage right across Australia in a lot of industries – is the perception of

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57 Mr Graeme Harris, *Transcript of Evidence*, 9 March 2006, p. 9.

58 Mr Bill Hamill, *Transcript of Evidence*, 8 February 2006, p. 5.

59 Mr Bill Hamill, *Transcript of Evidence*, 8 February 2006, p. 2.

60 Rural Industries Skill Training, Submission no. 29, pp. 4-5.

agriculture as a blue-collar, non-skilled industry. This is one of the critical areas. It starts at schools. Many schools now have done away with agriculture in their curriculum and there are a lot fewer schools now offering it. I will just use the example of our Western District, which is the hub of what was probably the biggest wool-growing area in Australia. It is a rural area. I find consistently that, when children are not doing well at school, teachers and other people say: 'You're not doing well at school; go back on the farm.' That is a common statement that is made. I do not think it is only in our area; I am sure it is right across Australia. That gives the perception that, if you are not bright academically and you are not doing too well, you should go back on the farm.<sup>61</sup>

- 1.50 Another obstacle was the attitude of school careers advisors. Mr Simon Livingstone, the Principal of Marcus Oldham College, had found that 'careers councillors in many of the schools are pretty negative about agriculture'.<sup>62</sup> Mrs Sheila Thompson, Chair of the Queensland Rural Industry Training Council, expressed the view that many careers advisors were simply ignorant of agriculture:

I believe that quite often careers advisers just do not know enough about our particular industries and career paths. I am a bit different in my industry, which is nurseries, as I mentioned, from Mike's, which is cotton, because there is a career path and you can see where you are going – if you are in horticulture – but with agriculture it is a bit different. There needs to be a tremendous amount of educating of careers advisers across the board in Queensland so that we promote agriculture, horticulture and animal care et cetera as being very worthwhile careers – as you say, 'dumbing up'. We need to speak it up and speak positively at all times about our industries, because they are tremendous.<sup>63</sup>

## Committee Conclusions

- 1.51 The committee is deeply concerned about the negative perceptions surrounding Australia's agriculture and forestry industries and the negative impact these perceptions are having upon the rural workforce. The committee feels that it is time to redress the balance

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61 Mr Bill Hamill, *Transcript of Evidence*, 8 February 2006, p. 2.

62 Mr Simon Livingstone, *Transcript of Evidence*, 15 November 2005, p. 8.

63 Mrs Sheila Thompson, *Transcript of Evidence*, 10 April 2006, p. 20.

and put a positive image of these industries before the public. This is certainly a job for the industries involved, and one they must take up. In this vein, the committee notes the first recommendation of the National Farmers' Federation *Labour Shortage Action Plan*.<sup>64</sup> It is also a job for government, to ensure that our agriculture and forestry industries remain viable well into the future.

- 1.52 It is also important that school children, our future workforce, be given every opportunity to understand the role of agriculture and forestry in Australian society, and be given the opportunity to make an informed assessment of the desirability of agriculture and forestry as career prospects. The career opportunities are there if people know to take them.
- 1.53 Industry, schools, careers advisors and governments all have a role to play in promoting agriculture and forestry in schools. The committee is aware of DAFF involvement in 'promoting agriculture to schools as an alternative, viable science based education';<sup>65</sup> and the Australian Government's Career Advice Australia initiative, aimed at enhancing the quality and availability of careers counselling.<sup>66</sup> The committee is also aware of programs and initiatives organised at the State level, such as LandLearn in Victoria and AgAware in Queensland, to promote knowledge of agriculture in schools. Yet, there is no coordinated strategy at a national level specifically targeting agriculture and forestry in schools.
- 1.54 A national strategy is required to promote agriculture and forestry in schools. It needs to begin at primary school, educating children on the role of those industries in society and giving them an understanding of the roles they may play within those industries. As part of this process, children need to be given hands on experience of working with animals and plants in a productive environment, whether through farm visits or school farms. Similarly, secondary students need to be targeted with information which gives them an understanding of these industries and the career prospects that await them. Opportunities for hands on experience are vital.

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64 National Farmers' Federation, *Labour Shortage Action Plan*, 21 September 2005, p. 11.

65 Mr Ian Thompson, DAFF, *Transcript of Evidence*, 9 August 2006, pp. 6, 14.

66 Mr Ben Johnson, DEST, *Transcript of Evidence*, 16 August 2006, p. 2.

## Recommendation 2

- 1.55 **The committee recommends that the Australian Government, in conjunction with State and Territory Governments and industry, formulate a national strategy for promoting the role of agriculture and forestry within Australian society, and the diverse career opportunities available within those industries.**

## Recommendation 3

- 1.56 **The committee recommends that the Australian Government, in conjunction with State and Territory Governments and industry, develop a national strategy for promoting agriculture and forestry in both primary and secondary schools.**

## Holding on to people—making better use of what we've got

- 1.57 In a tight labour market, getting people into rural industries is only part of the story. We must also make better use of the resources available – expanding the role of women; making better use of the knowledge and experience of older workers and even retirees; coordinating the pool of available labour better; and making better use of information and communication technology (ICT).

## Women in agriculture

- 1.58 The committee notes that the importance of women in Australian agriculture is gaining greater recognition. The increasing significance of women's role was highlighted in the evidence of Ms Jillian Condell, a consultant with Conservation Farmers Inc. (CFI), who brought to the committee's attention the result of a survey conducted by CFI:

We did a survey of 40 women in this region – the partners of grain growers – and we discovered quite a number of very interesting facts. It was conducted under the CFI auspice and funded by the Grain Research and Development Corporation's Partners in Grain project. The overwhelming information that we got back was that a large majority of

women did the books and marketed the grain and the men exclusively grew the grain. There was quite a division in the labour that people do. There were some exceptions and they tended to be organisations – for instance, where a number of families were farming together. Often a mother or someone else would have responsibility for the business and there were daughters-in-law and so on who did not have that role. But overall the women largely had that role.<sup>67</sup>

- 1.59 Ms Wendy Newman, from the Western Australian Technology and Mining Industry Advisory Council, Government of Western Australia, saw women as a key to resolving skill shortages in rural Australia:

From another perspective, in terms of skills shortages I see a huge potential for women in the region. Women are an untapped resource, an underutilised resource and an unacknowledged and unrewarded element of the work force. There are huge opportunities there. On a practical level, there are opportunities to create more flexible learning processes. Our women tend to be more highly qualified than our male farmers. We need more flexible learning processes to enable those women to utilise their degrees and move on, adding value back into their businesses – and into the industry; the industry representation on board and decision-making bodies is not great.<sup>68</sup>

- 1.60 There are, however, significant barriers to women's participation in rural skills training. Ms Newman told the committee:

We are not seeing the incentive to create the flexibility required to meet the needs of women. It becomes complex because it is also about the huge distances that have to be travelled versus the immaturity of the technology to deliver courses. It is about a lack of things like child care and support systems to help those women undertake those kinds of courses.<sup>69</sup>

- 1.61 Ms Condell also emphasised the barriers facing women seeking training, and the trial program CFI had put in place to overcome them – using communications technology:

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67 Ms Jillian Condell, *Transcript of Evidence*, 11 April 2006, pp. 36–7.

68 Ms Wendy Newman, *Transcript of Evidence*, 20 July 2006, p. 25.

69 Ms Wendy Newman, *Transcript of Evidence*, 20 July 2006, p. 25.

The other thing we discovered from the survey was that women find a lot of training and extension not very user-friendly. Particularly in this region they travel quite some distance to attend training. They often find that the training is not tailored or relevant to their farming needs or their enterprises – so they have travelled for two or three hours to attend a seminar and the information they have received is not that useful to them.

Other barriers to them attending were child care, travel and other issues, yet these are the women who really need to be very sophisticated in their business management skills. We found no programs at all that direct education, training or extension at women in these roles, so we have set about developing a trial using a fairly innovative strategy involving teleconferencing. Women do not have to leave their farms and can dial in to attend a teleconference. The learning materials are sent to them via the internet.<sup>70</sup>

1.62 The results, she explained, were astounding:

Our goal was to measure what the sustainable change was for these women. They blew us away. It was not just for the women; they went back and taught the skills to their husbands and also took the skills into the local P&Cs. We thought, ‘This is a family benefit and a community benefit from one small trial that we have run so far.’ I think that women will really hold a leadership role in the future of farming. I think that the most sustainable changes in behaviour – I will go back to that one – can be brought about through the women.<sup>71</sup>

1.63 As Mr Michael Burgis, Executive Officer of CFI, explained:

...the key to getting some on-ground change is actually looking at the family unit as one. A lot of the training has been targeted just at the man and maybe his son. Family units these days are working very closely together, and the daughters of housewives are very important.<sup>72</sup>

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70 Ms Jillian Condell, *Transcript of Evidence*, 11 April 2006, p. 37; Conservation Farmers Inc., Submission no. 110, p. 2.

71 Ms Jillian Condell, *Transcript of Evidence*, 11 April 2006, p. 37.

72 Michael Burgis, *Transcript of Evidence*, 11 April 2006, p. 35.

- 1.64 The committee notes the work of governments and organisations to increase and support the participation of women in agriculture. For example, the work of the Grains Industry Training Network, which initiated the successful 'Women in Grains' project that 'encouraged women to be involved in skill development at a level which addressed their needs'.<sup>73</sup> The success of this program was such that the Grains Research and Development Corporation (GRDC) initiated the national program, 'Partners in Grain', based on the principles of 'Women in Grains'.<sup>74</sup>
- 1.65 The committee also notes the work undertaken by the CSIRO to boost the participation of women in training and research in natural resource management through the use of new knowledge based technologies. The CSIRO has also undertaken a pilot study on impediments to and opportunities for women's use of technology in rural areas.<sup>75</sup>
- 1.66 DAFF's Pathways to Participation Strategy (which now incorporates the Women in Rural Industries Program<sup>76</sup>), aims to increase the profile and contribution of women and young people working in rural industries. The new strategy seeks to build on the skills and knowledge of women in rural industries by providing training and development activities.<sup>77</sup> The Department advised that the strategy will 'help develop pathways to assist women to identify the actions, experiences and skills required for them to achieve their goal and enhance the opportunities available to women to participate in their industries'.<sup>78</sup> At the time of writing the Department was developing a communication campaign to address the importance of industries undertaking inclusive consultation and decision making. The

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73 Grains Industry Training Network, Submission no. 42, pp. 1-2.

74 Grains Industry Training Network, Submission no. 42, pp. 1-2; Conservation Farmers Inc., Submission no. 110, p. 2.

75 CSIRO, Submission no. 86, p. 7.

76 The DAFF submission states that the Women in Rural Industries Program acknowledged and celebrated rural women's achievements through the provision of individual skill development opportunities and the support of national rural women's non-government organisations. These opportunities enhanced the ability of rural women to contribute to and participate in rural industries. DAFF, Submission no. 66, p. 16.

77 The committee understands that the Government decided in the late 1990s to place a greater emphasis on young people involved in agriculture, fisheries and forestry. The new strategy seeks to address the current imbalance.

78 DAFF, Submission no. 115, p. 2.

campaign will also seek to increase the awareness of opportunities available for women to access support and training.<sup>79</sup>

- 1.67 The committee was also informed that in March 2006 the Department conducted a review of the women's initiatives under the industry Partnerships Programme. Subsequently, DAFF will remove technical barriers to female participation in new initiatives, and initiatives will be delivered in a participatory learning approach and in a format that encourages the involvement of women with children. Such strategies are already implemented in FarmBis.<sup>80</sup>
- 1.68 The committee also notes the importance of incentives such as the annual RIRDC Rural Women's Award, which is designed to recognise and encourage the vital contribution women make to rural Australia.<sup>81</sup>

## An ageing workforce

- 1.69 The principal concerns surrounding the ageing of the workforce are resistance to innovation and change, and the potential for large scale and widespread declines in knowledge and skill levels.
- 1.70 In its submission, Rural Industries Skills Training noted the level of resistance to formal training evident in older age cohorts:

A resistance to change and negative perception to training are characteristics of an ageing workforce. While there are exceptions to this (53% of RIST participants are over the age of 45) there are a significant number of older producers and rural employees who have not embraced training or undertaken any skills development programs. We estimate this number could be as high as 40%. The characteristics of this group are; earn a reasonable income from their operation to support lifestyle needs, are older males, usually well respected in the community, gather information from individual specialists (consultants), have a fear of

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79 DAFF, Submission no. 115, p. 2.

80 DAFF, Submission no. 115, pp. 3–4.

81 The RIRDC Rural Women's Award began in 2000 with the objective of increasing women's capacity to contribute to agriculture and rural Australia, by providing them with the support and resources to further develop their skills and abilities. While the Award acknowledges past achievement, it is clearly focused on supporting women with strong leadership skills, a positive vision for the future of agriculture and the potential to make a difference in their chosen field. The 2007 Award will provide a Bursary of \$10,000. See <<http://www.ruralwomensaward.gov.au/>>

participating in group activities because of their insecurity in their abilities and knowledge base, tend to employ people in their own mould and age group and they do not see training as important for themselves and staff.<sup>82</sup>

- 1.71 Nonetheless, RIST identified the upskilling of the older age cohort as essential to the long term viability of agriculture:

This group of rural producers and employees are critical to the medium to long term success of agriculture and maintaining and upgrading their skill levels is very important. Due to the current demographic age spread of people involved in agriculture it will be a requirement that this group maintains an active involvement in managing their farming operations for longer as there is evidence that there will be fewer people to replace them when they finally retire or die.

In other words there is a need to upgrade this group's skills, maintain their motivation in agriculture and increase their involvement in agriculture for a longer period to ensure that the productivity in the agricultural sector is maintained and is not impacted by the predicted skill shortage when this age group bubble goes out of the industry.<sup>83</sup>

- 1.72 The potential problems caused by the ageing workforce are exemplified by the apiary industry, which will be seriously affected by ageing and future retirements within its already small workforce.<sup>84</sup> In 2000–01, the average age of operators was 54 and these operators had 25 years of experience in the industry on average.<sup>85</sup> The committee was informed that 'best practice is restricted to a minority in the industry and that much of this know-how will be lost with the retirement of ageing beekeepers and queen breeders'.<sup>86</sup> The committee was also told that recruitment of skilled young people into the industry is inadequate.<sup>87</sup>
- 1.73 The ageing of the workforce will have an impact in the research area as well as across the agricultural workforce. In its submission, the
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82 Rural Industries Skills Training, Submission no. 29, pp. 5–6.

83 Rural Industries Skills Training, Submission no. 29, p. 6.

84 Queensland Rural Industry Training Council, Submission no. 28, p. 6.

85 Veronica Boero Rodriguez et al., 2003, *Honeybee Industry Survey*, RIRDC, Publication no. 03/039, p. vii.

86 Group of apiarists, Submission no. 99, p. 8.

87 Dr Max Whitten, Submission no. 11, p. 2.

School of Rural Science and Agriculture at the University of New England stated:

Researcher training is probably one area where industry will not necessarily identify future needs. The reality is that a high proportion of the agricultural research population are from the “baby boomer” generation and that in most areas of agricultural research **there has been little succession planning to provide either full time researchers or tertiary teachers for the future.**<sup>88</sup>

- 1.74 There are also implications for industry in the ageing of rural skills training and extension professionals. Mr Gregory Hallihan, Executive Officer of Primary Skills Victoria, explained:

With respect to the ageing farm cohort, the problem has been well canvassed, I am sure. What is less well appreciated is the issue of professional capital within training organisations and, for that matter, with the extension arms of the departments of primary industries in all states which have also been steadily depleted. In recent years, the loss of teaching expertise in both the industry environment and in the more formal training environment has exacerbated the problem associated with a lack of skilled work force. The pool of knowledge and breadth of industry understanding is becoming less comprehensive as the appreciably more technically skilled older cohort are replaced by often part time training operators with industry experience, but little time for preparation and increased levels of reporting protocols. They have a range of industry skills which are of great value, but may have a limited ability to communicate which can limit their capacity to act as trainers. The industry skills are not necessarily matched well to the technical craft of teaching.<sup>89</sup>

## Committee Conclusions

- 1.75 It is clear to the committee that understanding and supporting the role of women in agriculture is vital to securing a skilled workforce for the industry. Whilst some programs already exist, there needs to

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88 School of Rural Science and Agriculture, University of New England, Submission no. 47, p. 3.

89 Mr Gregory Hallihan, *Transcript of Evidence*, 14 November 2005, p. 12.

be a broader, whole of sector, approach to utilising and enhancing the skills and potential of women in rural Australia.

- 1.76 Moreover, considerable attention must be given to utilising the skills and abilities of older workers. An existing invaluable source of skills will be lost if the role and needs of older workers in an ageing workforce are not recognised and dealt with. Government and industry must actively seek to ways to facilitate the ongoing contribution of older workers and ensure that skills are not simply lost to industry. There is a need to identify ways to better tap into their skills and knowledge and pass them onto future generations.

#### **Recommendation 4**

- 1.77 **The committee recommends that the Australian Government coordinate programs with State and Territory Governments and industry aimed at enhancing the contribution of women to Australian agriculture and to facilitate their participation in rural skills training.**

#### **Recommendation 5**

- 1.78 **The committee recommends that the Australian Government, in conjunction with State and Territory Governments and industry, develop a strategy for utilising the knowledge and skills of older workers in rural industries – including training, extension and research services – and facilitate the transfer of knowledge and skills to younger generations.**

### **Competing for labour**

- 1.79 The committee received evidence from a range of sources indicating that agriculture was losing skilled workers to other industries, especially mining. Mr Trevor De Landgraft, President of the Western Australian Farmers Federation (WAFarmers), highlighted the problem in his State, telling the committee: 'There is a mining boom

on at the moment and everyone is getting poached.’<sup>90</sup> In its submission, Conservation Farmers Inc. observed:

Northern NSW & Queensland agriculture is suffering from an explosion of mining activities and the resource boom in northern Australia. Skilled and unskilled labour is being attracted by the financial rewards the mining industry offers, coupled with consistent work hours and additional working allowances.<sup>91</sup>

- 1.80 Part of the problem was that agriculture could not compete with mining for skilled labour. Mr Ralph Leutton, Program Manager, Policy and Legislation for Cotton Australia, stated:

Why would you work on a farm when you can work on a mine which is an hour-and-a-half drive away – you can drive in and drive out for four days on and four days off – driving a truck getting \$100,000-plus a year? You get all your accommodation, food and keep given to you for \$70 a week. Why would you work on a farm? Right now we are facing the issue of another primary industry that is on a boom cycle and can afford to draw the staff away.<sup>92</sup>

- 1.81 The other part of the problem was that agricultural workers were ideally suited to the needs of the mining industry. As Mr De Landgraft explained:

What makes a good candidate for the mining industry is someone who is a good all-rounder, who has skills across a range, who can work alone and who knows the deal of living in an isolated area. Those independent people make perfect candidates for the mining industry...<sup>93</sup>

- 1.82 The National Farmers’ Federation (NFF) have adopted a strategy of integrating their labour requirements more closely with mining. In evidence before the committee, Mrs Denita Wawn, Workplace Relations Manager with the NFF, referring to the NFF’s *Labour Shortage Action Plan*, stated:

One thing we have certainly identified in the action plan is that, as an industry, we should not try to compete with the

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90 Mr Trevor De Landgraft, *Transcript of Evidence*, 20 July 2005, p. 2.

91 Conservation Farmers Inc., Submission no. 20, p. 2.

92 Mr Ralph Leutton, *Transcript of Evidence*, 20 October 2005, p. 95.

93 Mr Trevor De Landgraft, *Transcript of Evidence*, 20 July 2005, p. 2.

mining industry and so forth but work with them...it is about multiple skilling. Someone might have the skill capacity to work in agriculture for the peak season and the capacity to work in the mining industry or the tourism sector in between times. There is a rural competency program whereby you can undertake training in rural skills and also other skills from other training areas to become multiskilled to look at working in a number of industries. It is quite critical that regional industries work together in harmony as opposed to competing with each other, which obviously has an impact on wages and the like. So there is certainly capacity already in the skills area to look at multi-industry skilling, but I do not think we have pushed that as hard as we could, and that is mentioned in the action plan.<sup>94</sup>

1.83 Mr De Landgraftt also advocated a more cooperative approach:

But on the poaching side I have been trying to look at something a bit more innovative for agriculture. We have had some discussions with the local minister for education, Ljiljana Ravlich, and she complained also about the mining companies not putting sufficient money into training and pinching people. We think that perhaps there is a more innovative approach. Because, as I mentioned earlier, agriculturally trained people are perfect candidates, we should perhaps take advantage of that. The other side of the story is that parents are probably reluctant to send their kids off out into the bush to become farm labourers because there is no career path. So, if we had a situation whereby we could deliver certificate III to young people who come out to an agricultural area, teach them all about OH&S and give them grounding for all of their skills areas, then perhaps if they stayed – perhaps being bonded – in agriculture for three or four years, they would do a good service for us. It would make them good candidates to move on into mining, and mining might be the career path they were looking for.

The paydirt for us would be firstly that they would come out to us and 25 per cent would probably stay in agriculture because they liked it. Half of them may well go to mining, but probably half of those would come back. That is the other area where we lack in agriculture: those more senior people

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94 Mrs Denita Wawn, *Transcript of Evidence*, 10 August 2005, p. 8.

who could be farm managers coming back into agriculture. It would also be pretty valuable for us if, rather than see them as an antagonist or the opposition, we could perhaps work with the mining industry by developing some sort of a pact whereby we do some of the training, become a pathway, and rotate them back. The mining industry is cyclical like every other industry and those people would be looking for somewhere to go.<sup>95</sup>

- 1.84 Other witnesses, however, emphasised that it was not just money affecting people's decisions to leave agriculture – there was a need for the industry to modernise its management practices and align itself with the expectations of young people today. Dr Peter Wylie, of Horizon Rural Management, stated:

Farmers have to become very much more modern in outlook in the way they handle employees if they are going to survive. Retaining employees is the main thing, in the face of the much higher wages being paid by industry. We have gone down the track in our part of the world now. The mining industry have caught up with southern Queensland. They are building power stations and coalmines and offering people \$1,000 a week while farmers are only paying their workers \$700 a week. So farmers need to get a lot smarter in terms of keeping their labour. That is more important than trying to attract labour from the cities. The most important thing is to retain labour and not have it trot off to the coalmines.<sup>96</sup>

- 1.85 Dr John Taylor, the Director of Rangelands Australia, concurred. He explained:

One of the important things that producers need to think about these days is that if they have employees who are of generation Y, they have a whole new raft of expectations when they come to work for you. They expect fairly high levels of people management. They expect career opportunities. They expect developmental opportunities. If the farmer does not have the interpersonal skills, the knowledge or the foresight to provide both training opportunities and skilling opportunities then people will walk. There are some who are purely attracted to dollars but there are other motivators for people, and it has to be

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95 Mr Trevor De Landgraft, *Transcript of Evidence*, 20 July 2005, pp. 5–6.

96 Dr Peter Wylie, *Transcript of Evidence*, 11 April 2006, p. 9.

accepted that it is not just the dollars alone that suck people away.<sup>97</sup>

## Information and Communication Technology

- 1.86 Information and communication technology (ICT) has an important role to play in improving the speed and quality of communications in rural Australia, and increasing access to education and training services. There can be no doubt that high quality and reliable ICT would help offset some of the problems involved in delivering education and training services to agriculture, and simply allowing people spread over vast distances to effectively communicate. As Land & Water Australia observed in its submission: 'Information technology does help overcome barriers of distance and multiple access for people working in regional and rural Australia.'<sup>98</sup>
- 1.87 An Australian Bureau of Statistics report noted that in 2004–05, 56 per cent of approximately 129 900 farms used a computer as part of their business operations. Moreover, 53 per cent of farms (almost 70 000 properties) used the Internet as part of their business operations. The report also stated that 33 per cent of surveyed farms used a dial-up connection, 7 per cent used an Integrated Services Digital Network (ISDN) connection and 9 per cent used broadband. A strong relationship was identified between farm size and computer and internet usage. Specifically, the proportion of larger farms using a computer and the internet for business purposes was significantly higher than that for smaller farms.<sup>99</sup>
- 1.88 A report prepared for the Rural Industries Research and Development Corporation in 1999 highlighted the importance of ICT to rural industries:

The reality is that informal education and training is at least as important – if not more important – than formal award courses to the successful operation of Australian farming enterprises. The Internet is, of course, a major potential source of information and hence a major avenue for informal learning.<sup>100</sup>

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97 Dr John Taylor, *Transcript of Evidence*, 10 April 2006, p. 13.

98 Land & Water Australia, Submission no. 89, p. 11.

99 ABS, 2005, *Use of Information Technology on Farms*, cat no. 8150.0.

100 Jim Groves, 1999, *Online Education and Training for Australian Farmers*, RIRDC, Publication no. 99/4, p. vii.

- 1.89 It noted that 'given the potential role Internet delivery of education and training could play in achieving current rural policy goals' there was a strong argument for 'policy action to ensure that all rural and remote residents have equitable access to an acceptable standard of telecommunications service'.<sup>101</sup>
- 1.90 There are, however, significant barriers to the use of ICT in rural Australia. These barriers include: the inability to access the internet; poor connections or bandwidth limitations; education funding mechanisms; level of teacher awareness and training; and the level of community understanding (for example, the view that internet-based learning is inferior in quality to traditional delivery methods).<sup>102</sup>
- 1.91 For example, when discussing the participation of women in agricultural education and training, Ms Condell (Conservation Farmers Inc.) told the committee that 'part of a problem is that...these women actually have very slow dial-up speeds and very high dropout rates. We have a few who have satellite broadband':
- Our organisation has been looking at using Skype, an internet phone provider, to basically videoconference. We can put our materials up and we can use a whiteboard all at the same time and they can sit in their home offices. It is cutting edge technology, but they do not have the technology at the other end. What I find really frustrating about that is that a lot of those women actually have the ability to use the technology. They have been off and have got their degrees – they are teachers and nurses – they are actually able to use it, but there is nothing there for them to be able to do that. The slow broadband download leaves lags when you speak. If you are trying to actually teach someone something they lose concentration. It does not work. We have explored all that. We are ready to go, but the technology is not there.<sup>103</sup>
- 1.92 Other witnesses also highlighted lack of access to broadband as a barrier to using ICT.<sup>104</sup> The committee understands that poor ICT infrastructure and services to rural and remote Australia also
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101 Jim Groves, 1999, *Online Education and Training for Australian Farmers*, RIRDC, Publication no. 99/4, p. x.

102 Jim Groves, 1999, *Online Education and Training for Australian Farmers*, RIRDC, Publication no. 99/4, p. viii.

103 Ms Jillian Condell, *Transcript of Evidence*, 11 April 2005, p. 44.

104 Mrs Kay Bodman, Ms Wendy Newman, *Transcript of Evidence*, 20 July 2005, p. 33; Mrs Margaret Brown, *Transcript of Evidence*, 10 March 2006, p. 20; Queensland Rural Industry Training Council, Submission no. 28, p. 10.

contributes to the barriers indigenous people experience in accessing mainstream vocational education and extension programs. The Indigenous Land Corporation advised the committee that the 'lack of access to resources including equipment required for training purposes, computers, the internet and local libraries' needs to be addressed.<sup>105</sup>

- 1.93 To redress this problem, Mr Claude Gauchat, Executive Director of Avcare Ltd, called for 'financial resources to establish flexible delivery of rural skills training' including 'access to information technology such as bandwidth in rural areas for the emerging e-training sector'.<sup>106</sup>
- 1.94 The committee notes that the Australian Government has recognised this problem. In its submission, DEST acknowledged that 'to support the provision of quality education and training in rural areas, affordable and adequate bandwidth needs to be available at least to education institutions and preferably to the student's home desktop'. The Australian Government had already invested some \$80 million in the Australian Research and Education Network, providing 'high bandwidth capacity, both nationally and internationally, for Australian universities and research institutions'.<sup>107</sup>
- 1.95 The committee was also informed that DEST is discussing with the Department of Communications, Information Technology and the Arts (DCITA) potential funding under the Connect Australia program to enable adequate bandwidth to homes, and hence to students. In addition, DEST indicated that there may also be scope to fund joint projects which will provide better connectivity to a number of regional campuses.<sup>108</sup>

## Committee Conclusions

- 1.96 The committee believes that the provision of adequate ICT infrastructure and services should be a high priority for governments at all levels. Adequate ICT infrastructure across Australia addresses the basic right to equitable access to education, training and research opportunities. It would also facilitate improved linkages and coordination between government, industry, and education, research and extension services.

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105 Indigenous Land Corporation, Submission no. 50, p. 2.

106 Mr Claude Gauchat, *Transcript of Evidence*, 7 September 2005, p. 14.

107 DEST, Submission no. 94, p. 36.

108 DEST, Submission no. 116, p. 10.

- 1.97 Moreover, the committee believes that the Australian Government must recognise that access to high quality and reliable ICT in rural Australia is not just a matter of equity but is vitally important to the development of Australian agriculture and its future competitiveness. The Australian Government must increase its efforts to ensure the provision of adequate ICT infrastructure in rural and remote areas of Australia.

### **Recommendation 6**

- 1.98 **The committee acknowledges the critical role of information and communications technology services to skill formation in rural areas and recommends that the Australian Government pays particular attention to the further development of information and communications technology services to rural and regional Australia, that includes access to high-speed broadband services to rural and remote communities.**