CHAIR: Are there any restrictions around levels of qualifications within those programs? Are companies restricted in training from, say, levels I to II where they are bringing entry level people into their business, possibly, versus levels III to IV or above where they have an existing workforce that they are looking to upskill? Are there any restrictions around that in the program?

RESPONSE

Through programs such as the Enterprise Based Productivity Places Program (EBPPP), the Critical Skills Investment Fund and the National Workforce Development Fund (NWDF) the Government is working in partnership with industry to support workforce development and training that is tailored to the needs of the enterprises who participate. The Government is contributing over $600 million in funding through these measures. Industry will be making a co-contribution to the cost of projects. Funding was made available to the food processing sector through the EBPPP during 2010-2011 and will be made available through the NWDF from 2011-12 to 2014-2015. The NWDF has been consolidated to include the Critical Skills Investment Fund.

Through the Enterprise Based Productivity Places Program (EBPPP) the Government provided $50 million to support the upskilling and reskilling of existing workers. Training undertaken through the EBPPP was for a nationally endorsed qualification recognised under the Australian Qualifications Framework that addresses the identified training and skills development needs of the participating organisations. These qualifications include Certificate III, IV, Diploma, Advanced Diploma, Vocational Graduate Certificate and Vocational Graduate Diploma.

The National Workforce Development Fund (NWDF) forms part of the Australian Government’s $3.02 billion Building Australia’s Future Workforce package. The NWDF allows eligible organisations to apply for funding to support the training of existing workers and new workers in areas of identified business and workforce development need. Through the NWDF the Government will provide $558 million over four years to support training and workforce development in areas of current and future skills need. Government funding will be supplemented by a co contribution from industry with the Government contributing at higher levels for smaller businesses. Funding is available to support training and workforce development across all sectors of the economy.

Training undertaken through the National Workforce Development Fund must be for a nationally endorsed qualification recognised under the Australian Qualifications Framework that addresses the identified training and skills development needs of the participating organisations. For new workers (including job seekers) these qualifications include Certificate II, III, IV, Diploma, Advanced Diploma, Vocational Graduate Certificate and Vocational Graduate Diploma for new workers. For existing
workers these qualifications include Certificate III, IV, Diploma, Advanced Diploma, Vocational Graduate Certificate and Vocational Graduate Diploma.

Australian Government funding may also be used to support the delivery of Training Package Skills Sets recognised under the Australian Qualifications Framework to learners who already hold a qualification (at the Certificate III level or above) that requires bridging training to meet current skills requirements. In addition the skills set must meet an identified workforce development need of the enterprise in which the learner is working or will be employed.

The NWDF will be managed by the new Workforce and Productivity Agency once it is established in 2012. The Agency will have a key role in determining the arrangements for the delivery of training and the priority sectors and occupations to be targeted from 1 July 2012.

Further details on the Fund including eligibility requirements are available on the web-site for the program www.deewr.gov.au/nwdf.

2. Question two: page 10

Mr Baigent: In general, over the past 10 years in the narrow field of study of agriculture, fisheries and horticulture, if you want to consider it that, there has been generally a decline in enrolments between 2001 and 2010.

Senator EDWARDS: By what sort of scale?

Mr Baigent: I will pick agriculture. In 2001, there were 5,570 students enrolled. In 2012 it was 3,681.

Senator EDWARDS: And that still includes the environmental group?

Mr Baigent: No. That is excluding environment. If it helps, I can read out the categories.

Senator EDWARDS: Yes.

Chair: Is it possible to table them?

RESPONSE

The table below shows higher education enrolments in the narrow fields of education within the broad field of Agriculture, Environmental and Related Studies over the last 10 years. Some enrolments do not have a narrow field recorded so they are only listed against the broad field of study in the third last row of the table.
**Student data is only reported at the broad field of study**

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 narrow fields of education.

The Australian Bureau of Statistics describes these fields of education in the Australian Standard Classification of Education 2001 as follows:

**BROAD FIELD 05: AGRICULTURE, ENVIRONMENTAL AND RELATED STUDIES**

AGRICULTURE, ENVIRONMENTAL AND RELATED STUDIES is the study of the theory and practice of breeding, growing, gathering, reproducing and caring for plants and animals. It includes the study of the interaction between people and the environment and the application of scientific principles to the environment to protect it from deterioration.

The theoretical content of Broad Field 05 Agriculture, Environmental and Related Studies includes:

- crop production
- animal production and management
- environmental impact and assessment
- forest resource management
- soil and water conservation
- aquatic resource management

The main purpose of this broad field of education is to develop an understanding of the management and use of natural resources, and the production of primary agricultural products.

This broad field comprises the narrow fields listed below but **excludes:**

- Veterinary science. This is included in Narrow Field 0611 Veterinary Science.
NARROW FIELD 0501 AGRICULTURE

AGRICULTURE is the study of growing, maintaining and harvesting non-intensively managed crops and pastures, and breeding, grazing and managing animals. It includes the study of farming and producing unprocessed plant and animal products.

The main purpose of this narrow field of education is to develop an understanding of livestock reproduction, the production of primary plant and animal products, and the theory and practice of farming. It also involves developing an ability to utilise current agricultural technology, techniques and practices.

Courses in Narrow Field 0501 Agriculture develop skills in:

- analysing current and future market conditions to determine which crops are grown and/or livestock raised
- identifying environmental factors affecting flock and herd health and productivity

This narrow field comprises the following detailed fields:

- 050101 Agricultural Science
- 050103 Wool Science
- 050105 Animal Husbandry
- 050199 Agriculture, n.e.c.

Exclusions:

- Agricultural economics. This is included in Detailed Field 091901 Economics.
- Farm management and agribusiness. These are included in Detailed Field 080321 Farm Management and Agribusiness.

NARROW FIELD 0503 HORTICULTURE AND VITICULTURE

HORTICULTURE AND VITICULTURE is the study of cultivating, propagating and producing intensively managed crops such as grapes and other fruits, vegetables, flowers, trees, shrubs and plants.

The main purpose of this narrow field of education is to develop an understanding of the factors affecting plant propagation, growth and physiology. It also involves developing an ability to utilise current horticultural and viticultural technology, principles and practices.

Courses in Narrow Field 0503 Horticulture and Viticulture develop skills in:

- establishing and maintaining turf surfaces for various sporting and recreational facilities
- planting, pruning and maintaining shrubs, trees and grapevines
- propagating, cultivating and harvesting intensively managed crops

This narrow field comprises the following detailed fields:

- 050301 Horticulture
- 050303 Viticulture

Exclusions:

- Maintaining and managing nature parks. This is included in Detailed Field 050901 Lands, Parks and Wildlife Management.
NARROW FIELD 0505 FORESTRY STUDIES

FORESTRY STUDIES is the study of establishing, cultivating, harvesting and managing forests.

The main purpose of this narrow field of education is to develop an understanding of sustainable forest management, and the establishment and maintenance of forest farms.

Courses in Narrow Field 0505 Forestry Studies develop skills in:
- assessing current forest resources and estimating future demand
- designing coupes and planning broadscale harvesting operations
- identifying, classifying and measuring trees and forests
- managing post-harvest rehabilitation programmes

This narrow field comprises the following detailed field:
- 050501 Forestry Studies

NARROW FIELD 0507 FISHERIES STUDIES

FISHERIES STUDIES is the study of breeding, rearing, harvesting, handling, and managing fish and other aquatic resources.

The main purpose of this narrow field of education is to develop an understanding of sustainable fisheries management and commercial fisheries operations.

Courses in Narrow Field 0507 Fisheries Studies develop skills in:
- harvesting and handling fish and other aquatic resources
- monitoring and maintaining water quality
- identifying, preventing and controlling diseases of aquatic resources
- monitoring and ensuring compliance with fisheries regulations and standards

This narrow field comprises the following detailed fields:
- 050701 Aquaculture
- 050799 Fisheries Studies, n.e.c.

Exclusions:
- Operating fishing vessels. This is included in Detailed Field 031705 Marine Craft Operation.

NARROW FIELD 0509 ENVIRONMENTAL STUDIES

ENVIRONMENTAL STUDIES is the study of the relationships between living organisms and the natural, rural, industrial and urban environments. It includes the study of the impact humans have upon the natural environment.

The main purpose of this narrow field of education is to develop an understanding of the scientific aspects of the environment and the procedures required to establish an environmentally sustainable
society. It also involves developing an understanding of how physical, economic, social and technological factors effect the environment.

Courses in Narrow Field 0509 Environmental Studies develop skills in:

- applying the principles and practices of managing natural ecosystems
- assessing the impact of humans on the environment
- preparing environmental impact statements
- identifying, evaluating and analysing environmental issues of current and future significance

This narrow field comprises the following detailed fields:

- 050901 Land, Parks and Wildlife Management
- 050999 Environmental Studies, n.e.c.

NARROW FIELD 0599 OTHER AGRICULTURE, ENVIRONMENTAL AND RELATED STUDIES

This narrow field includes all Agriculture, Environmental and Related Studies not elsewhere classified.

This narrow field comprises the following detailed fields:

- 059901 Pest and Weed Control
- 059999 Agriculture, Environmental and Related Studies, n.e.c.

3. Question three: page 11

Senator EDWARDS: What would be the biggest skills shortage outside the metropolitan areas [...]?

Ms O’Regan: I can probably comment a little on that [...] It is not my area personally, but I would say that the health professions is probably the one that screams out. We could provide some more detail along those lines. We do have some information here about shortages of agricultural consultants and scientists, and there has been some particular difficulty filling those sorts of positions in the more remote locations and also –

Senator EDWARDS: Can we get that?

Ms O’Regan: Yes, I think that would be a good idea. I am happy to table it.

Mr Roddam: Ms O’Regan’s area certainly has a great deal of skill shortage research and also surveys they have undertaken which would at least touch on the areas you are interested in, so we could easily put together a summary of that information.

CHAIR: That would be very handy.
Employment growth in Agriculture and Food Product Manufacturing is expected to be moderate in the five years to 2015-16, but relatively strong employment growth is projected in some sectors, such as dairy and meat production\(^1\). DEEWR's survey research suggests that skill and labour shortages are not particularly widespread in Agriculture and Food Product Manufacturing, although persistent skill shortages exist in occupations which are important to the industry, such as agricultural scientists/consultants, bakers and butchers.

The Agriculture, Forestry and Fishing industry is particularly susceptible to adverse weather conditions, such as drought and natural disasters, and more recently the temporary cessation of the live exportation of livestock. Agriculture, Forestry and Fishing has declined by 31,500 (or 9.0 per cent) in the five years to August 2011.

The loss of employment in this industry in the past five years has been driven by declines in the larger employing sectors such as Fruit and Tree Nut Growing (down by 14,100), followed by Sheep, Beef Cattle and Grain Farming (11,600) and Mushroom and Vegetable Growing (8,200). By contrast, Dairy Cattle Farming (up by 9,000) experienced the largest increase, followed by Poultry Farming (2,400).

Demand for Australia’s agricultural products is expected to continue, both domestically and internationally, and barring any unforeseeable events that may adversely affect this industry, employment is expected to be positive in the five years to 2015-16. Employment in Agriculture, Forestry and Fishing is projected to increase by 27,400 (or 1.4 per cent per annum) driven by growth in the Sheep, Beef Cattle and Grain Farming (18,700) and Dairy Cattle Farming (5,000) sectors.

While employment in Manufacturing as a whole decreased by 62,000 (6.1 per cent) in the five years to August 2011, employment in Food Product Manufacturing increased by 12,200 (6.7 per cent), the largest sectoral increase in this industry over this period. Most of the growth in Food Product Manufacturing has been driven by employment gains in Dairy Product Manufacturing (up by 8,300), followed by Meat and Meat Product Manufacturing (4,100).

Although Manufacturing is projected to experience further employment losses in the five years to 2015-16, down by 30,400 (or 3.1 per cent per annum), employment gains for the Food Product Manufacturing sector (up by 16,700) are projected to continue, with the largest gain in Bakery Product Manufacturing (12,300), followed by Dairy Product Manufacturing (3,900), Meat and Meat Product Manufacturing (1,600), and Sugar and Confectionary Manufacturing (1,100).

DEEWR skill shortage research focuses on skilled occupations (that is, those which generally require at least three years of post school education or training). Many of the occupations relating to agriculture, horticulture and food processing are at a lower skill level or relate to farming occupations which are not included in the DEEWR research.

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\(^1\) DEEWR employment projections, 2011. Note that these projections were prepared in early 2011 and are anchored to the 2010 MYEFO. As such, they do not take into account changes in labour market conditions or government policy initiatives since that time. The projections will be updated in March/April 2012 to take account of new information on the outlook.
DEEWR research into professional occupations that are important to the agriculture, horticulture and food processing indicates there are persistent shortages of agricultural scientists/consultants. Shortages have been experienced continuously since 2007, with low training numbers being a key factor contributing to the low supply of these professionals.

In the technicians and trades labour market, shortages are evident for bakers and butchers, with employers experiencing significant difficulty recruiting trade-qualified workers in these occupations. These shortages have been evident for almost all of the past decade, with relatively low pay and difficult working conditions (such as early starting times) considered to be factors contributing to low supply. In addition, some employers recruiting agricultural technicians have difficulty attracting suitable applicants, but this occupation includes diverse tasks across quite different agricultural sectors, covering dairy technician, field crop tester, poultry technical officer and artificial insemination technician, and demand varies markedly by location.

Further detail about the findings of DEEWR’s skill shortage programs is available by occupation on the DEEWR website (deewr.gov.au/skillshortages). Copies of the occupational reports for Agricultural Scientists/Consultants and Agricultural Technicians have been provided separately as part of this response.

DEEWR has an ongoing program of surveys of employers’ recruitment experiences across selected regions. During the 12 months to September 2011, DEEWR surveyed 7,950 employers. The following analysis is based on the results of 156 of these employers who were in the Agriculture, Forestry and Fishing industry and 173 who were in the Food Product Manufacturing and Beverage and Tobacco Product Manufacturing sectors.

**Agriculture, Forestry and Fishing**

- Recruitment activity in the Agriculture, Forestry and Fishing industry was strong in the 12 months to September 2011. Employers in the Agriculture, Forestry and Fishing industry had a very high recruitment rate (39 vacancies per 100 staff) when compared with employers across all industries (22 vacancies per 100 staff). This result may be due to the seasonal nature of the industry and the requirement to increase staff at peak times during the year.

- In their most recent recruitment rounds, employers in the Agriculture, Forestry and Fishing industry reported a low level of competition for vacancies, with an average of 2.7 applicants and 1.4 suitable applicants per vacancy. This compared with an average of 6.0 applicants and 2.0 suitable applicants across all industries.

- Despite the average low level of competition for vacancies, employers in the Agriculture, Forestry and Fishing industry reported that they were largely able to fill vacancies, with only 3.4 per cent of vacancies remaining unfilled. This compared with 10.6 per cent of vacancies across all industries.

- The proportion of employers reporting recruitment difficulty in their most recent recruitment round (46 per cent) was on par with employers across all industries (47 per cent).

- The outlook for the Agriculture, Forestry and Fishing industry was similar to the all-industries average. A slightly larger proportion of employers expected to recruit in the 12 months
following the survey (56 per cent) compared with employers across all industries (52 per cent) and the same proportion of employers expected to increase staff numbers (both 29 per cent).

**Food Product Manufacturing and Beverage and Tobacco Product Manufacturing**

- In the 12 months prior to being surveyed, employers in the Food Product and Beverage and Tobacco Product Manufacturing sectors had a lower average recruitment rate (18 vacancies per 100 staff) when compared with employers across all industries (22 vacancies per 100 staff).

- Employers reported there was limited competition for recent vacancies in the Food Product and Beverage and Tobacco Product Manufacturing sectors with an average of 4.1 applicants per vacancy of whom an average of 1.5 were considered suitable. This compared with an average of 6.0 applicants and 2.0 suitable applicants across all industries.

- Despite the lower level of competition for recent vacancies, only 6.1 per cent of vacancies in the Food Product and Beverage and Tobacco Product Manufacturing sectors remained unfilled, well below the unfill rate across all industries (10.6 per cent).

- The proportion of employers reporting recruitment difficulty in their most recent recruitment round (45 per cent) was on par with employers across all industries (47 per cent).

- The outlook for the Food Product and Beverage and Tobacco Product Manufacturing sectors was stronger than all-industries average. Almost two thirds of employers expected to recruit in the 12 months following the survey (63 per cent) compared with 52 per cent of employers across all industries. A considerably larger proportion of employers also expected to increase staff numbers (40 per cent) compared with employers across all industries (29 per cent).

*Table 1: Employers' recruitment experiences, 12 months prior to being surveyed*

<table>
<thead>
<tr>
<th>12 months prior to being surveyed</th>
<th>Agriculture, Forestry and Fishing Industry</th>
<th>Food Product and Beverage and Tobacco Product Manufacturing sectors</th>
<th>All Industries (12 months to September 2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of employers who recruited</td>
<td>65%</td>
<td>77%</td>
<td>71%</td>
</tr>
<tr>
<td>- to increase staff</td>
<td>65%</td>
<td>56%</td>
<td>53%</td>
</tr>
<tr>
<td>- to replace staff</td>
<td>73%</td>
<td>90%</td>
<td>86%</td>
</tr>
<tr>
<td>Vacancies per 100 staff</td>
<td>39</td>
<td>18</td>
<td>22</td>
</tr>
</tbody>
</table>
Table 2: Employers’ recruitment experiences, most recent recruitment round

<table>
<thead>
<tr>
<th>Most Recent Recruitment Round</th>
<th>Agriculture, Forestry and Fishing Industry</th>
<th>Food Product and Beverage and Tobacco Product Manufacturing sectors</th>
<th>All Industries (12 months to September 2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unfill rate</td>
<td>3.4%</td>
<td>6.1%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Average no. of applicants per vacancy</td>
<td>2.7</td>
<td>4.1</td>
<td>6.0</td>
</tr>
<tr>
<td>Average no. of suitable applicants per vacancy</td>
<td>1.4</td>
<td>1.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Had difficulty recruiting</td>
<td>46%</td>
<td>45%</td>
<td>47%</td>
</tr>
</tbody>
</table>

Table 3: Employers’ recruitment expectations, 12 months following being surveyed

<table>
<thead>
<tr>
<th>Following 12 months (Future)</th>
<th>Agriculture, Forestry and Fishing Industry</th>
<th>Food Product and Beverage and Tobacco Product Manufacturing sectors</th>
<th>All Industries (12 months to September 2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expects to recruit</td>
<td>56%</td>
<td>63%</td>
<td>52%</td>
</tr>
<tr>
<td>Expects to increase staff numbers</td>
<td>29%</td>
<td>40%</td>
<td>29%</td>
</tr>
<tr>
<td>Expects to reduce staff numbers</td>
<td>4%</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Expects future recruitment difficulty</td>
<td>47%</td>
<td>37%</td>
<td>47%</td>
</tr>
</tbody>
</table>

4. Question four: pp 12-13

Senator FISHER: I presume you might not be placed to reflect on comments – though you might, Mr Roddam, if you put on your past hat – from the Food and Grocery Council about any relationship between what they describe as an two per cent on wages costs in their members’ sector relative to the CPI during the life of the Fair Work Act?
Mr Roddam: I do not have the latest wage growth figures for that sector. From our workplace agreements database, we would be happy to get the figures for you for this sector on collective agreements in that industry which may prove or disprove that theory.

RESPONSE

Using data from the 12 374 enterprise agreements approved under the Fair Work Act to June 30, 2011, as the graph below illustrates, growth in average wages for the food manufacturing industry has been ahead of CPI in recent years. However, the two percent differential cited by the Food and Grocery Council, while true in late 2009 no longer holds. The gap between wages growth in the food manufacturing industry and CPI narrowed during 2010 and markedly so during 2011. While wages growth in the food manufacturing industry remained ahead of the CPI in the June quarter 2011 the difference was around 0.5 of a per cent.

In addition, during the life of the Fair Work Act, wage growth for the food manufacturing industry (as measured by the average annualised wage increase in agreements - AAWI) was largely in line with the AAWI of all industries, which in turn was consistent with wage growth data from the ABS publications.

The comparison shown in the graph below is between CPI (Consumer Price Index) and average annualised wage increases provided by enterprise agreements approved under the Fair Work Act since its commencement on 1 July 2009.

Further background information is available in the Trends in Federal Enterprise Bargaining quarterly reports. The reports contain data about the number of enterprise agreements made in the federal workplace relations system, as well as data about the number of employees covered and the level of wage increases included in these collective agreements. The data is obtained from the Department’s Workplace Agreements Database. Reports are available at www.deewr.gov.au/WorkplaceRelations/Pages/Reports.aspx.
Source: DEEWR, Workplace Agreement Database. 446 agreements covering 41,091 employees, were made in the Food Manufacturing sector under the Fair Work Act between 1 July 2009 and 30 June 2011.

5. Question five: page 13

Mr Roddam: Most horticultural enterprises have probably a relatively small amount of permanent staff, but at harvest time they are often relying on backpacker and other sources of itinerant labour. I think they are basically the people that Pacific workers are replacing, in any case.

CHAIR: Are there any case studies around that efficiency?

Mr Roddam: We do have some, yes. We undertake that as part of our evaluations and our engagement with the growers. I would be happy to share those with the committee as well.

RESPONSE

The Final Evaluation of the Pacific Seasonal Worker Pilot Scheme by TNS Social Research (please note this report is not public) – includes the following paragraphs:

“Obtaining data was difficult as it is not generally workplace practice to track productivity rates, nor is productivity tracked by workers cohorts. While only limited productivity data is available, early indications appear very promising. One grower indicated that picking rates were as high as 300% that of backpackers, with seasonal workers picking three bins to an overseas worker’s one bin. Another grower provided data from a snapshot of a two-day period of work demonstrating very high rates of productivity for Tongan workers relative to others.”

“Best indications are that seasonal workers are up to 20% more expensive than alternative labour sources, but have productivity generally over 30% higher than alternative labour sources, not including additional savings obtained through decreased supervision, reduced absenteeism and
greater workforce certainty. Most Approved Employers (AEs) reported that after initial investments in the Pilot, they are now making a profit. Growers working as AEs reported that increased productivity levels, more than off-set the investment in the Pilot.”

Qualitative evidence - Approved Employers / Growers have stated:

“Their work ethic is phenomenal. They are able to work to – we have a set of norm times here that we expect our staff to get to quite quickly, and we find that Pacific islanders do achieve that in very good time and maintain that level, if not go well beyond that level.” – Bryony Hackett, Tomato Exchange

“I’m very satisfied with the production level that we’ve seen and the efficiency of the workers. There is an additional cost to having the Pacific seasonal workers here... That being said the additional cost is more than borne out in the productivity.” – Richard Hamley, Tomato Exchange

“We’ve found in the past couple of years being part of the Pilot has been— huge benefits for our company. Just having them there. Having the Pacific guys there ready to work. It’s made it a lot easier for recruiting. Also for turnover workers. Retraining, we now we’re on our third year with the PSWPS and we have a noticeable drop off in training timeframes.” – Alf Fangaloka, Tree Minders

“Their productivity really comes from their ability to turn up for work and be reliable and their commitment to work. That gives you a greater level of productivity than anything else. And the productivity comes in because you’re not having to retrain them. Once they come up to speed and they’re trained they’re very competent. The productivity gains are also in the level of supervision that you need because when you’re constantly training new people you’ve got to spend a lot of time one on one with them so it takes up your key people and that’s where you gain productivity as well.” – Craig Pressler, 2PH Farms