Rural and Regional Affairs and Transport Committee

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2012

Agriculture, Fisheries and Forestry

Question: 63

Division/Agency: ABARES - Australian Bureau of Agricultural and Resource Economics and Sciences
Topic: Report on wine grape production in Australia
Proof Hansard page: 108 (21/05/2012)

Senator EDWARDS asked:

Mr Morris: We already have collected some information about wine grape production. In fact, we released a report earlier this year about wine grape production in Australia, if that is what you are talking about, and that looked across all of the growing regions in Australia and looked at the total production of red and white wine grapes. I do not have a copy of that with me here at the moment, but Dr Penm might be able to comment on that if you want more detail on that report.
Senator EDWARDS: If you would not mind tabling that, that would be great.
Mr Morris: We will provide you with a copy.

Answer:

A copy of the Australian Bureau of Agricultural and Resource Economics and Sciences' report 'Australian wine grape production projections to 2013–14' is attached.

Rural and Regional Affairs and Transport Committee

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2012

Agriculture, Fisheries and Forestry

Question: 64

Division/Agency: ABARES - Australian Bureau of Agricultural and Resource Economics and Sciences
Topic: Forecasts of live animals exports
Proof Hansard page: 109 (21/05/2012)

Senator NASH asked:

Senator NASH: How far out do you forecast the numbers?
Mr Morris: The forecasts go out five years. Each year in March for the outlook conference we do our five-year projections, so we look out five years, and then for the other three-quarters of the year we look out only one year.
Senator NASH: Could you provide for the committee that five-year forecast and the previous, say, three years of numbers and the comparison there.
Mr Morris: Sure.

Answer:

The table below presents the forecasts for Australian live cattle exports published in the June 2012 *Agricultural Commodities* publication and the medium term outlook (from 2013–14 to 2016–17) as published in the March 2012 *Agricultural Commodities* publication as well as the historical exports for 2007–08 to 2010–11.

Live exports of feeder/slaughter cattle

	'000 head
2007-08	708
2008-09	845
2009-10	871
2010-11	728
2011-12 f	**530**
2012-13 f	**500**
2013-14 f	**520**
2014-15 f	**535**
2015-16 f	**550**
2016-17 f	**575**

Notes: **f** forecasts.

- The Indonesian Government imposed a quota limit of 500 000 head of cattle to be imported from Australia in the 2011 calendar year and a stricter enforcement of a 350kg weight limit. In the 2012 calendar year the Indonesian Government intends to limit imports to 283 000 head.

Question: 64 (continued)

- Total Australian live cattle exports to all markets were forecast to fall by 27 per cent in 2011–12 to 530 000 head, reflecting the effect of the Indonesian import quota. The latest available data indicates that in the first 11 months of 2011-12, 488 998 cattle were exported from Australia (excluding dairy and breeders).
- In the short term, it is unlikely that a significant number of cattle originally intended for export to Indonesia can be redirected to other markets. In 2010–11, all cattle exported to Turkey, Israel, Saudi Arabia and the Russian Federation were sourced from southern Australian ports, indicating a preference for *Bos taurus* type cattle rather than the Brahman breeds of northern Australia. In addition, many of these markets generally import cattle from Australia that are close to slaughter weight because they lack large-scale feedlot infrastructure for finishing cattle prior to slaughter.
- In the absence of change to Indonesia's policy, growth in live cattle exports over the medium term will depend on development of new markets for northern Australian cattle.

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ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2012

Agriculture, Fisheries and Forestry

Question: 65

Division/Agency: ABARES - Australian Bureau of Agricultural and Resource Economics and Sciences
Topic: Forecasts of live animals exports
Proof Hansard page: 109-110 (21/05/2012)

Senator NASH asked:

Mr Morris: We look at the domestic demand and supply conditions quarterly, so we look at cattle slaughterings, live animal trade, prices and all that sort of thing. We provide a quarterly outlook on all those.
Senator NASH: Is that something you do quarterly, though—the domestic redirection of northern cattle?
Mr Morris: We look at the domestic market supply conditions quarterly. We look at cattle slaughterings, live animal trade, prices and all that sort of thing. We provide a quarterly outlook on all of those.
Senator NASH: It would be quite useful if we could have the comparative over the last couple of years and insofar as you forecast that out, and the current figures, obviously—if you could provide that to the committee just to get a sense of where those numbers have been and where they might go.
Mr Morris: Sure. Of course there are a number of factors that influence those numbers. It is not just what is happening in the live export space.
Senator NASH: Oh yes, exactly.
Mr Morris: Clearly what is happening internationally in the beef markets is a major influence in terms of what happens on the cattle market domestically. There has also been herd rebuilding in Australia which is having an influence on prices as well. There are a number of different factors that influence what happens with cattle prices domestically.
Senator NASH: Yes, certainly. If you could provide all of those factors too so that we can look at it in context, that would be great. Thank you.

Answer:

The latest short term outlook (to 2012–13) for beef and veal was published in the June 2012 *Agricultural Commodities* publication (pp. 76-83), which is available on the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) webpage at www.daff.gov.au/abares/publications.

The medium term outlook (from 2013–14 to 2016–17) was published in the March 2012 *Agricultural Commodities* report (pp.84-90), which is also available on the ABARES webpage at www.daff.gov.au/abares/publications.

Rural and Regional Affairs and Transport Committee

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2012

Agriculture, Fisheries and Forestry

Question: 66

Division/Agency: ABARES - Australian Bureau of Agricultural and Resource Economics and Sciences
Topic: Impact of managed investment schemes (MIS) on replanting
Proof Hansard page: 111 (21/05/2012)

Senator COLBECK asked:

Senator COLBECK: But is there any reduction in that replanting as harvests occur in certain locations? Are you detecting any forward trends? The information I have is that up to 50 per cent of what was put in, particularly through the MIS process, may not go back in.
Dr Davey: Senator, the MIS plantations in some cases are not being replanted.
Senator COLBECK: Do you have any sense of the scale of that?
Dr Davey: Not at this stage, largely because a lot of companies are in receivership, so we have not actually got any information regarding that.
Dr Ritman: It would depend on the rotation length.
Senator COLBECK: Yes, I understand that—and where they are in the rotation and all of those elements. I understand all of that.
Dr Ritman: We could take this on notice.
Dr O'Connell: I think the suggestion that there has been a big fallout as a result of MIS is right to a degree. I think we would need to take it on notice just to give you a sense of what we understand about the full effect. It is not complete at all.

Answer:

Based on 2009 to 2011 National Plantation Inventory survey information, around 20 000 hectares of managed investment schemes (MIS) plantations were removed from the total plantation estate (2 million hectares). This represents around 1 per cent of the total plantation estate and 3 per cent of the total MIS plantation estate. The full effects of the collapse of some MIS companies will not be known for another 10 years. Plantation removals are expected to increase over the next five to 10 years as commercially unviable plantations are harvested and not replanted. This includes MIS and non-MIS plantations.

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ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2012

Agriculture, Fisheries and Forestry

Question: 67

Division/Agency: ABARES - Australian Bureau of Agricultural and Resource Economics and Sciences
Topic: Evidence used in analysis of impact of carbon tax
Proof Hansard page: 113 (21/05/2012)

Senator NASH asked:

Mr Morris: I think under the Treasury analysis of the long-run impacts, they do show agriculture gains because agriculture is exempted from the tax. So, relative to other sectors in the economy, resources flow into agriculture and it actually gets the benefit. But our analysis was looking at more the short-run impact and various assumptions in terms of particularly the pass-back of the imposition of the tax from processors on to farmers. That was where the main impact was. A lot of the numbers that have been quoted in our figures are actually with 100 per cent pass-back, but that is unlikely to happen. It is likely to be somewhere in between zero and 100 per cent. That is why we provided a range of figures looking at different scenarios.
Senator NASH: I do not want to cut across Senator Colbeck, but there are two things that you could take on notice. The first is why you assume that the pass-on, or the pass-back, as you call it, of those costs will be somewhere between nought and 100—what evidence are you basing that on?

Answer:

Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) estimated the short-run impacts on farmers of carbon pricing for a range of assumptions regarding shifting the burden from processors to farmers, called 'pass-back', between zero and 100 per cent (Whittle et al 2011). The extent of pass-back depends on a range of complex interrelated factors. The degree to which each party along the agricultural supply chain bears the burden of the increased processing costs depends on the price sensitivity of demand by final consumers in international and domestic markets, and processors' ability to absorb costs increases and remain profitable. The effect of these factors will vary between industries, regions and over time.

There are no off-the-shelf estimates of pass-back rates available for the study. Also, industry estimates of carbon pricing impacts are based on 100 per cent 'pass-back'. While estimating the exact degree of pass-back requires extensive data analysis and econometric estimates of supply and demand responses the boundaries for possible pass back rates are zero and 100 per cent. A pass-back rate that is greater than 100 per cent would imply that the price paid for farm goods decreases by an amount greater than the increase in processors' costs. A pass-back rate that is less than zero (negative) implies that the price paid for farm goods will

Question: 67 (continued)

increase despite increasing processor costs. Therefore, the ABARES' analysis provides upper and lower bounds to the change in revenue faced by producers under a carbon price. The paper has put forward a number of reasons why the level of 'pass-back' could be less than 100 per cent including the ability of processors to pass price increases on to final consumers.

Whittle, L, Hug, B, Heyhoe, E, Ahammad, H and Berry, P 2011, *Possible short-run effects of a carbon pricing scheme on Australian agriculture*, ABARES research report 11.10, December, Canberra.

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ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2012

Agriculture, Fisheries and Forestry

Question: 68

Division/Agency: ABARES - Australian Bureau of Agricultural and Resource Economics and Sciences
Topic: Request for copy of ABARES January 2012 report on foreign investment
Proof Hansard page: 116 (21/05/2012)

Senator BACK asked:

Mr Morris: Yes, we appeared before the inquiry earlier this year. I would just note for your information, Senator, that there was a report that we released in January 2012 on foreign investment in Australian agriculture which provides our views on the important role that foreign investment plays in Australian agriculture and some findings, I suppose, in terms of how to go forward, including the one that the government responded to in terms of collecting further data in the future.
Senator BACK: So that is on the website?
Mr Morris: We can certainly provide you with a copy of that.
Senator BACK: And that report covered both agricultural land and agricultural businesses?
Mr Morris: Yes, it covered both the farm level as well as processing.
Senator BACK: Thank you, Chair—that will satisfy me.

Answer:

A copy of the Australian Bureau of Agricultural and Resource Economics and Sciences' report 'Foreign investment and Australian agriculture' is available from the Rural Industries Research and Development Corporation website at:
https://rirdc.infoservices.com.au/items/11-173.

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ANSWERS TO QUESTIONS ON NOTICE

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Agriculture, Fisheries and Forestry

Question: 93

Division/Agency: ABARES - Australian Bureau of Agricultural and Resource Economics and Sciences
Topic: Details about what information could be provided from model
Proof Hansard page: 55-56 (22/05/2012)

Senator NASH asked:

Senator NASH: I do not work very well in hectares. So that is 157 000, but we do not know whether that is going to be on 4 DSE country or 1 DSE or irrigation country. We actually cannot determine that; is that what you are saying?
Mr Morris: I think what Dr Ahammad was saying was that we have that information built into the model. We could actually provide you with some of that information. Perhaps we will take it on notice in terms of what we can provide you with. What Dr Ahammad was saying was that there are a number of caveats around that; obviously with modelling there is a certain level of coarseness. So we would not want somebody to say that the model says that there are going to be trees in this particular area and, if there are not trees there, therefore we are wrong.
Senator NASH: I will not hold you to it.

Answer:

Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) did not estimate specifically the dry sheep equivalent of the land projected to be planted under trees in the study (Burns et al 2011). However, the report does include the estimated area of reforestation that is projected to occur on each major agricultural land use type. The table below summarises the findings of the report.

Table Additional areas of reforestation projected under the medium global scenario, by current agricultural land use, 2012–13 to 2049–50

Current land use	**Area of land converted '000 ha**
Livestock – dryland	326.3
Livestock – irrigated	<0.1
Cropping – dryland	19.8
Cropping – irrigated	0.6
Sugar	0.6
Total of all land uses	347.3

Note: Results in this table reflect the total area of land converted, environmental plantings and plantations, rather than the environmental plantings as specified in the question. Separate data is not available.

Burns, K, Hug, B, Lawson, K, Ahammad, H and Zhang, K 2011, *Abatement potential from reforestation under selected carbon price scenarios*, ABARES Special Report, Canberra, July

Rural and Regional Affairs and Transport Committee

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2012

Agriculture, Fisheries and Forestry

Question: 127

Division/Agency: ABARES - Australian Bureau of Agricultural and Resource Economics and Sciences
Topic: Details of electromagnetic airborne mapping surveys
Proof Hansard page: 36 (21/05/2012)

Senator EDWARDS asked:

Dr O'Connell: I have just been provided with some information which might be useful to you in terms of the salinity mapping issue. ABARES did a range of electromagnetic airborne mapping surveys between 2001 and 2011. That was the work that was relevant to targeting what the real problems were. This has all been published. There are nine specific projects. If it is useful to you, we can provide you with that detail.
Senator EDWARDS: That would be terrific. I just have to know what the problem is.

Answer:

The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) has been involved in a range of airborne electromagnetic mapping (AEM) surveys between 2001 and 2011. These AEM surveys were done across Australia to assist with natural resource management and funded under the National Action Plan for Salinity and Water Quality. ABARES contributed to nine individual projects that produced detailed salt mapping of selected priority areas to target intervention and investment strategies:

- Pike Floodplain, South Australia
- Calperum Station, South Australia
- River Murray Corridor, Victoria
- Lower Macquarie River, New South Wales
- Lower Balonne, Queensland
- Billabong Creek, New South Wales
- Honeysuckle Creek, Victoria
- South Australian Salinity Management Support Project
- Angas–Bremer Prescribed Wells Area, South Australia

Reports and data products for all of these projects are available on the DAFF website:

- www.daff.gov.au/natural-resources/soils/salinity-mapping

As part of the Lower Balonne project, there was a series of salinity management products developed for land users in the region, including salinity management factsheets. These have also been published on the DAFF website:

- www.daff.gov.au/natural-resources/soils/salinity-mapping/lower_balonne

Rural and Regional Affairs and Transport Committee

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2012

Agriculture, Fisheries and Forestry

Question: 228

Division/Agency: ABARES - Australian Bureau of Agricultural and Resource Economics and Sciences
Topic: Impact of carbon pricing on Australian agriculture
Proof Hansard page: Written

Senator COLBECK asked:

What consideration has been made to estimate the short, medium and long term impacts of the carbon pricing scheme on Tasmanian producers and exporters?

Answer:

The Government, through the Department of Treasury, has conducted one of the largest economic modelling exercises in Australia's history, specifically on the impact of carbon pricing on the Australian economy. This modelling included detailed impacts by sector, including agricultural sub-sectors, and by state. It has been publically released and is available at: http://archive.treasury.gov.au/carbonpricemodelling/content/default.asp

The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) has also estimated the potential short-run effects of a carbon pricing scheme on the economic value of farm production for six broad industry classifications: dairy, beef, sheep, beef-sheep, wheat and other crops, and mixed livestock-crops (Whittle et al. 2011).

These ABARES short-run estimates are intended to supplement the medium to long-run estimates of the proposed carbon pricing scheme published by the Treasury.

Australian Government 2011, *Update: Strong Growth, Low Pollution: modelling a carbon price*, September, Canberra.

Whittle, L, Hug, B, Heyhoe, E, Ahammad, H and Berry, P 2011, *Possible short-run effects of a carbon pricing scheme on Australian agriculture*, ABARES research report 11.10, December, Canberra.

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ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2012

Agriculture, Fisheries and Forestry

Question: 229

Division/Agency: ABARES - Australian Bureau of Agricultural and Resource Economics and Sciences
Topic: Impact of carbon pricing on Australian agriculture
Proof Hansard page: Written

Senator COLBECK asked:

What consideration has been made to estimate the short, medium and long term impacts of the carbon pricing scheme on horticultural producers and exporters across Australia?

Answer:

The Australian Government, through the Department of Treasury, has conducted one of the largest economic modelling exercises in Australia's history, specifically on the impact of carbon pricing on the Australian economy. This modelling included detailed impacts by sector, including agricultural sub-sectors, and by state. It has been publically released and is available at: http://archive.treasury.gov.au/carbonpricemodelling/content/default.asp

The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) has also estimated the potential short-run effects of a carbon pricing scheme on the economic value of farm production for six broad industry classifications: dairy, beef, sheep, beef-sheep, wheat and other crops, and mixed livestock-crops (Whittle et al. 2011).

These ABARES short-run estimates are intended to supplement the medium to long-run estimates of the proposed carbon pricing scheme published by the Treasury.

Australian Government 2011, *Update: Strong Growth, Low Pollution: modelling a carbon price*, September, Canberra.

Whittle, L, Hug, B, Heyhoe, E, Ahammad, H and Berry, P 2011, *Possible short-run effects of a carbon pricing scheme on Australian agriculture*, ABARES research report 11.10, December, Canberra.

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ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2012

Agriculture, Fisheries and Forestry

Question: 230

Division/Agency: ABARES - Australian Bureau of Agricultural and Resource Economics and Sciences
Topic: ABARES report into impact of carbon pricing on Australian agriculture
Proof Hansard page: Written

Senator COLBECK asked:

1. What activities are included in “aerial agricultural services”?

2. How is the assumption that increases in aviation fuel costs will only affect aerial agricultural services justified?

3. What consideration has been given to the impact of aviation fuel increases on costs of getting produce to market, such as short shelf life products – cherries to Thailand for example?

4. In establishing the potential increase from aerial agricultural services, ABARES only looked at the total expenditure on these services in the sheep, cattle, grains and dairy industries. Are these enterprises representative of other agricultural users of aerial agricultural services?

5. The report says that "determining the extent of cuts in price paid to farmers is a difficult task…" and lists a number of reasons, including "limited understanding of the degree of cost-price pass-through downstream to wholesalers and consumers, and upstream to agricultural producers.” If there is “limited understanding” of the impact on producers how can the Department and Minister support the introduction of the tax?

Answer:

1. ‘Aerial agricultural services’ is based on the Australian and New Zealand Standard Industrial Classification (ANZSIC) system. Activities under this industry classification include aerial crop spraying or dusting; aerial fertiliser spreading; aerial mustering; aerial pasture spraying or dusting; aerial pest control or baiting; aerial seeding service; and aerial topdressing.

2. An increase in aviation fuel costs is likely to affect the price of aerial agricultural services and domestic aviation transport. International aviation fuel use will not be subject to an increase in the aviation fuel excise (Australian Government 2011) and as such will not be directly affected by an effective carbon price on aviation fuel.

   The effect of higher aviation fuel costs on the price of aerial agricultural services was included in the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) analysis (Whittle et al 2011).

Question: 230 (continued)

The effect of higher aviation fuel costs on the costs of domestic air transport was not included in the analysis. This is because air transport tends to be reserved for higher value, compact commodities. The goods produced by the sheep, grains, beef and dairy industries tend to be bulkier and as such, road and rail transport are the primary forms of transport. This is supported by data from the ABS (2008) which shows that the share of 'air and space transport' expenditure in total input costs for primary producers and food processors in 2006–07 was negligible. Specifically, the estimated share of 'air and space transport' expenditure in total input costs for the 'sheep, grains, beef and dairy cattle' industry was less than 0.14 per cent in 2006–07 (ABS 2008). The estimated share of 'air and space transport' in total input costs for the 'meat and meat product manufacturing' and 'dairy product manufacturing' industries were also insignificant, did not exceed 0.03 per cent and 0.02 per cent, respectively (ABS 2008). It should also be noted that these figures include international air transport which will not be affected by the imposition of an effective carbon price on aviation fuels.

3. As highlighted earlier, international aviation fuel use will not be subject to an increase in fuel excise (Australian Government 2011) and, therefore, carbon pricing will not increase the costs of marketing goods internationally such as cherries to Thailand.

4. The 'sheep, grains, beef and dairy cattle' industry under the ANZSIC classification system concords with the six industries considered by ABARES (Whittle et al 2011). The use of aerial agricultural services by the 'sheep, grains, beef and dairy cattle' industry is representative of the activities included in this classification but it is not known whether it would be representative for other industries.

5. The 'limited understanding' referred to in the question was addressed by the pass-back scenario analysis with pass-back rates assumed to range between zero and 100 per cent. While the boundaries for possible pass-back are zero and 100 per cent pass-back the specific level will depend on factors such as the price sensitivity of demand by final consumers', in international and domestic markets, and processors' ability to absorb cost increases and remain profitable. The ABARES study (Whittle et al 2011) presented zero, 20, 60 and 100 pass-back scenarios and discussed in some detail the worst case scenario with 100 per cent pass back of costs from processors to producers.

ABS (Australian Bureau of Statistics) 2008, Australian National Accounts: Input-Output Tables 2006-07, cat. No. 5209.0.55.001, Canberra.

Australian Government 2011, Securing a Clean Energy Future, July, Canberra.
Whittle, L, Hug, B, Heyhoe, E, Ahammad, H and Berry, P 2011, *Possible short-run effects of a carbon pricing scheme on Australian agriculture,* ABARES research report 11.10, December, Canberra

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ANSWERS TO QUESTIONS ON NOTICE

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Agriculture, Fisheries and Forestry

Question: 231

Division/Agency: ABARES – Australian Bureau of Agricultural and Resource Economics and Sciences
Topic: Agricultural Employment, QoN 105 – February 2012
Proof Hansard page: Written

Senator COLBECK asked:

1. ABARES have reported approximately 30% drop in employment in Tasmania's horticultural and fruit growing sector and just over a 30% drop in employment in Tasmania's grain, sheep and beef cattle sector. What research is being undertaken to understand the reasons for these reductions and the potential impacts of these reductions on Tasmania?

2. What programs or initiatives are being developed to address the reasons and impacts?

3. Where are employment figures for fisheries and forestry sectors? Are they amalgamated in the "Agriculture not fully defined" section?

4. If so, how can meaningful decisions be made if changes in sectors such as fisheries and forestry are not specifically identified?

Answer:

1. The Australian Bureau of Agricultural Resource Economics and Sciences is not currently undertaking specific research to identify factors driving variations in agriculture employment. Australian Bureau of Statistics data indicate that employment in agriculture has remained relatively stable from a longer term perspective, averaging around 312 000 jobs since 2002–03. For Tasmania, employment in agriculture has averaged 10 800 jobs over the same period.

2. Please refer to the answer to Question 1.

3. In response to a previous question on notice on this issue (QoN 105 – February 2012), only employment in agriculture is presented (not including fisheries and forestry). According to the Australian Bureau of Statistics (Cat. no. 6291.0.55.003 released on 14 June 2012), total annual employment in fisheries and forestry declined by 6.2 per cent between 2009–10 and 2010–11, from 18 402 to 17 267 (see table 1.). This decline mainly reflects a 20 per cent fall in the number of forestry and logging jobs, from 6 971 to 5 568. Partially offsetting this, employment in commercial fishing (which includes aquaculture, fishing, hunting and trapping) increased by 2.3 per cent to 11 699 in 2010–11, compared with 11 431 in 2009–10.

Question: 231 (continued)

For Tasmania, annual employment in fisheries and forestry declined by 15.2 per cent between 2009–10 and 2010–11, from 3 549 to 3 010. Employment in forestry and logging fell by almost 45 per cent to 1 220 jobs while employment in commercial fishing rose by 34 per cent to 1 790 jobs

4. Employment figures for fisheries and forestry are supplied in the tables below.

Table 1. Employment in fisheries and forestry, 2009–10 and 2010–11

	NSW no.	Vic. no.	Qld. no.	SA no.	WA no.	Tas. no.	NT no.	ACT no.	Aust. no.
2009-10									
Aquaculture	454	561	662	1 322	456	1 011	236	na	3 785
Fishing, hunting and trapping	2 029	348	1 719	1 436	1 707	325	202	109	7 646
Forestry and logging	1 564	968	946	392	936	2 213	99	na	6 971
	NSW no.	**Vic. no.**	**Qld. no.**	**SA no.**	**WA no.**	**Tas. no.**	**NT no.**	**ACT no.**	**Aust. no.**
2010-11									
Aquaculture	1 158	na	912	1 033	949	1 364	155	na	4 373
Fishing, hunting and trapping	1 408	923	1 722	2 989	699	426	147	na	7 326
Forestry and logging	1 067	955	1 064	357	887	1 220	na	75	5 568

na = Not available.
Source: ABS, Labour Force, Australia, Detailed, cat. no. 6291.0.55.003, Canberra.