

Senate Rural Affairs and Transport Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Supplementary Budget Estimates October 2010
Agriculture, Fisheries and Forestry

Question: ABARE–BRS 01

Division/Agency: Australian Bureau of Agricultural and Resource Economics –
Bureau of Rural Sciences

Topic: MDBA referee report

Proof Hansard Page: 62 and 147 (24/05/2010)

Senator Nash asked:

Senator NASH—I just have some very quick questions to finish up on. Is the referee report you said the MDBA did something available that the committee could look at?

Mr Gooday—I believe it is on their website.

Senator NASH—So are 1,200 other bits of technical information.

Mr Glyde—Yes, if it would help, we could provide it to you.

Senator NASH—That would be very useful, thank you.

.....

Dr O’Connell—...Also, clarification for Senator Nash: we had said we understood that the peer review of the ABARE work was on the MDBA website. It is not. We will now see if we can get it provided to you.

Senator NASH—Thank you.

Answer:

This request has been forwarded to the Murray Darling Basin Authority for a response.

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Agriculture, Fisheries and Forestry

Question: ABARE–BRS 02

Division/Agency: Australian Bureau of Agricultural and Resource Economics –
Bureau of Rural Sciences

Topic: Water Modelling

Proof Hansard Page: 62-63 (20/10/2010)

Senator Nash/Birmingham asked:

Senator NASH—And what are the population movements when the buybacks occur? Have you looked at that under the current buyback program that has already occurred? Has there been any work done on that?

Mr Gooday—No, we have not been able to look at that.

Senator NASH—And does the modelling assume that irrigators will actually stay in a community after that buyback program?

Mr Gooday—Yes, the modelling that we have done assumes that the payments for the water go to households in those regions.

Senator NASH—Yes.

Mr Gooday—And then they spend some of that money inside the region and some of the money outside the region, the same as every other household in the region.

Senator NASH—I am very happy for you to take this on notice—can you just give us some more detail around what underpins that? I would like to see the evidence behind it because I only have it anecdotally, but I think a lot of the payment for that water is going straight to the bank to retire debt. So I would be very interested in your underpinning, I guess, and how you have arrived at that, given that the experience on the ground says something really entirely different. And could I just ask, also on notice, a last question. Mr Glyde, you very kindly supplied for me an answer to a question on notice—very recently, Minister. It was question ABARE 05. If you could just take on notice: over the five years that you gave me the allocations against entitlement, could you break those allocations down further? What proportion of that was government allocation for environmental purposes?

Mr Morris—Yes. I will take it on notice.

Senator BIRMINGHAM—If I can just add, while you are taking some of the details on notice: if you could explain the mobility of people and your assumptions about their movements, and how that compares with mobility in metropolitan areas and what assumptions you have made within the modelling, I would be interested.

Mr Morris—Yes, I am happy to do that.

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Question: ABARE–BRS 02 (continued)

Answer:

The Australian Bureau of Agricultural and Resource Economics–Bureau of Rural Sciences (ABARE–BRS) modelling results presented in the report *Assessing the regional impact of the Murray-Darling Basin Plan and the Australian Government's Water for the Future Program in the Murray-Darling Basin* assume that water bought by the government results in an increase in expenditure by households equal to the annualised value of buyback purchase amounts within the region. The annualised value is determined based on an assumed interest rate of 5 per cent and can be interpreted as irrigators placing buyback proceeds in savings and spending the interest, or government paying irrigators in the form of an annuity rather than a lump sum.

Irrigators may also use water buyback proceeds to reduce debt. In general this would be essentially consistent with the above assumptions. That is, a reduction of debt will lead to a reduction in interest payments providing for an increase in future household expenditure equivalent to placing the proceeds in savings and spending the interest.

The ABARE–BRS survey of irrigation farms in the Murray-Darling Basin provides a picture of the financial status of irrigation farms over the years 2006-2007, 2007-2008 and 2008-2009. The majority of surveyed irrigation farms are classified as having high farm equity, with farm equity ratios in excess of 80 per cent. While there was a slight decline in average equity ratios between 2006-2007 and 2007-2008 due to the drought conditions (a fall from 85 per cent to 83 per cent for irrigated broadacre farms for example), only a small proportion of farms were classified as both low equity and low income (13 per cent) in both 2006-2007 and 2007-2008. Average debt servicing ratios (interest payments relative to total farm cash receipts) varied from 8 per cent among horticulture and dairy farms to 14 per cent in broadacre farms in 2007-2008.

While the modelling assumes buyback proceeds lead to increases in household expenditure, this expenditure need not occur in the region. The modelling assumes that household expenditure patterns (specifically the proportion of expenditure that is made within a region) are the same as those of the model baseline (the pre buyback case).

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Question: ABARE–BRS 02 (continued)

The general equilibrium (AusRegion) modelling takes into account potential migration between regions. People move between regions in response to economic and employment opportunities. The model does not have sufficient regional detail to assess differences in population mobility between metropolitan and non–metropolitan regions.

ABARE–BRS is not in possession of any data relating to historical water allocations made against water entitlements held by environmental water holders such as the Commonwealth Environmental Water Holder.

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Question: ABARE–BRS 03

Division/Agency: Australian Bureau of Agricultural and Resource Economics–
Bureau of Rural Sciences

Topic: **The impact of the Murray-Darling Basin Plan on agricultural industries in the basin**

Proof Hansard Page: 127 (20/10/2010)

Senator Nash asked:

Senator NASH—In terms of the potential impact of the Murray-Darling Basin Plan and any permanent removal or reduction in water, will Agricultural Productivity be doing any work on the impact that that might potentially have on the meat, dairy and wool industries? Has that been done at all or is that something you are likely to be tasked to do?

Mr Glyde—The estimates of the impacts of that work have all been done by ABARE-BRS. It does not sit within the Agricultural Productivity Division.

Senator NASH—So it sits with ABARE and it has been done?

Mr Glyde—Yes.

Senator NASH—Is it publicly available?

Mr Glyde—In terms of the impacts on the industry, yes. The documents that Mr Morris and Mr Gooday were referring to go through each of the sectors and describe the impact in each sector.

Senator NASH—Great. I have not had a chance to get right through that yet. That is all contained in there?

Mr Glyde—Yes.

Senator NASH—Great. Does it also have impact on exports and what the likely outcome is going to be on the export industry, given the significant nature of Australian agricultural exports? Has any work been done on that?

Mr Glyde—I am not sure, to be quite honest.

Senator NASH—Could you come back to me on that?

Mr Glyde—Sure.

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Question: ABARE–BRS 03 (continued)

Answer:

The Australian Bureau of Agricultural and Resource Economics–Bureau of Rural Sciences (ABARE-BRS) report to the Murray Darling Basin Authority regarding the economic analysis of the Basin Plan did not examine the impact on exports. The 3500GL option analysed in the ABARE-BRS report is estimated to reduce the value of total Australian agricultural production by 2.2 per cent so the aggregate impact on exports is expected to be small.

However, impacts on some export industries could be greater, particularly for rice and cotton. While ABARE-BRS estimates at an industry level indicate that reduced production of most commodities as a result of the 3500GL option will be relatively small, at less than 3 per cent, total rice and cotton production is expected to fall significantly (by 37 per cent and 20 per cent, respectively).

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Question: ABARE–BRS 04

Division/Agency: Australian Bureau of Agricultural and Resource Economics –
Bureau of Rural Sciences

Topic: Vegetable commodities

Proof Hansard Page: 132 (20/10/2010)

Senator Colbeck asked:

Senator COLBECK—I will move on. I will ask you to take this on notice. I want to get some figures on vegetable imports. For the 10 most imported vegetables, can you give me a breakdown of imports of vegetable commodities in 2009 by commodity and origin and a breakdown of exports of vegetable commodities in 2009 by commodity and origin?

Dr O’Connell—Just to be clear, is this commodities you are talking about?

Senator COLBECK—By vegetable commodity, fresh and processed.

Dr O’Connell—There is a lot of complication with processed food imports in trying to work out the quantities.

Senator COLBECK—My problem is that some of these are inputs to processing.

Dr O’Connell—Yes, I understand that.

Senator COLBECK—I understand the complexities. I just want to get some relatively complete figures on the flows of vegetables in and out, bearing in mind the trend over recent years towards net import. I am going to need fresh and processed, I think. I am looking for as complete a picture as I can get.

Dr O’Connell—You are looking for things like frozen veg.

Senator COLBECK—Yes.

Dr O’Connell—And we can give you a commentary around it so that it is helpful, if you like.

Senator COLBECK—Yes. I specifically want to get some figures from New Zealand, and I need to get some production figures as well over, say, the last five years by state and product.

Mr Glyde—You want to go back five years so you get a bit of a trend?

Senator COLBECK—Yes. I would like to get some trend flows and inflows and outflows so that I can just look at some general pictures of where that particular industry sector is moving.

Mr Grant—Just for imports from New Zealand?

Senator COLBECK—No.

Mr Grant—But that identify New Zealand especially?

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Question: ABARE–BRS 04 (continued)

Senator HEFFERNAN—In the case of New Zealand, are you looking for country of origin or—

Senator COLBECK—No, Bill. I do not want to complicate it.

Senator HEFFERNAN—A lot of them are Chinese products from New Zealand into Australia.

Senator COLBECK—In a lot of circumstances it is not necessarily possible to identify that.

Senator HEFFERNAN—So you are not interested in whether they—

Senator COLBECK—Once I get the numbers, I can then start to look at a breakdown

Answer:

See response to ABARE–BRS 10.

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Question: ABARE–BRS 05

Division/Agency: Australian Bureau of Agricultural and Resource Economics –
Bureau of Rural Sciences

Topic: Social and economic impacts of the establishment of marine parks

Proof Hansard Page: Written

Senator Colbeck asked:

I understand ABARE-BRS has undertaken some work for DEWHA (SEWPC now) on the social and economic impacts of the establishment of marine parks.

1. Can you please advise when this work was requested?
2. What was the terms of reference for the work?
3. Were draft maps provided?
4. Has it been completed in part or full?
5. Has it been provided in part or full to DEWHA?
6. What agencies or organisations were consulted?
7. Were any consultants engaged? Who? When? How much? For what?

Answer:

1. The Memorandum of Understanding which underpins the work was signed by both parties (Department of Environment, Water, Heritage and the Arts and Bureau of Rural Sciences; now Sustainability, Environment, Water, Population and Communities (SEWPAC) and Australian Bureau of Agricultural and Resource Economics–Bureau of Rural Sciences (ABARE–BRS) on 21/08/2009.
2. The objective of the project is to support SEWPAC’s consideration of potential Marine Protected Area (MPA) network designs under the National Representative System of MPAs by providing reports detailing the potential impacts of MPA networks on commercial fisheries’ Gross Value of Production and an overview of the potential impact any proposed access restrictions may have on charter, recreational, Indigenous fishing interests, support industries to the above sectors and coastal communities and the wider economy.
3. Yes, draft maps of potential marine reserve network options for the South-west, North-west and North Marine regions were provided to ABARE–BRS.

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Question: ABARE–BRS 05 (continued)

4. Interim reports for the South-west and North-west have been finalised. An interim report for the North is being finalised.
5. Interim reports for the South-west and North-west have been finalised and provided to SEWPAC.
6. SEWPAC, the Australian Fisheries Management Authority and state agencies for the relevant regions were consulted.
7. No.

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Question: ABARE–BRS 06

Division/Agency: Australian Bureau of Agricultural Resource and Economics–
Bureau of Rural Sciences

Topic: Murray-Darling Basin

Proof Hansard Page: Written

Senator Heffernan asked:

1. When was ABARE first asked by the Murray-Darling Basin Authority to undertake socioeconomic analysis of proposed SDLs?
2. On September 1, the MDBA announced it was delaying the release of the Guide to the Basin Plan to undertake further "work to improve some of the social and economic elements of the Guide's contents."
Was ABARE asked to undertake this work?
3. If so, when were they contracted to do this?
4. When were ABARE first asked to model the three scenarios of 3,000 GL, 3,500 GL and 4,000 GL?
5. The 800 jobs figure that the MDBA originally made much out of but is now backing away from. Is that ABARE's figure? If so, how did you come up with this figure and what assumptions are it based on?
6. Does it represent the amount of initial jobs lost or a long-run outcome? What is ABARE's estimate of the amount of people who will be displaced or lose their job?
7. I presume that you assume that some who lose employment or their business, will find employment elsewhere.
What sort of jobs will these be? In what industries will they find employment?
8. Does your modelling assume that employment will actually increase in the Basin after the SDLs are in place and the Government Water for the future program is complete?
9. ABARE states that modelling the effects on downstream industries (such as rice, cotton and dairy processing) is "difficult given the uncertainties involved" (p. 5)
Does ABARE actually model these impacts?
10. How many cotton gins or rice mills close under these cuts in your model?
11. Can your model accurately predict the effects on downstream processing activities?

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Question: ABARE–BRS 06 (continued)

Answer:

1. Australian Bureau of Agricultural and Resource Economics (ABARE) submitted a proposal for the Murray Darling Basin Authority (MDBA) Request for Tender: *Social and economic advice, modelling and analysis: Economic and social profiles and impact assessments in the Murray-Darling Basin* on 7 December 2009. ABARE was advised on 5 January 2010 that it was the successful bidder.
2. ABARE was not asked to conduct any work beyond that already contracted.
3. Not applicable – see answer to question 2.
4. The first time Australian Bureau of Agricultural and Resource Economics – Bureau of Rural Sciences (ABARE–BRS) received 3000GL, 3500GL and 4000GL scenarios was 27 July 2010. Specific details within these three scenarios were modified several times by the MDBA. The final scenarios (which are those presented in the final report) were received on 23 August 2010.
5. ABARE–BRS modelled long-run percentage changes in employment from ‘what would have otherwise occurred in the absence of the Basin Plan’. This modelling was undertaken using the AusRegion Computable General Equilibrium Model. These results are provided on page 38 of the ABARE–BRS report to MDBA. The MDBA applied the estimated percentage change in employment in the MDB to data on MDB employment levels to obtain the 800 job-loss figure.

The methodology used is documented in chapter 3 of the ABARE–BRS report to MDBA (*Environmentally sustainable diversion limits in the Murray-Darling Basin: Socioeconomic analysis*). Additionally, pages 39-40 of the report contain a detailed discussion of the employment results, including some of the important underlying assumptions and qualifications.

6. The numbers represent a long-run outcome, after the Australian economy has had time to adjust to the initial effects of the Basin Plan. ABARE–BRS has not modelled estimates of the direct irrigated agriculture related employment effects. However, these would be expected to be significantly larger than the long-run results.

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Question: ABARE–BRS 06 (continued)

7. The model employed to produce these estimates assumes labour is flexible in the long run, and hence allows labour to move between industries and across regions. After the economy adjusts to the initial shock, labour displaced from the affected industries is able to move to other industries, including within the agricultural sector. Industries, other than agriculture, are defined very broadly in the model, and include manufacturing, public and other services and construction.
8. In the report, *Assessing the regional impact of the Murray-Darling Basin Plan and the Australian Government's Water for the Future Program in the Murray-Darling Basin* that was undertaken by ABARE–BRS for the Department of Sustainability, Environment, Water, Population and Communities, the model results for the scenario that includes the impacts of the *Water for the Future* initiative indicate a net increase in employment in the MDB up to 2020-21. This is in part attributable to government expenditure in infrastructure boosting construction and related industries. The models were not run beyond this timeframe. The positive employment effects would be expected to lessen over time after the program is complete.

It is important to note that all of these results are with reference to a defined baseline scenario. The baseline scenario involves annual growth in GDP and employment across the basin regions. The reductions in employment estimated in some scenarios, is not sufficiently large to offset the general baseline trend of increased employment. Therefore in absolute terms employment is increasing under all scenarios both the *Water for the Future* and Sustainable Diversion Limits only scenarios.

9. The AusRegion CGE model includes a representation of downstream processing sectors such as dairy processing and other food processing. However, the AusRegion modelling is limited in that it does not incorporate the potential for threshold effects or tipping points. The report includes a detailed qualitative discussion (pages 48-54) of the potential effects of water reduction scenarios on key downstream processing sectors (dairy, rice and cotton).
10. As indicated on page 48 of the report, the modelling only takes into account production levels and values and does not produce estimates of the number of gins or mills that might close. To enhance the modelling results a qualitative discussion is provided on pages 48-54 of the report.

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Question: ABARE–BRS 06 (continued)

11. The AusRegion model provides estimates of the potential effects on downstream processing sectors. However, these estimates are at a broad geographical scale and broad industry level and cannot be used to predict impacts on particular processing facilities or towns.

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Question: ABARE–BRS 07

Division/Agency: Australian Bureau of Agricultural and Resource Economics –
Bureau of Rural Sciences

Topic: Murray-Darling Basin

Proof Hansard Page: Written

Senator Heffernan/Joyce asked:

1. What work has the MDBA performed on “tipping points” which may occur in some communities if too much water is taken away? Most of the graphs in the report appear to be relatively linear, but wouldn't there come a point for many industries, that if too much water is taken away, it loses the support services (such as mills, gins and supplies) which threaten the whole industry?
2. Does the ABARE model allow people to move from region to region? What happens to population movements when buybacks occur?
3. Does your modelling assume that irrigators stay in a community after they sell their water to the Government under its Restoring the Balance program?
4. How up to date is the data that ABARE use in its models?
5. What are your assumptions over how easily farmers can substitute water for land and how do these compare to other studies? How do your assumptions compare with other studies?
6. How does your modelling incorporate the variability of Australia's rainfall patterns into its analysis and how do these compare to other studies?
7. How much money does ABARE assume is spent on improving infrastructure to save water in the Basin?
8. If they say \$4.4 billion, ask what happened to \$5.8 billion? Isn't that the amount in the Sustainable Rural Water Use and Infrastructure Program?
9. Has ABARE held any technical modelling workshops to review the economic modelling and test its assumptions? If not, why not?
10. Has the MDBA sought the advice of modelling expertise elsewhere in government, including the Productivity Commission or Treasury?
11. Has ABARE's modelling been refereed by anyone?
12. If so, could ABARE please provide the Committee with their referee reports?
13. Did ABARE have any farmers, irrigators or agribusiness experts review or referee its modelling or its assumptions used in these reports for the MDBA?
14. On p. 3 of the "Environmentally sustainable diversion limits report" ABARE states:

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Question: ABARE–BRS 07 (continued)

- *The modelled 3500 GL scenario involves a reduction in surface water use of 32 per cent relative to the baseline ...*

How has ABARE constructed this baseline? In particular, does it include or exclude savings made under the Living Murray Initiative and state water recovery programs?

Answer:

1. Australian Bureau of Agricultural and Resource Economics – Bureau of Rural Sciences (ABARE-BRS) has only performed qualitative analysis in this regard, for the rice, cotton, and dairy processing industries (pages 48-54 of the report). Threshold effects (‘tipping points’) could occur. However, incorporating this into the modelling would require predicting the location of impacts at a much lower geographical scale than has been undertaken to date.

The work undertaken for the Murray Darling Basin Authority (MDBA) by Marsden Jacob Associates to develop socioeconomic profiles of communities of the basin, and to assess the resilience and adaptive capacity of basin communities in the context of the basin plan contains relevant information and analysis. Queries on non-ABARE-BRS work should be forwarded to the MDBA.

2. The AusRegion model includes a population component that models migration between regions based on changes in regional economic activity and (in particular) employment. The modest decline in projected employment in the MDB leads to a very small decline in population relative to the reference case. Under the scenario with the buyback the population decline is smaller. In both the “with” and “without buyback” scenarios population declines are projected to be not larger than 0.04 per cent relative to the reference case in 2020–21.
3. The ABARE-BRS modelling results presented in the report *Assessing the regional impact of the Murray-Darling Basin Plan and the Australian Government’s Water for the Future Program in the Murray-Darling Basin* assume that water buybacks result in an increase in expenditure by households equal to the annualised value of buyback purchase amounts within the region.

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Question: ABARE–BRS 07 (continued)

The annualised value is determined based on an assumed interest rate of 5 per cent and can be interpreted as irrigators placing buyback proceeds in savings and spending the interest or government paying irrigators in the form of an annuity rather than a lump sum.

While the modelling assumes proceeds from water sales lead to increases in household expenditure, this expenditure need not occur in the region. The modelling assumes that household expenditure patterns (specifically the proportion of expenditure that is made within a region) are those of the model baseline (the pre buyback case). This is similar to assuming that irrigators remain in the region following the sale of water. The impact of changing this assumption on (gross regional product) and employment results is minimal due to the manner in which the impact of water purchases has been modelled (as an annuity, rather than a lump sum).

4. The water trade model combines data from the Australian Bureau of Statistics agricultural census for 2000-01 and 2005-06 years. The 2005-06 agricultural census represents the most recent available release. A combination of 2000-01 and 2005-06 is used since 2000-01 better reflects the long run average level of water availability.

The AusRegion model baseline is based on the 2001-02 data. More recent data on agricultural production and gross domestic product is also incorporated up to 2007-08.

5. The model incorporates crop yield responses that depend on the amount of water supplied per hectare, determined from observed data from other published sources (see reference on page 16 of the report). As a result, the model captures limitations on the substitutability of land for water.

The ABARE-BRS' water trade model is relatively sophisticated in this regard. Most other models assume either no substitution between land and water, or use simplistic methods to allow for limited substitution.

6. In the report for the MDBA a separate variability analysis is undertaken which demonstrates the different model impacts observed between a representative normal and a representative dry year. For more detail on this see pages 22-24, 35-37, and 80-86 of the report.

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Question: ABARE–BRS 07 (continued)

The approach used by ABARE-BRS is relatively standard. The MDBA commissioned the University of Queensland's Risk and Sustainable Management Group to also investigate variability of rainfall and they used a similar approach.

7. For the report *Assessing the regional impact of the Murray-Darling Basin Plan and the Australian Government's Water for the Future Program in the Murray-Darling Basin* that was undertaken by ABARE-BRS for DSEWPaC, the assumptions on infrastructure expenditure provided by DSEWPaC are that \$4.4 billion from the \$5.8 billion SRWUI program and \$0.4 billion from the \$1.6 billion Water Smart Australia program are spent in the Basin.
8. The total value of this program is \$5.8 billion, however DSEWPaC have advised that for the purposes of the report undertaken for them ABARE-BRS should assume \$4.4 billion is spent within the Murray-Darling Basin.
9. During the course of the work for the MDBA a number of workshops were held between ABARE-BRS and the MDBA to discuss the modelling approach. This included input from a number of external reviewers. The MDBA also organised for the proposed methodology and preliminary results to be externally peer reviewed.

MDBA hosted a workshop with officials from state agencies on 10 March 2010 so that methods to be used in the socio-economic assessment could be critiqued. ABARE presented results from 'dummy runs' to the workshop.

In addition ABARE-BRS has previously presented the water trade model at a number of professional conferences including the Australian Agricultural and Resource Economics Society (AARES) conference to obtain feedback on methodology and results.

10. This question should be addressed to the MDBA.
11. Yes. ABARE-BRS' work has been subject to extensive review by the MDBA and external reviewers.
12. This question has been referred to the MDBA for response.

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Question: ABARE–BRS 07 (continued)

13. The model responses and assumptions regarding the relative profitability of alternative activities have been checked against available data from the ABARE-BRS surveys of irrigators in the MDB (annual surveys of around 900 irrigators since 2006-07). Responses and assumptions have also been validated against observed production and water trade data from recent years.

ABARE-BRS did not directly consult with farmers, irrigators, or agribusiness experts in regards to its economic modelling for these reports. The scope of the project with MDBA required the use of existing models and data. The approach has been used on a number of previous occasions, including assessing the economic effects of the first tranche of government water purchases and modelling the effects of climate change on water users.

14. These scenarios are based directly on the MDBA hydrological modelling results. ABARE-BRS take the percentage changes in water availability as estimated by the MDBA and apply them as shocks to the water trade model.

Page 48 of the MDBA *Guide to the Basin Plan (Volume 1)* states what the MDBA included and excluded.

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Question: ABARE–BRS 08

Division/Agency: Australian Bureau of Agricultural and Resource Economics –
Bureau of Rural Sciences

Topic: Murray–Darling Basin

Proof Hansard Page: Written

Senator Birmingham asked:

1. Expressed in unit and also percentage terms, what has been the change in average price for grapes, volumes crushed and hectares of vineyard plantings in the Murray-Darling Basin for each of the last ten years?
2. Does ABARE–BRS believe its modelling undertaken for the Murray-Darling Basin Authority satisfactorily captures more recent changes in both market conditions and technological advances for the agricultural sectors modelled?

Answer:

1. These data are drawn from data used to produce an ABARE-BRS publication titled *Australian wine grape production projections to 2011-12*¹. These data only go back to 2001-02 and the historical data for 2009-10 have not yet been compiled. Only eight years data have therefore been provided.

The price data available from the ABARE-BRS publication is available for a split of warm and cool climate regions only. The price data for the warm climate regions are from three regions that are within the Murray-Darling basin (MDB). These are: Lower Murray (Sth Aust); Murray-Darling-Swan Hill (NSW & Vic); and Big Rivers (NSW). Every other wine grape region in Australia comprises the cool climate regions and several of these are outside the MDB. Changes in warm climate grape prices are therefore the best indicator presently available of changes in the prices of wine grapes in the MDB. The changes in cool climate prices are also provided, however, because there are wine grape regions that fall at least partly within the MDB that are classified as cool climate wine areas. These are Central Victoria; North East Victoria; North and West New South

¹ Gunning-Trant C (2010), *Australian wine grape projections to 2011-12*, ABARE research report 10.4, April.

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Question: ABARE–BRS 08 (continued)

Wales; Central Ranges (NSW); and the Australian Capital Territory and the rest of New South Wales.²

The production and planted area data cover the group of wine grape regions that we understand to be at least partly within the MDB. These are: Lower Murray (Sth Aust); Murray Darling-Swan Hill (NSW & Vic); Big Rivers (NSW); Central Ranges (NSW); Southern NSW; the Australian Capital Territory and the rest of New South Wales; North and West New South Wales; North and West Victoria; Central Victoria; and North East Victoria.

Change in warm climate¹ grape prices

Year	White Grapes		Red Grapes	
	Change (%)	Change (\$/t)	Change (%)	Change (\$/t)
2001-02	10.0	47	-5.0	-36
2002-03	11.4	59	-18.6	-125
2003-04	0.4	2	-9.7	-53
2004-05	-10.6	-62	-12.7	-63
2005-06	-27.5	-143	-12.9	-56
2006-07	2.3	8	6.8	26
2007-08	31.0	119	48.1	193
2008-09	-33.6	-170	-31.4	-187

Note:1 Data cover the wine grape zones of Big Rivers, Murray Darling – Swan Hill and Lower Murray.

² A map showing the location of the wine grape regions may be found on page 4 of the publication referenced in footnote 1.

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Question: ABARE–BRS 08 (continued)

Change in cool climate² grape prices

Year	White Grapes		Red Grapes	
	Change (%)	Change (\$/t)	Change (%)	Change (\$/t)
2001-02	0.8	10	-4.5	-71
2002-03	11.1	131	-3.2	-48
2003-04	-2.6	-34	-17.5	-258
2004-05	-8.0	-102	-9.5	-116
2005-06	-12.8	-150	-8.2	-90
2006-07	10.4	107	15.2	155
2007-08	0.8	9	11.9	139
2008-09	-16.6	-188	-20.0	-261

Note:2 Data cover all wine grape zones except Big Rivers, Murray Darling – Swan Hill and Lower Murray.

Change in production

Year	Change (%)	Change (t)
2001-02	28.6	286430
2002-03	-19.3	-248299
2003-04	25.9	269260
2004-05	5.9	77679.4
2005-06	-4.5	-63101
2006-07	-19.9	-263999
2007-08	20.5	216823
2008-09	-6.2	-78808

Note: Data covers the wine grape zones of Lower Murray (Sth Aust); Murray Darling-Swan Hill (NSW & Vic); Big Rivers (NSW); Central Ranges (NSW); Southern NSW; the Australian Capital Territory and the rest of New South Wales; North and West New South Wales; North and West Victoria; Central Victoria; and North East Victoria. A small amount of production from these zones is outside the Murray Darling Basin. Production has been provided in lieu of crush, which is not available. Production includes grapes grown but not taken to a winery.

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Question: ABARE–BRS 08 (continued)

Change in area of vineyard plantings

Year	Change (%)	Change (ha)
2001-02	6.3	4501.4
2002-03	-0.7	-507.1
2003-04	5.3	4042.1
2004-05	1.3	1057.4
2005-06	-0.7	-585.2
2006-07	5.1	4105.9
2007-08	-0.2	-203.4
2008-09	-1.1	-963.8

Note: Data cover the wine grape zones of Lower Murray (Sth Aust); Murray Darling-Swan Hill (NSW & Vic); Big Rivers (NSW); Central Ranges (NSW); Southern NSW; the Australian Capital Territory and the rest of New South Wales; North and West New South Wales; North and West Victoria; Central Victoria; and North East Victoria (a small amount of plantings from these zones are outside the Murray Darling Basin).

2. ABARE-BRS modelling is based on 2001-02 and 2005-06 Australian Bureau of Statistics data. Being the most comprehensive data available on irrigated agricultural production, we believe this provides the best basis for considering potential impacts. Being the year prior to the drought, 2001-02 is generally considered the most representative year for annual crops, while 2005-06 data was used to capture some of the changes in industry structure for perennials, including changes in the grape industry.

The modelling is not intended to incorporate recent market conditions. Rather, it is intended to reflect long term averages. Commodity markets periodically undergo fluctuations in economic conditions. As the basin plan will come into effect from 2014 (2019 in Victoria) market conditions could change significantly before then.

Technological advances are difficult to model without sufficient data on adoption rates (by region) and impacts on profitability and water use. If significant advances are made and widely adopted these will affect the levels of the model estimates – however, they should not greatly affect the percentage change estimates (for example, the baseline and Sustainable Diversion Limits scenarios would both show an increase in ‘Gross Value of Irrigated Agricultural Production’ relative to the current estimates).

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Question: ABARE–BRS 09

Division/Agency: Australian Bureau of Agricultural and Resource Economics –
Bureau of Rural Sciences

Topic: Grant funding for immobilisation of feral donkeys and camels

Proof Hansard Page: Written

Senator Nash asked:

1. Is it correct that in April this year that a grant of \$104,651 was given to the West Australian Agricultural Authority “*to develop a standard operating procedure to ensure the humane, safe and efficient field immobilisation of feral donkeys and feral camels, and to develop and implement a training package for field operators.*”
2. Was it that procedure?
3. What is deficient in the current procedure?
4. Why do the field operators need a training package?
5. What is the training package?

Answer:

1. Yes. The grant was for the ‘Development of Standard Operating Procedures (SOPs) and a training package for field immobilisation of large herbivores in Judas control programs’ funded under the Australian Pest Animal Research Program that is administered by ABARE–BRS.
2. When implemented the SOPs should ensure the use of an appropriate drug regime for the humane, safe and efficient field immobilisation technique for large herbivores, such as camels and donkeys. The Department of Agriculture and Food Western Australia (DAFWA) have a contract with ABARE–BRS until December 2012, it is expected that this program will be completed at this time.
3. There are no SOPs in place for the field immobilisation of donkeys and camels. These new SOPs are critical for the safe, efficient and humane immobilisation of the animals preceding tracking collar attachment.
4. Once developed, an SOP requires an appropriate training package to be developed and implemented so that the tool can be used by field operatives.

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Question: ABARE–BRS 09 (continued)

5. The training package is yet to be finalised but will be developed based on the SOPs. The training will be delivered to field operatives and consist of three components: on-line course materials, a face-to-face workshop/demonstration and a series of supervised practical exercises.

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Question: ABARE–BRS 10

Division/Agency: Australian Bureau of Agricultural and Resource Economics –
Bureau of Rural Sciences

Topic: Vegetable exports and imports

Proof Hansard Page: Written

Senator Colbeck asked:

1. Can you please provide a breakdown of imports of vegetable commodities in the past 5 years by commodity and origin? (10 most imported vegetables only).
2. Can you please provide a breakdown of exports of vegetable commodities in the past 5 years by commodity and destination? (10 most exported vegetables only)
3. Can you please provide the level of imports from NZ of vegetables over the past 10 years by commodity and year?
4. Can you please provide the level of production of vegetable commodities over the past 5 years by State and commodity?

Answer:

1. Leading imports of vegetable commodities (value in \$A)

**Minimally transformed vegetable imports
(Unprocessed), \$A**

Garlic	2005	2006	2007	2008	2009
China	6,200,223	8,482,601	8,132,326	6,002,172	9,420,352
Mexico	522,332	1,373,251	2,046,554	2,040,027	3,202,818
United States of America	443,183	1,103,321	564,413	1,693,046	905,701
Argentina	315,208	1,079,265	580,902	1,496,035	810,872
<i>Other</i>	<i>371,030</i>	<i>303,036</i>	<i>252,875</i>	<i>1,224,329</i>	<i>2,412,260</i>
Total	7,851,976	12,341,474	11,577,070	12,455,609	16,752,003

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

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Question: ABARE–BRS 10 (continued)

Asparagus	2005	2006	2007	2008	2009
Peru	1,834,375	2,768,863	3,171,625	2,799,579	4,940,213
Thailand	2,060,897	1,635,717	1,355,257	2,252,453	1,743,528
Philippines	203,714	854,839	1,347,736	991,113	597,495
United States of America	134,765	173,621	874,192	1,892,717	503,193
<i>Other</i>	<i>126,285</i>	<i>408,407</i>	<i>714,764</i>	<i>1,255,373</i>	<i>1,290,987</i>
Total	4,360,036	5,841,447	7,463,574	9,191,235	9,075,416

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Onions and shallots	2005	2006	2007	2008	2009
United States of America	2,667,241	3,758,095	5,396,109	5,270,161	5,205,484
New Zealand	302,268	1,415,260	1,385,377	2,627,609	1,439,501
Netherlands	771,466	749,482	981,304	1,057,615	1,023,629
China	59,919	187,222	330,539	478,090	399,615
<i>Other</i>	<i>11,649</i>	<i>0</i>	<i>13,917</i>	<i>34,360</i>	<i>17,120</i>
Total	3,812,543	6,110,059	8,107,246	9,467,835	8,085,349

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Capsicums	2005	2006	2007	2008	2009
New Zealand	8,163,982	8,525,843	9,603,746	5,835,129	5,845,212
Greece	156,803	128,647	16,304	0	0
Mexico	151,960	73,485	0	0	0
United States of America	23,906	0	0	0	18,754
<i>Other</i>	<i>13,194</i>	<i>0</i>	<i>20,890</i>	<i>29,125</i>	<i>2,447</i>
Total	8,509,845	8,727,975	9,640,940	5,864,254	5,866,413

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Question: ABARE–BRS 10 (continued)

Peas	2005	2006	2007	2008	2009
China	2,664,102	2,551,811	3,102,197	3,678,421	4,792,999
New Zealand	0	13,889	90,311	60,567	92,831
India	48,582	23,276	7,930	20,310	33,145
Thailand	44,469	0	0	0	13,914
<i>Other</i>	<i>92,127</i>	<i>11,297</i>	<i>43,250</i>	<i>12,707</i>	<i>18,520</i>
Total	2,849,280	2,600,273	3,243,688	3,772,005	4,951,409

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Tomatoes	2005	2006	2007	2008	2009
New Zealand	4,574,890	5,091,588	3,175,805	1,758,441	3,652,617
Italy	0	0	2,248	0	0
Total	4,574,890	5,091,588	3,178,053	1,758,441	3,652,617

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Mushrooms (excl. the genus agaricus)	2005	2006	2007	2008	2009
Korea, Republic of	47,615	185,720	362,321	871,887	906,101
China	155,167	181,515	186,512	508,373	272,241
Thailand	96,873	42,803	64,399	63,313	74,321
Taiwan	37,503	125,363	104,044	12,801	7,593
<i>Other</i>	<i>45,990</i>	<i>10,640</i>	<i>70,940</i>	<i>45,993</i>	<i>35,872</i>
Total	383,148	546,041	788,216	1,502,367	1,296,128

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Question: ABARE–BRS 10 (continued)

Vegetables, other	2005	2006	2007	2008	2009
Thailand	1,050,036	963,300	964,524	991,614	868,173
Fiji	93,568	280,513	861,118	534,825	171,542
New Zealand	179,207	431,618	296,978	118,499	106,887
China	44,859	41,665	131,264	48,665	36,177
<i>Other</i>	65,683	28,325	54,762	11,703	57,099
Total	1,433,353	1,745,421	2,308,646	1,705,306	1,239,878

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Beans	2005	2006	2007	2008	2009
Canada	249,337	223,105	287,419	531,121	532,574
United States of America	77,035	34,712	215,100	422,835	521,672
Thailand	3,227	5,689	42,861	42,927	25,310
Myanmar	0	0	49,962	49,110	0
<i>Other</i>	57,868	18,350	48,525	3,992	0
Total	387,467	281,856	643,867	1,049,985	1,079,556

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Mushrooms of the genus agaricus	2005	2006	2007	2008	2009
Korea, Republic of	0	0	130,625	691,296	667,750
China	330,230	277,689	298,581	194,407	298,199
New Zealand	160,103	0	2,113	0	0
Taiwan	109,489	0	0	0	0
<i>Other</i>	12,180	11,357	4,819	36,801	10,306
Total	612,002	289,046	436,138	922,504	976,255

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

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Question: ABARE–BRS 10 (continued)

**Substantially & elaborately transformed vegetable imports
(Processed), \$A**

Potatoes	2005	2006	2007	2008	2009
New Zealand	15,376,332	29,698,751	30,306,799	37,438,345	36,424,991
Canada	563,722	795,512	4,729,273	24,582,802	19,352,454
Netherlands	931,116	1,630,308	4,226,697	16,664,109	14,526,148
Belgium	0	621,919	1,930,952	9,162,551	6,414,550
<i>Other</i>	532,553	1,058,725	983,381	10,995,461	11,081,901
Total	17,403,723	33,805,215	42,177,102	98,843,268	87,800,044

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Tomatoes	2005	2006	2007	2008	2009
Italy	29,380,851	21,850,282	27,967,173	40,161,877	41,547,277
United States of America	50,375	32,005	141,564	7,621,851	7,343,391
Turkey	1,466,276	1,384,907	1,827,085	1,574,103	416,724
Argentina	290,746	663,731	938,344	974,526	443,088
<i>Other</i>	1,133,344	836,599	662,647	924,726	761,299
Total	32,321,592	24,767,524	31,536,813	51,257,083	50,511,779

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Shelled beans	2005	2006	2007	2008	2009
New Zealand	24,556,498	25,394,171	23,935,832	22,087,956	25,074,777
Italy	6,696,520	7,830,400	8,327,356	11,571,793	13,424,279
Spain	652,642	1,609,188	1,953,424	2,606,035	3,463,744
China	163,822	165,257	349,161	286,264	408,642
<i>Other</i>	1,655,119	960,210	1,780,584	1,254,201	1,319,317
Total	33,724,601	35,959,226	36,346,357	37,806,249	43,690,759

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Frozen mixtures of vegetables	2005	2006	2007	2008	2009
New Zealand	19,736,320	19,416,360	22,417,013	21,721,765	22,748,327
China	3,280,645	5,383,177	9,096,051	11,995,701	12,392,858
Belgium	236,100	63,995	62,652	642,589	1,657,247
United States of America	0	37,349	81,837	73,484	0
<i>Other</i>	157,906	99,390	37,086	68,283	156,605
Total	23,410,971	25,000,271	31,694,639	34,501,822	36,955,037

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Question: ABARE–BRS 10 (continued)

Juice of any single fruit or vegetable (excl. orange, grapefruit, lime)	2005	2006	2007	2008	2009
United States of America	4,877,855	3,591,310	5,612,132	7,914,772	5,173,772
China	3,440,295	3,297,317	5,825,434	6,263,595	5,973,570
Italy	3,560,990	3,007,036	3,259,177	4,237,060	4,301,554
New Zealand	2,285,583	3,446,911	4,066,687	3,245,163	2,744,759
<i>Other</i>	9,703,559	11,721,526	13,082,831	14,184,471	16,325,043
Total	23,868,282	25,064,100	31,846,261	35,845,061	34,518,698

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Vegetable saps and extracts	2005	2006	2007	2008	2009
China	0	0	0	4,641,752	8,630,012
Switzerland	0	0	0	3,329,138	3,972,577
United States of America	0	0	0	2,792,142	3,722,116
Germany	0	0	0	2,634,516	3,245,000
<i>Other</i>	0	0	0	13,034,503	14,470,534
Total	0	0	0	26,432,051	34,040,239

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Vegetables and mixtures of vegetables	2005	2006	2007	2008	2009
Italy	0	0	6,051,640	6,310,516	5,834,713
Turkey	0	0	4,214,680	4,379,499	5,785,000
Spain	0	0	3,600,868	2,513,417	2,749,903
China	0	0	2,161,712	2,503,827	3,064,669
<i>Other</i>	0	0	10,437,401	13,698,930	15,253,026
Total	0	0	26,466,301	29,406,189	32,687,311

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Mixtures of fruit and vegetable juices (excl. citrus) unfermented	2005	2006	2007	2008	2009
United States of America	12,324,081	9,955,031	20,593,692	18,153,163	24,959,575
New Zealand	2,693,515	3,652,118	2,178,892	7,235,709	1,365,315
South Africa	394,535	208,593	168,578	302,123	309,321
Ecuador	164,289	752,155	0	0	0
<i>Other</i>	<i>1,187,373</i>	<i>1,357,906</i>	<i>1,208,996</i>	<i>1,415,562</i>	<i>1,212,129</i>
Total	16,763,793	15,925,803	24,150,158	27,106,557	27,846,340

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Tomatoes in packs >1.14 L	2005	2006	2007	2008	2009
United States of America	2,125,056	1,809,171	4,752,323	21,500,346	7,819,368
China	2,419,679	2,343,448	5,015,001	10,049,114	11,791,653
Italy	2,066,282	2,616,930	3,355,731	3,674,665	2,686,830
New Zealand	1,856,624	998,512	2,356,321	2,340,154	1,128,106
<i>Other</i>	<i>1,326,146</i>	<i>1,659,587</i>	<i>4,838,986</i>	<i>1,727,771</i>	<i>1,459,187</i>
Total	9,793,787	9,427,648	20,318,362	39,292,050	24,885,144

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Question: ABARE–BRS 10 (continued)

2. Leading exports of vegetable commodities (value - \$A)

Minimally transformed vegetable exports (Unprocessed), \$A

Carrots and turnips	2005	2006	2007	2008	2009
UAE	6,652,991	8,293,283	8,590,186	8,120,061	10,775,762
Singapore	7,173,810	8,020,719	7,238,681	8,007,530	10,264,445
Malaysia	6,020,129	7,246,304	5,366,946	5,497,957	7,403,072
Saudi Arabia	1,712,856	3,020,748	2,719,748	4,650,728	4,625,560
<i>Other</i>	<i>16,024,405</i>	<i>16,939,804</i>	<i>13,531,961</i>	<i>14,922,522</i>	<i>17,898,171</i>
Total	37,584,191	43,520,858	37,447,522	41,198,798	50,967,010

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Brown onions	2005	2006	2007	2008	2009
Belgium	4,568,435	7,233,987	1,835,178	1,272,657	9,205,559
Germany	2,985,682	1,373,210	7,672,182	8,011,159	2,903,547
Japan	2,870,122	2,897,429	1,800,351	1,274,286	2,149,263
Spain	1,052,121	1,941,217	2,528,984	2,930,380	1,438,472
<i>Other</i>	<i>5,996,367</i>	<i>5,976,177</i>	<i>8,654,697</i>	<i>9,005,539</i>	<i>7,854,739</i>
Total	17,472,727	19,422,020	22,491,392	22,494,021	23,551,580

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Asparagus	2005	2006	2007	2008	2009
Japan	18,667,232	15,299,968	13,864,046	21,860,344	13,313,149
Singapore	698,345	723,455	871,650	667,481	738,066
Taiwan	1,107,506	708,260	537,026	678,959	325,320
Hong Kong	603,723	627,706	598,289	546,993	418,030
<i>Other</i>	<i>1,181,340</i>	<i>617,423</i>	<i>826,611</i>	<i>638,668</i>	<i>357,890</i>
Total	22,258,146	17,976,812	16,697,622	24,392,445	15,152,455

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Vegetables, other	2005	2006	2007	2008	2009
Singapore	0	0	1,946,144	3,196,198	3,385,917
New Zealand	0	0	2,485,461	2,844,704	3,182,477
UAE	0	0	1,524,913	1,254,897	831,019
Hong Kong	0	0	824,451	1,089,580	1,026,629
<i>Other</i>	<i>0</i>	<i>0</i>	<i>3,848,126</i>	<i>3,892,836</i>	<i>5,027,638</i>
Total	0	0	10,629,095	12,278,215	13,453,680

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

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Potatoes	2005	2006	2007	2008	2009
Korea, Republic of	3,400,039	4,595,860	2,705,420	1,258,512	1,738,841
Singapore	2,328,072	1,729,062	1,938,609	1,615,645	2,274,612
Malaysia	2,457,807	1,867,663	1,498,217	649,760	1,377,641
Indonesia	1,372,198	1,202,768	388,709	371,246	2,436,092
<i>Other</i>	<i>6,002,144</i>	<i>3,676,851</i>	<i>3,819,771</i>	<i>2,880,691</i>	<i>3,238,327</i>
Total	15,560,260	13,072,204	10,350,726	6,775,854	11,065,513

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Tomatoes	2005	2006	2007	2008	2009
New Zealand	5,446,396	7,634,035	9,123,762	6,440,265	5,942,032
Singapore	198,569	314,506	598,682	240,523	245,054
Indonesia	148,426	163,675	264,725	214,728	220,282
Hong Kong	185,781	255,886	135,907	224,136	81,652
<i>Other</i>	<i>331,865</i>	<i>644,366</i>	<i>520,273</i>	<i>1,162,608</i>	<i>983,114</i>
Total	6,311,037	9,012,468	10,643,349	8,282,260	7,472,134

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Broccoli	2005	2006	2007	2008	2009
Singapore	3,033,527	3,748,142	2,560,684	2,301,048	2,408,119
UAE	1,184,303	1,429,001	878,731	1,183,737	1,048,093
Malaysia	788,663	1,064,750	245,360	281,117	225,720
Japan	547,751	522,349	560	5,700	2,400
<i>Other</i>	<i>2,451,161</i>	<i>1,841,503</i>	<i>1,155,035</i>	<i>1,047,457</i>	<i>1,160,938</i>
Total	8,005,405	8,605,745	4,840,370	4,819,059	4,845,270

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

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Question: ABARE–BRS 10 (continued)

Onions (excl. brown)	2005	2006	2007	2008	2009
Italy	1,405,500	706,570	1,677,307	1,741,650	1,070,680
France	377,300	583,902	374,834	512,063	618,811
United Kingdom	390,719	327,170	867,012	664,838	183,125
Netherlands	250,114	215,216	495,372	878,571	437,940
<i>Other</i>	<i>1,552,605</i>	<i>823,633</i>	<i>1,215,690</i>	<i>1,273,777</i>	<i>1,887,558</i>
Total	3,976,238	2,656,491	4,630,215	5,070,899	4,198,114

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Beans	2005	2006	2007	2008	2009
New Zealand	2,680,356	3,308,650	2,878,412	3,198,521	3,534,393
Taiwan	0	55,834	0	0	18,288
Singapore	74	13,518	768	525	35,028
New Caledonia	273	994	30	13,588	20,307
<i>Other</i>	<i>27,084</i>	<i>29,251</i>	<i>23,491</i>	<i>20,365</i>	<i>21,324</i>
Total	2,707,787	3,408,247	2,902,701	3,232,999	3,629,340

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Capsicums	2005	2006	2007	2008	2009
New Zealand	2,250,007	3,043,416	2,756,685	1,836,348	2,310,630
Fiji	125,454	216,380	160,748	235,113	390,406
Indonesia	84,353	84,532	54,420	96,824	76,102
Brunei					
Darussalam	71,481	55,480	63,448	62,006	59,922
<i>Other</i>	<i>186,918</i>	<i>251,877</i>	<i>191,500</i>	<i>345,812</i>	<i>323,574</i>
Grand Total	2,718,213	3,651,685	3,226,801	2,576,103	3,160,634

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

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Question: ABARE–BRS 10 (continued)

**Substantially & elaborately transformed vegetable exports
(Processed) - \$A**

Dried, shelled beans	2005	2006	2007	2008	2009
Egypt	20,435,979	40,948,887	23,052,563	13,756,681	18,791,991
Saudi Arabia	6,054,154	12,492,839	8,853,971	22,322,655	15,058,937
United Arab Emirates	4,192,856	4,111,646	6,745,528	10,340,987	7,802,357
Indonesia	3,120,562	3,299,811	2,075,732	1,683,581	3,732,948
<i>Other</i>	<i>8,045,536</i>	<i>10,735,692</i>	<i>13,029,127</i>	<i>18,476,299</i>	<i>12,983,870</i>
Total	41,849,087	1,588,875	3,756,921	66,580,203	58,370,103

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Dried, shelled peas, not split	2005	2006	2007	2008	2009
India	13,323,861	27,513,162	8,715,140	15,122,940	13,308,390
Malaysia	5,041,873	4,392,212	2,934,127	6,012,986	8,145,178
Bangladesh	2,789,705	9,320,938	1,424,881	2,426,589	1,087,469
Pakistan	0	6,938,024	0	1,773,616	4,628,833
<i>Other</i>	<i>5,112,744</i>	<i>6,074,339</i>	<i>5,593,219</i>	<i>10,308,303</i>	<i>11,631,836</i>
Total	26,268,183	54,238,675	38,667,367	35,644,434	38,801,706

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Dried, shelled peas, split	2005	2006	2007	2008	2009
Sri Lanka	6,248,955	7,669,867	10,368,768	11,862,609	10,896,936
India	638,286	422,981	144,075	12,882,520	20,552
Malaysia	1,829,635	2,484,664	3,904,272	2,816,827	2,767,660
Mauritius	1,138,150	1,219,964	1,353,481	2,343,654	1,796,111
<i>Other</i>	<i>1,181,940</i>	<i>3,556,305</i>	<i>1,321,517</i>	<i>2,778,637</i>	<i>2,766,502</i>
Total	11,036,966	15,353,781	17,092,113	32,684,247	18,247,761

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

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Dried shelled leguminous vegetables	2005	2006	2007	2008	2009
Egypt	207,736	4,737,897	2,838,524	7,736,456	3,593,946
Sri Lanka	165,413	158,826	1,506,334	4,960,615	2,018,446
Saudi Arabia	2,720,688	400,262	63,519	0	0
Lebanon	63,864	289,312	362,670	283,106	0
<i>Other</i>	<i>665,214</i>	<i>700,151</i>	<i>251,385</i>	<i>1,151,397</i>	<i>453,051</i>
Total	3,822,915	6,286,448	5,022,432	14,131,574	6,065,443

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Frozen beans	2005	2006	2007	2008	2009
New Zealand	48,206	198,465	306,145	624,140	1,364,013
Taiwan	0	0	0	0	77,520
Indonesia	15,918	17,681	9,016	24,846	3,393
Papua New Guinea	1,003	2,115	12,811	16,181	18,409
<i>Other</i>	<i>7,921</i>	<i>18,901</i>	<i>28,199</i>	<i>14,826</i>	<i>12,545</i>
Total	73,048	237,162	356,171	679,993	1,475,880

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Frozen mixed vegetables	2005	2006	2007	2008	2009
New Zealand	3,657,754	1,881,623	1,545,476	1,091,315	563,680
Singapore	115,033	400,960	367,133	5,216	2,760
United Arab Emirates	103,930	153,769	122,188	146,461	174,930
East Timor, Dem Rep of	139,715	87,175	119,268	38,896	420
<i>Other</i>	<i>326,517</i>	<i>342,150</i>	<i>213,867</i>	<i>410,259</i>	<i>341,775</i>
Grand Total	4,342,949	2,865,677	2,367,932	1,692,147	1,083,565

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

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Question: ABARE–BRS 10 (continued)

Dried vegetables and mixtures	2005	2006	2007	2008	2009
Japan	881,033	1,037,334	19,000	8,282	39,055
New Zealand	402,043	480,496	250,828	326,578	503,158
India	347,116	96,421	37,625	58,148	0
Guatemala	107,353	110,553	125,315	93,653	92,571
<i>Other</i>	<i>225,813</i>	<i>322,890</i>	<i>217,219</i>	<i>313,148</i>	<i>279,720</i>
Total	1,963,358	2,047,694	649,987	799,809	914,504

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Frozen vegetables (excl. potatoes, leguminous, spinach and sweet corn)	2005	2006	2007	2008	2009
New Zealand	400,152	656,583	629,935	834,323	569,228
China	n/a	12,958	60,857	n/a	169,662
Papua New Guinea	4,148	6,752	9,673	24,916	66,439
Japan	20,555	86,590	0	0	0
<i>Other</i>	<i>86,410</i>	<i>137,821</i>	<i>72,945</i>	<i>131,863</i>	<i>182,466</i>
Total	511,265	900,704	773,410	991,102	987,795

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

Frozen sweet corn	2005	2006	2007	2008	2009
New Zealand	293,560	500,367	373,739	511,981	485,453
Indonesia	46,884	47,279	48,444	77,473	35,685
Malaysia	13,420	6,070	3,987	2,505	86,924
New Caledonia	8,908	22,717	42,588	0	350
<i>Other</i>	<i>76,336</i>	<i>44,052</i>	<i>49,916</i>	<i>33,505</i>	<i>54,376</i>
Total	439,108	620,485	518,674	625,464	662,788

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

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Question: ABARE–BRS 10 (continued)

Frozen potatoes	2005	2006	2007	2008	2009
New Zealand	1,627,961	663,783	245,188	99,164	0
Brunei					
Darussalam	108,545	103,193	86,686	117,561	114,583
Indonesia	50,114	44,494	87,544	122,465	175,308
Papua New Guinea	179,056	3,300	76,621	116,333	61,943
<i>Other</i>	<i>99,219</i>	<i>45,717</i>	<i>28,205</i>	<i>189,736</i>	<i>230,570</i>
Total	2,064,895	860,487	524,244	645,259	582,404

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

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Question: ABARE–BRS 10 (continued)

3. Australian vegetable trade with New Zealand, 1999-2009

Minimally transformed (Unprocessed) vegetable imports to Australia, \$A million

Commodity	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Capsicums	1.25	1.64	2.57	3.20	6.18	6.76	8.16	8.53	9.60	5.84	5.85
Tomatoes	0.17	0.00	0.50	1.13	3.23	4.42	4.57	5.09	3.18	1.76	3.65
Onions and shallots	0.15	0.61	1.48	0.20	1.10	0.98	0.30	1.42	1.39	2.63	1.44
Garlic, fresh or chilled	2.04	1.19	1.54	0.54	0.41	0.13	0.08	0.12	0.02	0.01	0.07
Carrots and turnips	0.06	0.47	1.28	1.24	0.62	0.99	0.04	0.00	0.17	0.00	0.00
Salad beetroot, salsify, celeriac, radishes and similar edible roots	0.00	0.01	0.04	0.01	0.15	0.00	0.13	0.12	0.73	0.64	0.53
Vegetables, other	0.10	0.12	0.07	0.05	0.00	0.05	0.18	0.43	0.30	0.12	0.11
Mushrooms	0.74	0.42	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asparagus	0.03	0.03	0.03	0.06	0.07	0.07	0.06	0.33	0.24	0.15	0.18
Mushrooms of the genus agaricus	0.00	0.00	0.00	0.30	0.33	0.17	0.16	0.00	0.00	0.00	0.00
Peas	0.01	0.00	0.00	0.01	0.03	0.02	0.00	0.01	0.09	0.06	0.09

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

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Question: ABARE–BRS 10 (continued)

Substantially & elaborately transformed (Processed) vegetable imports to Australia, \$A million

Commodity	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Shelled beans	3.47	11.94	19.59	24.68	25.66	25.59	24.56	25.39	23.94	22.09	25.07
Potatoes	2.23	3.71	8.96	5.17	11.26	17.57	15.38	29.70	30.31	37.44	36.42
Frozen mixtures of vegetables	4.70	5.76	9.13	9.26	10.77	15.79	19.74	19.42	22.42	21.72	22.75
Frozen sweet corn	10.90	10.39	10.28	10.66	12.94	12.04	11.69	10.62	17.02	16.36	9.14
Jams, fruit jellies, marmalades, fruit or nut puree and fruit or nut pastes	6.61	9.00	5.89	8.96	8.19	12.12	12.64	9.64	8.89	7.86	19.25
Frozen shelled peas	4.79	9.40	9.02	8.81	9.49	8.06	7.10	11.78	12.67	7.62	7.83
Vegetable extracts (except those containing odoriferous substances)	1.63	1.53	7.96	16.33	20.84	12.56	1.70	1.26	1.28	0.66	0.05
Frozen shelled peas	2.67	3.54	5.50	4.24	6.05	4.13	6.05	4.61	6.22	14.18	7.48
Fruit & other edible parts of plants	3.19	6.89	4.93	5.42	5.40	4.98	3.55	3.41	3.36	3.70	3.32
Dried, shelled peas	5.14	4.79	5.08	3.81	4.59	4.22	4.10	2.32	2.19	2.34	2.47
Vegetables and mixtures of vegetables	0.62	1.30	0.99	1.38	2.71	4.94	4.08	3.42	3.87	4.44	4.91

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Question: ABARE–BRS 10 (continued)

Minimally transformed vegetable (Unprocessed) exports from Australia, \$A million											
Commodity	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Tomatoes	4.67	3.84	3.49	4.99	6.39	6.28	5.45	7.63	9.12	6.44	5.94
Beans	1.68	1.62	2.01	1.84	2.00	2.90	2.68	3.31	2.88	3.20	3.53
Capsicums	2.10	1.60	0.93	1.53	2.02	2.64	2.25	3.04	2.76	1.84	2.31
Vegetables, other	2.47	2.37	1.38	1.96	2.14	3.35	3.00	3.32	2.49	2.84	3.18
Salad beetroot, celeriac, radishes	0.52	0.46	0.63	0.68	0.85	0.67	0.64	0.46	0.07	0.03	0.02
Cucumbers and gherkins	0.85	0.79	0.15	0.12	0.05	0.39	0.50	0.37	0.34	0.22	0.13
Lettuce (excl. cabbage lettuce)	0.88	1.29	0.36	0.16	0.01	0.02	0.00	0.16	0.00	0.02	0.01
Ginger	0.22	0.17	0.21	0.30	0.19	0.40	0.48	0.25	0.10	0.07	0.13
Cabbage lettuce (head lettuce), fresh or chilled	0.02	0.00	0.07	0.01	0.00	0.40	0.03	0.25	0.00	0.06	0.17
Vegetable products	0.00	0.00	0.00	0.14	0.18	0.05	0.21	0.39	0.00	0.00	0.00
Brussels sprouts	0.22	0.21	0.06	0.20	0.10	0.11	0.05	0.03	0.00	0.00	0.00

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Question: ABARE–BRS 10 (continued)

Substantially & elaborately transformed (Processed) vegetable exports from Australia, \$A million

\$A million

Commodity	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Potatoes, frozen	4.56	5.19	2.71	0.84	10.19	7.63	9.85	11.26	18.15	18.01	20.76
Tomato ketchup and other tomato sauces	2.29	8.29	11.57	11.95	7.75	8.22	8.12	7.55	6.83	7.53	7.14
Vegetable extracts, put up as prepared foodstuffs	1.01	0.86	0.87	10.45	3.66	3.11	6.80	7.66	8.03	7.36	9.85
Mixtures of fruit and other edible parts of plants	3.24	3.73	3.62	4.51	3.49	3.14	4.85	5.91	5.54	4.43	3.50
Tomatoes	1.74	1.51	1.04	5.23	2.80	3.37	2.61	2.28	1.52	0.75	1.16
Frozen mixed vegetables	4.19	1.19	0.94	0.72	1.45	4.22	3.66	1.88	1.55	1.09	0.56
Pickles and chutney	1.03	1.20	1.01	1.63	2.54	1.50	2.46	2.36	2.16	2.02	2.73
Vegetables, fruits, nuts and other edible parts of plants	0.00	0.00	0.00	1.97	2.35	2.16	2.55	1.99	1.74	1.24	1.68
Homogenised preparations of jams, fruit jellies, marmalades, fruit or nut puree	0.64	0.70	1.46	1.21	1.51	1.37	1.34	1.44	1.53	1.67	1.28
Vegetable saps and extracts	1.29	1.94	1.51	1.37	1.57	2.04	1.39	2.35	0.00	0.00	0.00
Frozen sweet corn	0.07	0.22	2.39	4.33	0.51	0.16	0.29	0.50	0.37	0.51	0.49

Australian Bureau of Statistics, International Trade, Australia, cat. No. 5465.0, (October 2010)

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Question: ABARE–BRS 10 (continued)

4. Vegetables: Gross Value of Production by state, commodity and year.

VEGETABLE COMMODITIES PRODUCED, Gross value–Year ended 30 June					
New South Wales	2004-05	2005-06	2006-07	2007-08	2008-09
	\$m	\$m	\$m	\$m	\$m
Mushrooms	na	63.4	68.6	80.6	67.3
All other vegetables	na	31.7	43.1	41.3	37.1
Potatoes	na	49.3	50.3	56.0	36.1
Asian vegetables	na	28.1	25.6	36.1	26.1
Lettuce	na	27.7	65.6	22.9	22.1
Melons (Rock and canteloupe)	na	22.3	29.9	28.6	19.9
Melons (Watermelon)	na	14.3	25	20.4	19.4
Onions	na	12.5	11.1	13.9	15.3
Tomatoes	na	19.7	13.6	42.5	14.6
Pumpkins	na	21.5	17.9	27.6	14.5
Cabbages	na	13.5	9.8	9.8	8.7
Broccoli	na	7.1	7.5	10.6	8.6
Cauliflower	na	8.0	6.6	7.1	8.2
Sweetcorn	na	5.8	18.1	3.9	7.1
Carrots	na	6.8	9.5	5.3	5.8
Cucumber	na	11.8	8.4	6.8	4.3
Zucchini and button squash	na	6.0	4	6.5	4.1
Capsicums	na	1.5	1.6	1.6	1.1
Beetroot	na	0.6	0.3	0.7	0.9
Celery	na	0.0	0.2	0.2	0.3
Asparagus	na	0.8	0.2	0.5	0.2
Parsnips	na	0.6	0.3	0.1	0.2
Beans (French and runner)	na	5.0	10.9	0.4	0.1
Green peas	na	0.8	0.7	0.2	0.1
Total vegetables	275.4	358.8	428.9	423.7	322.0

Australian Bureau of Statistics, Value of Agricultural Commodities Produced, cat. no. 7503.0
(May 2008; July 2008; July 2009; & June 2010)

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Question: ABARE–BRS 10 (continued)

VEGETABLE COMMODITIES PRODUCED, Gross value–Year ended 30 June					
Victoria	2004-05	2005-06	2006-07	2007-08	2008-09
	\$m	\$m	\$m	\$m	\$m
Potatoes	na	117.1	109.4	154.8	114.9
Mushrooms	na	73.5	91.5	100.1	87.5
Tomatoes	na	74.7	82.9	91.6	84.6
Lettuce	na	49.9	87.0	49.2	64.7
All other vegetables	na	66.9	86.4	74.9	55.6
Broccoli	na	38.4	49.3	38.9	48.5
Asparagus	na	43.7	25.2	43.0	44.3
Celery	na	25.6	30.2	38.4	24.4
Carrots	na	24.0	27.5	39.1	21.7
Asian vegetables	na	14.7	25.5	15.9	19.8
Onions	na	7.8	12.5	13.2	17.6
Cabbages	na	21.0	27.1	25.8	14.1
Cauliflower	na	21.0	13.0	13.8	13.6
Sweetcorn	na	11.8	3.9	10.2	10.2
Parsnips	na	6.8	9.4	10.2	8.7
Beans (French and runner)	na	11.3	3.0	11.1	7.3
Capsicums	na	7.6	5.0	14.2	5.5
Pumpkins	na	2.0	2.2	4.5	2.9
Melons (Watermelon)	na	2.2	2.0	4.3	2.7
Zucchini and button squash	na	3.3	5.8	5.0	2.5
Green peas	na	1.3	1.0	0.7	0.8
Beetroot	na	0.3	0.5	0.8	0.2
Cucumber	na	1.1	0.9	0.7	0.1
Melons (Rock and canteloupe)	na	5.6	3.3	2.4	0.1
Total vegetables	519.5	635.6	704.4	762.9	652.4

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VEGETABLE COMMODITIES PRODUCED, Gross value–Year ended 30 June					
Queensland	2004-05	2005-06	2006-07	2007-08	2008-09
	\$m	\$m	\$m	\$m	\$m
Tomatoes	na	145.2	169.1	209.6	187.9
All other vegetables	na	102.4	124.5	166.6	162.2
Capsicums	na	138.6	112.8	98.4	87.8
Lettuce	na	58.1	98.4	65.6	70.6
Potatoes	na	46.9	55.2	58.4	54.1
Beans (French and runner)	na	61.9	51.3	51.0	50.3
Zucchini and button squash	na	57.5	48.8	38.7	49.4
Melons (Watermelon)	na	39.1	47.6	37.8	41.7
Melons (Rock and canteloupe)	na	35.5	28.2	20.3	30.5
Pumpkins	na	33.4	28.8	30.7	29.7
Onions	na	20.7	33.5	25.1	28.3
Carrots	na	15.0	21.7	20.8	22.2
Mushrooms	na	57.2	46.2	33.8	21.5
Asian vegetables	na	18.8	18.7	36.0	20.8
Broccoli	na	16.8	15.2	23.1	20.5
Sweetcorn	na	36.0	28.0	26.7	17.9
Cauliflower	na	9.5	15.3	11.2	12.5
Beetroot	na	7.6	8.4	10.3	12.0
Cucumber	na	22.9	34.7	12.9	10.8
Celery	na	4.7	6.7	6.7	10.1
Cabbages	na	14.5	8.6	8.7	9.9
Green peas	na	1.0	0.6	1.6	0.7
Asparagus	na	0.9	0.1	0.8	0.2
Parsnips	na	0.0	0.0	0.0	0.0
Total vegetables	684.4	945.0	1,002.3	995.1	951.6

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VEGETABLE COMMODITIES PRODUCED, Gross value–Year ended 30 June					
South Australia	2004-05	2005-06	2006-07	2007-08	2008-09
	\$m	\$m	\$m	\$m	\$m
Potatoes	na	135.9	178.6	276.2	193.4
Onions	na	62.6	83.1	87.7	92.5
Carrots	na	49.2	49.9	47.0	42.5
Mushrooms	na	18.7	24.3	36.7	39.1
Tomatoes	na	13.6	12.2	37.8	22.5
All other vegetables	na	12.8	26.4	28.3	18.8
Lettuce	na	11.5	16.8	13.4	16.6
Capsicums	na	12.5	8.7	25.7	13.8
Cucumber	na	10.8	43.2	13.5	7.4
Cauliflower	na	7.2	7.2	4.8	6.8
Zucchini and button squash	na	0.8	2.2	0.9	5.7
Cabbages	na	5.9	5.2	4.1	5.0
Pumpkins	na	2.7	5.4	1.7	4.5
Parsnips	na	6.1	7.8	2.8	3.5
Broccoli	na	2.1	2.1	1.6	2.0
Melons (Watermelon)	na	0.7	2.3	0.2	1.3
Beans (French and runner)	na	0.2	0.3	0.3	0.4
Celery	na	4.8	0.2	0.2	0.4
Beetroot	na	0.2	0.3	0.4	0.2
Asian vegetables	na	1.8	0.3	0.7	0.1
Asparagus	na	0.0	0.0	0.0	0.0
Green peas	na	0.1	0.0	0.0	0.0
Melons (Rock and canteloupe)	na	2.0	0.1	0.2	0.0
Sweetcorn	na	0.6	0.9	0.2	0.0
Total vegetables	289.5	388.3	477.7	584.3	476.3

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Question: ABARE–BRS 10 (continued)

VEGETABLE COMMODITIES PRODUCED, Gross value–Year ended 30 June					
Western Australia	2004-05	2005-06	2006-07	2007-08	2008-09
	\$m	\$m	\$m	\$m	\$m
Potatoes	na	40.5	38.3	52.5	59.6
Carrots	na	35.1	26.8	37.8	53.8
Tomatoes	na	18.6	16.8	20.0	29.7
Onions	na	13.9	18.1	26.6	22.7
Sweetcorn	na	5.8	2.8	15.4	20.5
Broccoli	na	16.4	9.3	18.1	18.8
Pumpkins	na	19.9	15.2	15.9	14.4
Melons (Watermelon)	na	10.3	17.3	21.8	13.5
All other vegetables	na				12.7
Lettuce	na	8.6	12.5	14.5	11.4
Melons (Rock and canteloupe)	na	23.4	8.2	11.6	10.6
Beans (French and runner)	na	6.1	4.1	7.3	9.2
Capsicums	na	10.7	9.7	11.7	8.8
Celery	na	5.6	4.5	4.9	8.6
Cabbages	na	6.3	6.8	8.6	5.6
Cauliflower	na	3.8	6.0	5.6	5.5
Cucumber	na	12.8	3.9	4.1	5.0
Zucchini and button squash	na	4.0	6.9	4.1	3.2
Parsnips	na	1.9	2.6	2.3	1.0
Asian vegetables	na	5.8	5.9	10.4	0.4
Beetroot	na	0.6	4.2	0.5	0.4
Asparagus	na	1.1	0.6	1.0	0.3
Green peas	na	0.3	0.0	0.0	0.1
Mushrooms	na				
Total vegetables	195.7	292.4	267.8	345.2	341.0

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Question: ABARE–BRS 10 (continued)

VEGETABLE COMMODITIES PRODUCED, Gross value–Year ended 30 June					
Tasmania	2004-05	2005-06	2006-07	2007-08	2008-09
	\$m	\$m	\$m	\$m	\$m
Potatoes	na	73.7	82.5	91.2	99.0
Onions	na	27.6	31.1	40.3	47.6
Carrots	na	26.3	23.1	38.4	36.1
All other vegetables	na				16.4
Green peas	na	6.2	5.8	7.1	11.9
Beans (French and runner)	na	4.9	3.0	4.6	5.4
Cauliflower	na	3.4	4.6	4.2	3.2
Broccoli	na	5.6	4.2	2.7	2.8
Capsicums	na	0.9	0.8	0.0	2.5
Tomatoes	na	0.8	1.3	3.0	2.3
Lettuce	na	2.7	2.4	2.3	1.5
Cabbages	na	1.0	0.7	0.8	0.9
Celery	na	0.4	0.6	1.0	0.9
Pumpkins	na	0.9	0.7	1.0	0.9
Parsnips	na	0.7	0.3	0.1	0.2
Asian vegetables	na	0.0	0.0	0.0	0.1
Zucchini and button squash	na	0.0	0.1	0.2	0.1
Asparagus	na	0.0	0.0	0.0	0.0
Beetroot	na	0.1	0.3	0.0	0.0
Cucumber	na	0.1	0.0	0.0	0.0
Melons (Rock and canteloupe)	na	0.0	0.0	0.0	0.0
Melons (Watermelon)	na	0.0	0.0	0.0	0.0
Sweetcorn	na	0.1	0.1	0.0	0.0
Mushrooms	na				
Total vegetables	164.3	198.5	192.6	236.3	240.7

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VEGETABLE COMMODITIES PRODUCED, Gross value–Year ended 30 June					
Northern Territory	2004-05	2005-06	2006-07	2007-08	2008-09
	\$m	\$m	\$m	\$m	\$m
Melons (Watermelon)	na	4.9	5.7	8.0	15.4
Melons (Rock and canteloupe)	na	4.1	3.3	3.6	4.1
All other vegetables	na	3.3	17.6	0.5	4.0
Pumpkins	na	0.4	0.2	1.1	1.9
Asian vegetables	na	0.2	0.9	1.0	1.8
Cucumber	na	0.4	0.4	0.5	0.5
Zucchini and button squash	na	0.1	0.4	0.2	0.2
Tomatoes	na	0.2	0.1	0.1	0.1
Asparagus	na	0.0	0.0	0.0	0.0
Beans (French and runner)	na	0.0	0.0	0.0	0.0
Beetroot	na	0.0	0.0	0.0	0.0
Broccoli	na	0.0	0.0	0.0	0.0
Cabbages	na	0.0	0.0	0.0	0.0
Capsicums	na	0.2	0.0	0.0	0.0
Carrots	na	0.0	0.0	0.0	0.0
Cauliflower	na	0.0	0.0	0.0	0.0
Celery	na	0.0	0.0	0.0	0.0
Green peas	na	0.0	0.0	0.0	0.0
Lettuce	na	0.4	0.1	0.0	0.0
Mushrooms	na	0.0	0.0	0.0	0.0
Onions	na	0.3	0.6	0.0	0.0
Parsnips	na	0.0	0.0	0.0	0.0
Potatoes	na	0.0	0.0	0.0	0.0
Sweetcorn	na	0.0	0.0	0.0	0.0
Total vegetables	4.7	14.4	29.3	15.1	28.2

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VEGETABLE COMMODITIES PRODUCED, Gross value–Year ended 30 June					
Australian Capital Territory	2004-05	2005-06	2006-07	2007-08	2008-09
	\$m	\$m	\$m	\$m	\$m
All other vegetables	na	0.0	0.0	0.2	0.1
Asian vegetables	na	0.2	0.0	0.0	0.0
Asparagus	na	0.0	0.0	0.0	0.0
Beans (French and runner)	na	0.0	0.0	0.0	0.0
Beetroot	na	0.0	0.0	0.0	0.0
Broccoli	na	0.0	0.0	0.0	0.0
Cabbages	na	0.0	0.0	0.0	0.0
Capsicums	na	0.0	0.0	0.0	0.0
Carrots	na	0.0	0.0	0.0	0.0
Cauliflower	na	0.0	0.0	0.0	0.0
Celery	na	0.0	0.0	0.0	0.0
Cucumber	na	0.0	0.0	0.0	0.0
Green peas	na	0.0	0.0	0.0	0.0
Lettuce	na	0.0	0.0	0.0	0.0
Melons (Rock and canteloupe)	na	0.0	0.0	0.0	0.0
Melons (Watermelon)	na	0.0	0.0	0.0	0.0
Mushrooms	na	0.0	0.0	0.0	0.0
Onions	na	0.0	0.0	0.0	0.0
Parsnips	na	0.0	0.0	0.0	0.0
Potatoes	na	0.0	0.0	0.0	0.0
Pumpkins	na	0.0	0.0	0.0	0.0
Sweetcorn	na	0.0	0.0	0.0	0.0
Tomatoes	na	0.0	0.0	0.0	0.0
Zucchini and button squash	na	0.0	0.0	0.0	0.0
Total vegetables	0.0	0.2	0.0	0.2	0.1

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Question: ABARE–BRS 10 (continued)

VEGETABLE COMMODITIES PRODUCED, Gross value–Year ended 30 June

	2004-05	2005-06	2006-07	2007-08	2008-09
Australia	\$m	\$m	\$m	\$m	\$m
Vegetables					
Potatoes	na	463.5	514.4	689.0	557.1
Tomatoes	na	272.8	296.0	404.6	341.8
All other vegetables	na	344.9	408.8	371.2	307.0
Mushrooms	na	243.8	259.5	281.5	249.5
Onions	na	145.3	189.9	206.7	224.0
Lettuce	na	159.1	282.9	168.0	187.0
Carrots	na	156.4	158.4	188.4	182.1
Capsicums	na	171.9	138.6	151.6	119.6
Broccoli	na	86.5	87.6	95.1	101.2
Melons (Watermelon)	na	71.5	99.9	92.6	94.1
Beans (French and runner)	na	89.3	72.8	74.7	72.7
Asian vegetables	na	69.7	77.0	100.1	69.0
Pumpkins	na	80.8	70.3	82.5	68.8
Melons (Rock and canteloupe)	na	92.8	72.9	66.8	65.2
Zucchini and button squash	na	71.7	68.3	55.7	65.2
Sweetcorn	na	60.1	53.8	56.5	55.7
Cauliflower	na	53.0	52.7	46.8	49.8
Asparagus	na	46.6	26.2	45.3	45.0
Celery	na	41.1	42.3	51.4	44.6
Cabbages	na	62.2	58.3	57.9	44.2
Cucumber	na	59.9	91.6	38.5	28.2
Green peas	na	9.6	8.2	9.7	13.7
Beetroot	na	9.5	14.0	12.7	13.6
Parsnips	na	16.0	20.4	15.5	13.6
Total vegetables	2,133.5	2,878.1	3,164.6	3,362.7	3,012.3

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