

Senate Rural and Regional Affairs and Transport Legislation Committee

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2009

Agriculture, Fisheries and Forestry

Question: ABARE01

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: The effect of the CPRS on the profitability of the beef and cattle industry

Hansard Page: 72-73 (25/05/2009)

Senator Back asked:

Senator BACK—I did, thank you. Mr Glyde, we had the figures on the effect on income and profitability of three per cent and 43 per cent or 14 per cent and 217 per cent. Could you give us comparative figures from your studies that would enable us to be able to see the positive and the negative or the optimistic and the pessimistic? Mr Johnsson mentioned, when not included in the system, a decline of three per cent on income reflecting 43 per cent reduction in profit, and once included, 14 per cent reduction on income and 217 per cent reduction in profit. Could you give us some indication of those figures from your study?

Mr Glyde—Sure. I would make two comparisons: one, a longer term comparison, so at 2030; and then the immediate impact at 2011—which is probably the best one we can give. In 2030, we estimate that, for the beef and cattle industry, production will be eight per cent lower than it would otherwise have been if the CPRS had not been introduced. Production will still increase, but it will be just eight per cent lower than it otherwise would have been. That is with the assumptions of the emissions-intensive trade-exposed assistance, as designed by the government as they have currently stated. If you come back into 2011—

Senator BACK—Just before you do, have you made any estimate as to what effect that will be on actual profitability?

Mr Glyde—We probably have, but I do not have that figure in my head. I could take that on notice, if you like.

Senator BACK—I would like to know.

Answer:

Australian Bureau of Agricultural and Resource Economics (ABARE) has analysed the potential effects of the Carbon Pollution Reduction Scheme (CPRS) on the agriculture sector and published two papers on this.

The paper, *Effects of the Carbon Pollution Reduction Scheme (CPRS) on the economic value of farm production*, examines the short term ‘initial impacts’ of the CPRS at 2011 and 2015. In this paper it is assumed that farmers take no action to ameliorate the effects of the CPRS. The paper was released on 1 June 2009 and is available at www.abare.gov.au/insights/.

This paper includes estimates of the impact of the CPRS on the economic value of farm production (that is, the net farm cash income adjusted for the build-up in trading stocks). It is estimated that if farmers take no ameliorating action the economic value of farm production for broadacre farms will decline, relative to what it would be in the

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absence of the CPRS, by between 0.3 and 1.9 per cent in 2011, depending on the proportion of costs that are passed from processing points to farmers (see Table 1 for details).

The second ABARE paper, *Agriculture and the Carbon Pollution Reduction Scheme (CPRS): economic issues and implications*, examines the longer-term effects (in 2020 and 2030) of the CPRS on the agriculture sector. In this paper it is assumed that in response to the CPRS, farmers take adaptation actions such as changing their input mix, changing their output mix, changing their management practices and deploying emissions reducing technologies. This paper was released on 3 March 2009 and is available at www.abare.gov.au/insights/.

The analysis in this paper was undertaken using a general equilibrium framework. The change in agricultural production costs relative to the case without the CPRS was estimated. It was estimated that the cost of production would increase by around 20 per cent in 2030 for the beef cattle and sheep meat industries, relative to the case without the CPRS (see Table 2 for details).

Table 1: Effect of the CPRS on the economic value of farm production in 2011 under different cost-price pass-through rates, per cent change relative to what would be without the CPRS, on the assumption that farmers take no ameliorative action.

| | Cost-price pass-through rate | | | |
|--------------------------|------------------------------|------|------|------|
| | 0% | 20% | 60% | 100% |
| All broadacre industries | -0.3 | -0.6 | -1.2 | -1.9 |
| Wheat and other crops | -0.2 | -0.4 | -0.8 | -1.2 |
| Mixed livestock-crops | -0.3 | -0.6 | -1.2 | -1.8 |
| Sheep | -0.5 | -1.0 | -1.9 | -2.9 |
| Beef | -0.3 | -0.7 | -1.6 | -2.4 |
| Sheep–beef | -0.4 | -0.8 | -1.6 | -2.4 |
| Dairy | -0.7 | -0.9 | -1.4 | -1.9 |

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Table 2: Effect of the CPRS on Australian agricultural production costs in 2020 and 2030, per cent change relative to what would be without the CPRS, assuming adaptation actions are taken

| | 2020 | 2030 |
|----------------------------|-------------|-------------|
| Grains | 1.7 | 1.0 |
| Other crops | 1.1 | 0.2 |
| Beef cattle and sheep meat | -0.1 | 19.9 |
| Other animals | 1.5 | 4.0 |
| Dairy cattle | -1.2 | 6.7 |
| Wool | 2.4 | 15.8 |

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Agriculture, Fisheries and Forestry

Question: ABARE02

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Impact of the CPRS on the dairy industry

Hansard Page: 100 (25/05/2009)

Senator Williams asked:

Senator WILLIAMS—Do you have an average dollar amount on electricity or just a percentage?

Dr Ahammad—We will be able to provide that to you, taking it on notice.

Senator WILLIAMS—What I was getting at is that I see that with the increase in the price of electricity in the first year that cost is going to be extremely high for the dairy industry. That is why I was questioning the figure.

Mr Glyde—We can give you the dollar amounts for an average dairy farm.

Senator WILLIAMS—That would be good if you could, please.

Answer:

ABARE analysis, as published in 'Effects of the Carbon Pollution Reduction Scheme (CPRS) on the economic value of farm production,' indicates that in 2011, the cost of electricity for an average dairy farm would increase by around \$600 a year. This estimate is based on an assumption of no amelioration actions by farmers (as well as by dairy processors) to improve their energy efficiency, a permit price of \$10 per tonne of carbon dioxide equivalent (t CO₂-e) in 2011 and a resulting increase in electricity costs of 6.9 per cent. Based on ABARE farm surveys data, between 2003-04 and 2007-08 the electricity expenditure of an average dairy farm was estimated at \$9200 a year.

In the ABARE analysis, the carbon price in 2015 is assumed to be around \$28/t CO₂-e (in 2005 dollars). This higher emission price will lead to a greater increase in the cost of electricity. In 2015, ABARE estimates that the cost of electricity will increase by around 24 per cent. This will lead to an increase in electricity costs of dairy farms of around \$2200 a year, based on an assumption of no amelioration actions by farmers (as well as by dairy processors) to improve their energy efficiency.

The ABARE report 'Effects of the Carbon Pollution Reduction Scheme (CPRS) on the economic value of farm production,' was released on 1 June 2009 and is available at <http://www.abare.gov.au/insights/>.

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Agriculture, Fisheries and Forestry

Question: ABARE03

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Value of farm and fisheries production

Hansard Page: 105 (26/05/2009)

Senator Williams asked:

Senator WILLIAMS—On your website the value of Australia's total farm and fisheries production for 2006-07 declined by 11 per cent to \$30.2 billion, mainly because of the drought. When will the 2007-08 figures be available?

Mr S Hunter—I believe those figures would mostly be derived from the Australian Bureau of Agricultural and Resource Economics. We will try and find out the timing of when those figures would be available for you.

Answer:

Statistics on the value of Australia's farm and fisheries production and exports are available from the Australian Bureau of Agricultural and Resource Economics website, at: http://www.abare.gov.au/interactive/09ac_june/excel/Statistics.xls.

The total value of Australian farm production was \$36.25 billion in 2006-07 and \$44.10 billion in 2007-08.

The total value of Australian fisheries production was \$2.21 billion in 2006-07 and \$2.19 billion in 2007-08.

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Agriculture, Fisheries and Forestry

Question: ABARE04

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Impact of forestry MIS on food producers

Hansard Page: 111 (26/05/2009)

Senator Heffernan asked:

Senator HEFFERNAN—Yes, I know. I appreciate your remarks, Minister. But really what I was interested in is whether you have done any modelling on the long-term impact of agriculture producers whose main driver was not the commodity; it was the food. You can understand the distortion that would have caused in market supply and demand and market pressure.

Mr S Hunter—I am not aware of any but, to be absolutely sure of the correctness of my answer, I think I should take that on notice.

Answer:

The Australian Bureau of Agricultural and Resource Economics has not analysed the impact of the recent economic performance of managed investment schemes on future food production or on agriculture producers.

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Agriculture, Fisheries and Forestry

Question: ABARE05

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Grain container trade

Hansard Page: 110 (25/05/2009)

Senator Adams asked:

1. **Senator ADAMS**—On the container trade, could you tell me how much grain has gone out for the last harvest, in containers.
Dr Penm—I do not have the estimates with me. We can take it on notice, or I wonder whether any colleagues of mine have that. We produce numbers with disposal reports every month. I just do not have the numbers with me.
2. **Senator ADAMS**—The second question is: since deregulation of bulk handling for wheat, has the container trade reduced or has it increased? That is another one on notice.

Answer:

1. Between October 2008 and April 2009 (most recent data available), Australia exported 1.32 million tonnes of wheat in containers. In the corresponding period a year earlier (October 2007 and April 2008) Australia exported 1.26 million tonnes of wheat in containers. For the full 2007–08 marketing year (October 2007 to September 2008) exports in containers were 2.2 million tonnes.
2. The Australian bulk wheat export market was deregulated from 1 July 2008. The Australian container wheat export market was deregulated from 27 August 2007.

Between July 2008 and April 2009 Australian wheat exports in containers were 1.77 million tonnes. During the corresponding period a year earlier before deregulation of the bulk wheat export market, wheat exports in containers were 1.56 million tonnes. For the full 2007–08 financial year (July 2007 to June 2008) wheat exports in containers were 2.04 million tonnes.

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Agriculture, Fisheries and Forestry

Question: ABARE06

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Impact of afforestation on the Murray–Darling Basin

Hansard Page: 113 (25/05/2009)

Senator Nash asked:

Senator NASH—The issue of interception from the plantations that you raised before, Dr Ahammad, is quite a serious issue, and over a number of estimates in various forms it has raised its head. Can you tell me: do you work with the department of environment in looking at the issue of interception, given the potential impact, particularly in areas that are going to have an impact on the Murray–Darling Basin from the interception, from the potential planning of forests?

Mr Glyde—We do a fair bit of work with the Department of the Environment, Heritage, Water and the Arts, and in fact they have given some funds to survey irrigators and the like to do economic analysis in relation to water. This is one of the factors that is in that mix and we talk with them on quite a regular basis.

Senator NASH—Not necessarily irrigators. I am not talking about irrigators.

Mr Glyde—Sure. No.

Senator NASH—I am talking about the interception activity that results from afforestation.

Mr Glyde—I think one of the complexities of trying to come up with, as Dr O’Connell said, estimates of what might be some likely futures, depending on carbon price and things like that, is what the impacts will be of afforestation of any type in the landscape. In order to understand that, we need to go down to a catchment level, because the geology, the hydrogeology, is different from catchment to catchment, and so to make informed judgments about that we need a quite detailed model, which we sort of have in some places. They are critical decisions when you think about where we are going with the National Water Initiative and water policy more generally. They are all linked.

Senator NASH—Absolutely. From what you have just said, a lot of the forestation that has happened thus far has really happened without enough detailed knowledge of the potential impact of the interception, hasn’t it? We actually do not know yet.

Mr Glyde—You are talking about deforestation since European settlement?

Senator NASH—No, forestation.

Mr Glyde—Sorry, afforestation.

Senator NASH—I am talking about putting them in and the trees sucking the water out. That is the interception.

Mr Glyde—Dr Ahammad might know a little bit more about our state of knowledge and the extent to which we can comment on interception and the afforestation that has occurred over the last 30 years. I would have to take that on notice, I think, unless Dr Ahammad can help me.

Dr Ahammad—I would like to take it on notice. I am not a scientist; by training I am an economist. In our analysis we looked at the growth potentials of forestry, and that has come from the Department of Climate Change, so it might have factored in some

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Question: ABARE06 (continued)

growth potential and have taken into account average rainfall and things like that, but not in terms of interception.

Dr O'Connell—I absolutely agree, and I am sure the scale that would be looked at would be, at a rainfall-level scale, probably not much more than that. I think what you are looking at is: what do we know about catchment by catchment and what is the effect of plantations on the run-off and on recharge and others? That would obviously require a deal of input, for example, from the Bureau of Met, who are the major hydrology people around the place. But there is a very clear policy framework that is now in place with the National Water Initiative, which should, once fully in place, have an accounting framework for interception by plantations. Certainly, as I understand it, the states are going through the processes of developing that arrangement. That at least then should place the cost on the interception of water by plantations, which would then provide some limiting factor on the economics of plantations as well. I think this is getting into areas where you are also interested in the broader environmental effects, even when there is not run-off into other water users. That may be a broader issue. There are a range of other constraints which need to be placed, and that is exactly why I was trying to emphasise that what we will not get out of this is a clear prediction of what the level of plantation use will be as a result of the CPRS, because no matter really how far ABARE goes it is not going to get to this level of refinement in any reasonable time frame.

Answer:

Australian Bureau of Agricultural and Resource Economics (ABARE) cannot comment on the relationship between water interception and afforestation. ABARE is an economic research agency and does not undertake scientific analysis, such as determining the potential impact of afforestation on water interception. Work done in ABARE with significant scientific content is done in collaboration with other agencies.

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Question: ABARE07

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Slaughter lamb

Hansard Page: Written

Senator Nash asked:

Is the NLIS slaughter data reliable enough to provide meaningful industry statistics?

Answer:

Australian Bureau of Agricultural and Resource Economics does not have access to the National Livestock Identification Scheme data and therefore cannot assess their reliability.

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Agriculture, Fisheries and Forestry

Question: ABARE08

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Agriculture debt

Hansard Page: Written

Senator Nash asked:

1. What is the debt burden currently on agriculture according to the Reserve Bank of Australia?
2. How much has it increased over the past 10 years?
3. Please provide a region by region breakdown for each of the previous 10 years?

Answer:

1. Based on information supplied by large lending institutions to the Reserve Bank of Australia, rural indebtedness was around \$58.2 billion in 2007–08 (see Table 1).
2. This represents an increase of 175 per cent (in nominal terms) from \$21.2 billion in 1997–98.
3. Australian Bureau of Agricultural and Resource Economics does not have sufficient information to break down this data series by region.

Table 1: Rural indebtedness (\$million)

| | All banks | Pastoral and other finance companies | Other government | Total |
|-----------|-----------|---|---------------------|--------|
| 1997-98 | 18 566 | 1 979 | 609 | 21 154 |
| 1998-99 | 20 085 | 1 093 | 661 | 21 840 |
| 1999-2000 | 23 240 | 2 527 | 663 | 26 430 |
| 2000-01 | 25 174 | 2 639 | 701 | 28 514 |
| 2001-02 | 26 829 | 2 691 | 711 | 30 231 |
| 2002-03 | 28 957 | 1 628 | 867 | 31 452 |
| 2003-04 | 34 115 | 3 379 | 891 | 38 385 |
| 2004-05 | 39 261 | 3 112 | 977 | 43 350 |
| 2005-06 | 43 546 | 3 352 | 1 073 | 47 971 |
| 2006-07 | 47 187 | 2 542 | 1 293 | 51 023 |
| 2007-08 | 53 743 | 3 076 | 1 417 | 58 236 |

Source: Reserve Bank of Australia

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Agriculture, Fisheries and Forestry

Question: ABARE09

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Interest rate cuts

Hansard Page: Written

Senator Nash asked:

Have all of the recent interest rate cuts (last four) been passed on to farmers? If not how much has been passed on?

Answer:

Australian Bureau of Agricultural and Resource Economics (ABARE) does not have information on the actual reductions in bank lending rates to farmers.

The only information available to ABARE is the announced reductions in the variable benchmark lending rates by major commercial banks.

Between October 2008 and April 2009, the Reserve Bank of Australia lowered the official cash rate five times, with a total reduction of 400 basis points.

Based on their media releases, the National Australia Bank reduced its benchmark variable business lending rate by 270 basis points over the same period; the Commonwealth Bank by 263 basis points; Westpac by 285 basis points; ANZ by 250 basis points; and Rabobank by 365 basis points.

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Agriculture, Fisheries and Forestry

Question: ABARE10

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Interest rate paid by farmers

Hansard Page: Written

Senator Nash asked:

What is the average interest rate currently being paid by farmers?

Answer:

Please refer to the answer we provided to question ABARE05 from the February 2009 Senate Estimates.

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Agriculture, Fisheries and Forestry

Question: ABARE11

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Marginal land

Hansard Page: Written

Senator Nash asked:

What is the definition of 'marginal land' that the Minister was referring to when he stated '*our advice has always been that we'd be looking at marginal land*'? (please provide maps of land which the Government considers 'marginal' and on what basis it is referred to as marginal ie rainfall, carrying capacity etc).

Answer:

Please refer to the answer provided to question ABARE24 from the February 2009 Senate Estimates.

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Question: ABARE12

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: ABARE input to carbon price and emissions targets

Hansard Page: Written

Senator Nash asked:

The Minister during the press Conference on the 25th of February, 2009 also stated; *'The carbon price that's been spoken about, the emissions targets that have been set, were then put through ABARE.'*

1. Is this information publicly available?
2. Is this work that was 'put through ABARE' reflected in 'Analysing the economic potential of forestry for carbon sequestration under alternative carbon price paths' produced by ABARE in November 2008 which was commissioned by The Commonwealth Treasury to estimate the potential increase in afforestation on agricultural land under four hypothetical carbon price scenarios or is it different advice?

Answer:

Please refer to the answer provided to question ABARE23 from the February 2009 Senate Estimates.

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Question: ABARE13

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: ABARE input to carbon price and emissions targets

Hansard Page: Written

Senator Nash asked:

If the work that has been 'put through ABARE' is not the modelling in the document 'Analysing the economic potential of forestry for carbon sequestration under alternative carbon price paths', is it publicly available and does it supersede the work commissioned by Treasury?

Answer:

Please refer to the answer provided to question ABARE23 from the February 2009 Senate Estimates.

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Question: ABARE14

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Impact of CPRS on agriculture

Hansard Page: Written

Senator Williams asked:

At the last estimates it was stated that by this estimates more information would be available regarding impacts of ETS on agriculture. Are these figures on projected impacts through to 2020–2050?

Answer:

On 3 March 2009 the Australian Bureau of Agricultural and Resource Economics (ABARE) released a paper, Agriculture and the Carbon Pollution Reduction Scheme (CPRS): economic issues and implications', which provides a detailed analysis of the potential effects of the CPRS on various agriculture and food manufacturing industries in 2020 and 2030. In this paper it is assumed that in response to the CPRS, farmers take adaptation actions such as changing their input mix, changing their output mix, changing their management practices and deploying emissions reducing technologies. The paper is publicly available on the ABARE website at www.abare.gov.au/insights/. No analysis has been undertaken for the period 2030 to 2050.

The projected likely effects of the CPRS on agricultural production and the production of processed food products in Australia, as reported in the ABARE paper, are reproduced in Table 1 below.

Table 1: Impacts of the CPRS on production of Australian agriculture by industry

| Sector/Industry | Percentage increase in production in the absence of the CPRS ('no CPRS' case) | | Percentage increase in production in the CPRS scenario | | Percentage change in the CPRS scenario, relative to the 'no CPRS' case | |
|----------------------------|---|---------|--|---------|--|------|
| | 2005–20 | 2005–30 | 2005–20 | 2005–30 | 2020 | 2030 |
| grains | 29 | 49 | 33 | 56 | 3.3 | 5.3 |
| other crops | 20 | 37 | 20 | 37 | -0.6 | 0.0 |
| beef cattle and sheep meat | 15 | 30 | 15 | 20 | 0.1 | -8.0 |
| other animals | 26 | 48 | 24 | 46 | -1.6 | -1.1 |
| dairy cattle | 30 | 44 | 30 | 40 | 0.4 | -3.0 |
| wool | -4 | 6 | -6 | 4 | -1.4 | -2.1 |
| total agriculture | 19 | 36 | 20 | 35 | 0.1 | -1.0 |
| processed meat | 15 | 30 | 15 | 23 | 0.0 | -5.8 |
| processed other food | 42 | 70 | 42 | 72 | 0.0 | 0.6 |
| processed milk | 37 | 57 | 38 | 52 | 0.5 | -2.8 |

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Question: ABARE15

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Impact of CPRS on beef exports

Hansard Page: Written

Senator Williams asked:

What is the prediction of the effect of proposed ETS on agriculture with particular regard to the exporting of beef?

Answer:

ABARE has neither published a 'prediction' nor an analysis of the likely effects of the Carbon Pollution Reduction Scheme (CPRS) on the level of exports of individual agricultural commodities. However, ABARE has projected and analysed the likely effects of the CPRS on the level of Australian beef production under a set of modelling assumptions. Given the methodology and assumptions, ABARE estimates should be viewed as 'conditional projections' and, by no means, 'predictions'.

On 3 March 2009 ABARE published the paper 'Agriculture and the Carbon Pollution Reduction Scheme (CPRS): economic issues and implications', available on the ABARE website at www.abare.gov.au/insights/.

Overall, ABARE projects that under the CPRS, and assuming a global response to climate change, Australia will maintain or improve its international competitiveness in agriculture. Under the CPRS in 2020, Australia's trade competitiveness and share of world agricultural exports remain, more or less, unchanged relative to the scenario without the CPRS. This is because developed economies, including Australia's, are given transitional assistance that offsets nearly all of the effect of the CPRS in 2020. In 2020 Australia's share of agricultural world exports increases by around 4 per cent in the CPRS scenario, relative to the scenario without the CPRS.

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Question: ABARE16

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Land use change and the CPRS

Hansard Page: Written

Senator Nash asked:

What will be the 'land-use change' the government has always acknowledged that you do need which will be an implication and an outcome of the Government's Emissions Trading Scheme referred to by the Minister?

Answer:

While carbon sequestration through afforestation is likely to be part of achieving Australia's greenhouse gas abatement targets, the actual level and location of afforestation will depend on a range of biophysical, environmental, policy and market constraints.

In 2008 Australian Bureau of Agricultural and Resource Economics (ABARE) undertook analysis for the Commonwealth Treasury to estimate the economic potential for afforestation on agricultural land under four carbon price scenarios (Lawson et al. 2008). The ABARE paper by Burns et al. (2009) provides further discussion of the complexities of land use change under carbon pricing. ABARE analysis of this issue is ongoing.

References

Lawson, K, Burns, K, Low, K, Heyhoe, E and Ahammad, H, 2008, *Analysing the economic potential of forestry for carbon sequestration under alternative carbon price paths*, Canberra, November (available on the Treasury website at www.treasury.gov.au/lowpollutionfuture/consultants_report/downloads/Economic_Potential_of_Forestry.pdf).

Burns, K, Vedi, J, Heyhoe, E and Ahammad, H, 2009, Opportunities for forestry under the Carbon Pollution Reduction Scheme (CPRS): an examination of some key factors, *Issues Insights*, vol.1, no.1, pp.1-22 (available on the ABARE website at www.abare.gov.au/insights/).

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Agriculture, Fisheries and Forestry

Question: ABARE17

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Land use change and the CPRS

Hansard Page: Written

Senator Nash asked:

Where will that 'land use change' take place and how will it take place?

Answer:

Please refer to the answer provided to question ABARE16.

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Agriculture, Fisheries and Forestry

Question: ABARE18

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Farm debt

Hansard Page: Written

Senator Nash asked:

What is the current average debt for the average farm for each commodity group—i.e. dryland farming, beef, sheep, mixed farming, poultry, pork, citrus, horticulture, dairy?

Answer:

Based on Australian Bureau of Agricultural and Resource Economics (ABARE) farm surveys, the estimates of average farm business debt by commodity group are presented below.

Grains industry

Farm business debt averaged around \$879 000 per cropping farm in mid-2008.

Beef industry

Business debt for beef producers with more than 100 cattle averaged around \$820 000 per farm in northern Australia and \$577 000 per farm in southern Australia in mid-2008.

Dairy industry

Business debt for dairy farms averaged around \$572 000 in mid-2008, with significant variations among regions: \$958 000 in Tasmania, \$850 000 in South Australia, \$495 000 in northern Victoria and the Riverina, \$733 000 in western Victoria, \$502 000 in Gippsland, \$508 000 in southern and central New South Wales and \$671 000 in Western Australia.

Sheep industry

For producers of slaughter lambs, business debt in 2007–08 averaged more than \$1.6 million for producers who sold more than 2000 lambs for slaughter, around \$898 000 for producers who sold between 1000 and 2000 lambs for slaughter, around \$620 000 for producers who sold between 500 and 1000 lambs for slaughter and close to \$300 000 for producers who sold between 200 and 500 lambs for slaughter.

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Question: ABARE18 (continued)

Horticulture

Average business debt per farm in the Murray–Darling Basin at mid-2007 ranged from around \$1.2 million in the Border Rivers region to \$790 000 in the Goulburn–Broken region, \$342 000 in the Macquarie–Castlereagh region and \$125 000 in the Loddon–Avoca region.

Farm business debt owed by the farm business excludes leasing finance and personal non-business related debt owed by the farm operator.

ABARE farm surveys do not cover pork, poultry and citrus.

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Question: ABARE19

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Impact of financial crisis on farmer borrowing

Hansard Page: Written

Senator Nash asked:

Is the financial crisis impacting on the ability of farmers to borrow money to fund this year's winter crop, or replanting of permanent plantings or for restocking purposes devastated by the drought?

Answer:

The impact of the global financial crisis on farmers' ability to borrow money to fund their businesses will depend on a number of factors, chief of which are the banking sector and other lenders' availability of funds, farm-equity levels and farm financial performance.

The Australian Bureau of Agricultural and Resource Economics (ABARE) is not in a position to comment on the liquidity or lending practices of the financial sector. ABARE surveys indicate that, in general, farmers have been able to maintain their equity in their farm businesses at high levels because of increasing land values.

While considerable uncertainty remains about the potential economic impacts of the global financial crisis, the farm sector as a whole appears to be in a reasonable position to finance ongoing operations.

Senate Rural and Regional Affairs and Transport Legislation Committee

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2009

Agriculture, Fisheries and Forestry

Question: ABARE20

Division/Agency: Australian Bureau of Agricultural and Resource Economics

Topic: Beef statistics

Hansard Page: Written

Senator Nash asked:

1. Is it true that ABARE uses ABS slaughter figures to arrive at a domestic disappearance figure which is extrapolated as Australian domestic beef consumption?
2. Is it true that the USA subtracts 30 per cent from the above figure to cater for bone and other items which are not consumed by consumers to arrive at their domestic consumption figure?
3. Does Australia do the same?
4. Does it estimate the amount of domestic disappearance going for pet food?
5. If not, why not?

Answer:

1. Australian Bureau of Agricultural and Resource Economics (ABARE) estimates apparent domestic beef consumption using data published by the Australian Bureau of Statistics (ABS), the Department of Agriculture, Fisheries and Forestry (DAFF) and Meat & Livestock Australia (MLA).

Apparent domestic beef consumption is derived on a carcass weight equivalent basis using the following formula:

Opening stocks + Production + Imports – Exports – Closing stocks

Production and Imports are sourced from ABS data. Exports are sourced from DAFF. Stocks are MLA/ABARE estimates.

2. The US Department of Agriculture (USDA) publishes US beef consumption data on both a carcass weight equivalent and a retail weight basis.

(Source: <http://www.ers.usda.gov/publications/oce071/oce20071.pdf> , page 58).

The percentage difference between carcass weight equivalent and retail weight varies from year to year, but is around 30 per cent less for retail weight compared with carcass weight.

Senate Rural and Regional Affairs and Transport Legislation Committee

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2009

Agriculture, Fisheries and Forestry

Question: ABARE20 (continued)

From ABARE's understanding, the USDA publish data only on a carcass weight equivalent basis for international comparisons. See attached internet link:
<http://www.fas.usda.gov/psdonline/psdReport.aspx?hidReportRetrievalName=Beef+and+Veal+Summary+Selected+Countries&hidReportRetrievalID=49&hidReportRetrievalTemplateID=7>

3. ABARE only derives apparent beef consumption for Australia on a carcass weight basis. There is insufficient information available for ABARE to estimate consumption on a retail weight basis.
4. ABARE does not estimate the domestic disappearance going into pet food, as there is insufficient data available.
5. See 3 and 4 above.