

# Chapter 2

## Background

### The Australian beef cattle industry

2.1 The Australian beef cattle industry is one of the nation's significant industries, representing over \$16.2 billion in gross domestic product, or 1.3 per cent of total GDP and \$7.6 billion in household income in 2010. About 20 000 people are involved in the red meat industry in farm production, processing and retail.<sup>1</sup> It also underpins more than 148 000 full-time jobs across all sectors of the economy.<sup>2</sup> Although there is a substantial domestic market for beef, the majority of the industry's output is exported, either as beef and veal or as live cattle. In 2011-12, 66 per cent of Australia's total production of 2.1 million tonnes of beef worth \$4.69 billion was exported to 100 countries.<sup>3</sup>

2.2 The industry is particularly important for northern Australia. The Queensland Department of Agriculture, Fisheries and Forestry (QDAFF) submitted that the Queensland industry is worth more than \$3.4 billion a year at the farm gate and that the value of exports from Queensland was more than \$3.1 billion in 2011-12. QDAFF submitted that continued access to key export markets is vital to growing Queensland's economy.<sup>4</sup>

2.3 In 2011-12, imports of fresh and frozen beef and veal amounted to just 115 tonnes, all of which came from New Zealand, and 349 tonnes of prepared or preserved beef.<sup>5</sup>

### BSE and FMD

2.4 Bovine spongiform encephalopathy (BSE) is a fatal neurodegenerative disease in cattle that causes a spongy degeneration in the brain and spinal cord. BSE has a long incubation period, from about 30 months to 8 years. It may be most easily transmitted to humans by eating food contaminated with the brain, spinal cord or digestive tract of infected carcasses. In humans the condition is known as new variant Creutzfeldt-Jacob disease (vCJD) which is incurable and is invariably fatal.<sup>6</sup>

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1 Meat and Livestock Australia, Fast facts 2012, [www.mla.com.au/About-the-red-meat-industry/Industry-overview/Cattle](http://www.mla.com.au/About-the-red-meat-industry/Industry-overview/Cattle), (accessed 6 May 2013).

2 Australian Meat Industry Council, *Submission 14*, p. 1.

3 Meat and Livestock Australia, Fast facts 2012.

4 Meat and Livestock Australia, Fast facts 2012.

5 Meat and Livestock Australia, Fast facts 2012.

6 Wikipedia, [https://en.wikipedia.org/wiki/Bovine\\_spongiform\\_encephalopathy](https://en.wikipedia.org/wiki/Bovine_spongiform_encephalopathy), accessed 10 May 2013.

2.5 According to the US Department of Agriculture, BSE was first recognised in Great Britain in November 1986. The first cases probably occurred in early 1985. It is not definitive that the disease originated from scrapie<sup>7</sup> infected meat and bone meal that was used as a protein supplement in cattle feeds, but there is strong evidence and general agreement that the outbreak was amplified by feeding rendered infected cattle meat-and-bone meal to young calves. During the peak of the disease (1992), about 1 per cent of the adult cattle in the UK had the disease. As of November 2000, in more than 35 000 herds, about 177 500 cases of BSE were confirmed in the UK alone. Concurrent with the cattle epidemic in the UK was a rise of a new variant of CJD (vCJD) in humans. This form of CJD predominately affects younger individuals (median age at death 27.5 years as of October 2000), has atypical clinical features, coordination problems within weeks or months, dementia and myoclonus late in the illness, a duration of illness of at least 6 months, and an abnormal brain scan.<sup>8</sup>

2.6 The committee was informed that BSE, due to the various measures, is now at very low levels in countries that have reported BSE cases. However that does not mean it is not present. The risk still exists but, fortunately, it has been greatly reduced.<sup>9</sup> For instance, Food Standards Australia New Zealand (FSANZ) has reported that of the 88 cases of BSE in The Netherlands in the past 15 years all but one (born in February 2001) have been cattle born before the ban on feeding animal protein to farmed animals was imposed across Europe in 2001.<sup>10</sup> It has been estimated that the risk that each Australian has of dying from a road accident over the next two generations is perhaps 40 million times greater than the theoretical risk of them dying of vCJD transmitted by imported beef products.<sup>11</sup>

2.7 The infectious agent in BSE is believed to be a specific type of misfolded protein called a prion. Prions are not destroyed even if the beef or material containing them is cooked or heat-treated, unless extremely high temperatures are involved.<sup>12</sup> Dr Kevin Doyle, National Veterinary Director, Australian Veterinary Association of

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7 Scrapie is a progressive and invariably fatal degenerative disease of the central nervous system of sheep and goats. It is the prototype disease of the transmissible spongiform encephalopathies (TSEs). Animal Health Australia, <http://nahis.animalhealthaustralia.com.au/pmwiki/pmwiki.php?n=Factsheet.111-2?skin=factsheet>, accessed 2 June 2013.

8 US Department of Agriculture, *Bovine Spongiform Encephalopathy (BSE) and Other Animal Related Transmissible Spongiform Encephalopathies*, [www.nal.usda.gov/awic/pubs/bsebib.htm](http://www.nal.usda.gov/awic/pubs/bsebib.htm), accessed 27 June 2013.

9 Professor Steven Collins, Director, Australian National Creutzfeldt-Jacob Disease Registry *Committee Hansard*, 17 May 2013, p. 18.

10 *BSE Food Safety Risk Assessment Report: The Netherlands*, Risk Assessment Production Process Section, Food Standards Australia New Zealand, October 2012, p. 34.

11 Professor John Mathews, *Review of Scientific Evidence to Inform Australian Policy on Transmissible Spongiform Encephalopathies (TSEs)*, 9 October 2010, p. 31.

12 Wikipedia, [https://en.wikipedia.org/wiki/Bovine\\_spongiform\\_encephalopathy](https://en.wikipedia.org/wiki/Bovine_spongiform_encephalopathy), accessed 10 May 2013.

Australia, stated that a beef product would need to be heated 'for a couple of hours at a couple of atmospheres to a temperature of about 133 degrees Centigrade—something of that order—in order to ensure that you are killing [the BSE prion]'.<sup>13</sup> Professor Colin Masters, Executive Director, Mental Health Research Institute at the University of Melbourne, informed the committee that the technical difficulty in detecting BSE prions makes complete assurance of freedom from contamination very challenging.<sup>14</sup>

2.8 Foot-and-mouth disease (FMD) is an infectious and sometimes fatal viral disease that affects cloven-hoofed animals, including domestic and wild bovids. The virus causes a high fever for two or three days, followed by blisters inside the mouth and on the feet that may rupture and cause lameness. Susceptible animals include cattle, water buffalo, sheep, goats, pigs and deer. FMD is a severe plague for animal farming, since it can be spread through aerosols, through contact with farming equipment, vehicles, clothing or feed, and by domestic and wild predators.<sup>15</sup> Though most animals eventually recover from FMD, the disease can lead to inflammation of the heart muscle and death especially in newborn animals. Adult animals may suffer weight loss and, in cows, milk production can decline significantly. Humans are rarely affected.<sup>16</sup>

### Previous committee reports

2.9 From 2001 when cases of BSE were discovered overseas there had been a ban on importing meat into Australia from countries that had reported a case of BSE. On 20 October 2009 the Government announced a new policy to come into effect from March 2010 that would permit the importation of certain beef products under agreed conditions from countries that had reported cases of BSE.<sup>17</sup>

2.10 In November 2009 the Senate referred the Government's decision to relax import restrictions on beef to the Rural and Regional Affairs References Committee for inquiry and report. The committee published two reports on the inquiry in 2010.

2.11 In the first report, dated March 2010, the committee stated by way of background that on 28 July 2009 the Department of Foreign Affairs and Trade (DFAT) had advised the Red Meat Advisory Committee (RMAC) that there had been increasing pressure from Australia's trading partners to review the BSE policy. RMAC

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13 Dr Kevin Doyle, National Veterinary Director, Australian Veterinary Association, *Committee Hansard*, 17 May 2013, p. 4. The Proof Hansard stated '123 degrees' however this was corrected to '133 degrees' for the Official Hansard.

14 Professor Colin Masters, Executive Director, Mental Health Research Institute, The University of Melbourne, *Submission 2*, p. [1].

15 Wikipedia, [https://en.wikipedia.org/wiki/Foot-and-mouth\\_disease](https://en.wikipedia.org/wiki/Foot-and-mouth_disease), accessed 10 May 2013.

16 Wikipedia, [https://en.wikipedia.org/wiki/Foot-and-mouth\\_disease](https://en.wikipedia.org/wiki/Foot-and-mouth_disease), accessed 10 May 2013.

17 Rural and Regional Affairs and Transport References Committee, *The possible impacts and consequences for public health, trade and agriculture of the Government's decision to relax import restrictions on beef*, First report, March 2010, p. 5.

subsequently wrote to the Minister for Agriculture, Fisheries and Forestry to request that the 2001 policy on BSE be updated to reflect increased understanding of the risks posed by BSE, increased confidence in measures to minimise the risks posed by the disease, and the recommendations and principles published by the World Organisation for Animal Health (OIE).<sup>18</sup>

2.12 The committee noted that:

RMAC's concerns with the policy centre on two perceived risks to the Australian beef industry: the risk that all beef, both domestic and imported, would be removed from retail shelves in the event of a BSE outbreak in Australia; and the risk of action through the World Trade Organisation (WTO) by Australia's trading partners.<sup>19</sup>

2.13 The committee commented in relation to the first of those concerns that it did not accept that a blanket recall of Australian beef and beef product would ever be implemented on an Australia-wide basis in the event of an Australian case of BSE. It recommended that a clear policy for Australia's domestic response to an Australian case of BSE should be developed in consultation with the Australian beef industry. The committee also recommended that a process should be initiated through the Council of Australian Governments (COAG), to seek the input and agreement of the relevant Federal, State and Territory human health and food safety Ministers.<sup>20</sup>

2.14 In relation to trade, the committee referred to evidence given by the Australian Beef Association which claimed that the change to Australia's BSE policy was linked directly to the Free Trade Agreement with the United States of America.<sup>21</sup> The committee quoted from a side letter to the Agreement signed by the then Minister for Trade and the United States Trade Representative as follows:

Australia and the United States note that the OIE is presently reviewing BSE standards as they relate to animal and public health. Australia and the United States will work cooperatively in the OIE, Codex, and other fora as

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18 Rural and Regional Affairs and Transport References Committee, *The possible impacts and consequences for public health, trade and agriculture of the Government's decision to relax import restrictions on beef*, First report, March 2010, p. 7.

19 Rural and Regional Affairs and Transport References Committee, *The possible impacts and consequences for public health, trade and agriculture of the Government's decision to relax import restrictions on beef*, First report, March 2010, p. 7.

20 Rural and Regional Affairs and Transport References Committee, *The possible impacts and consequences for public health, trade and agriculture of the Government's decision to relax import restrictions on beef*, First report, March 2010, p. 49.

21 Rural and Regional Affairs and Transport References Committee, *The possible impacts and consequences for public health, trade and agriculture of the Government's decision to relax import restrictions on beef*, First report, March 2010, p. 11.

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appropriate, with the objective of securing science-based standards and guidelines that address risks to food safety and animal health from BSE.<sup>22</sup>

2.15 The committee also made recommendations which are summarised below:

- assessments of applications should be suspended pending the outcome of a formal import risk analysis (IRA) modelled on the expanded IRA process provide for in the IRA Handbook;
- countries applying to export meat to Australia should be able to demonstrate traceability of livestock equivalent to the Australian National Livestock Identification System;
- the assessment process should include mandatory in-country inspections;
- final responsibility for the development and administration of policy for food safety and plant and animal health arising from imports should rest with the responsible minister and be reflected in legislative instruments to ensure they are subject to appropriate parliamentary scrutiny; and
- unpackaged fresh meat should be labelled to show the country of origin.<sup>23</sup>

2.16 In its second and final report on the reference, which was presented to the Senate in June 2010, the committee remarked on the fundamental importance of effective import protocols. It expressed concern especially in relation to the traceability of livestock between countries and concluded that it was essential that there should be full traceability of animals across country borders. The committee reported that the Government had provided assurances that applicant countries would be required to demonstrate equivalence, especially with regard to traceability standards, with the Australian standards.<sup>24</sup>

2.17 The committee again recommended, as it had in its first report, that ministerial approval and parliamentary scrutiny should precede any change in policy to allow the

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22 Rural and Regional Affairs and Transport References Committee, *The possible impacts and consequences for public health, trade and agriculture of the Government's decision to relax import restrictions on beef*, First report, March 2010, p. 12.

23 Rural and Regional Affairs and Transport References Committee, *The possible impacts and consequences for public health, trade and agriculture of the Government's decision to relax import restrictions on beef*, First report, March 2010, pp 49–52.

24 Rural and Regional Affairs and Transport References Committee, *The possible impacts and consequences for public health, trade and agriculture of the Government's decision to relax import restrictions on beef*, Final Report, June 2010, pp 14–15.

importation of beef from any country that had reported cases of BSE.<sup>25</sup> It again stated that in-country inspections should be a mandatory part of the assessment processes.<sup>26</sup>

2.18 The committee also recommended that all food products should be labelled with both the country of origin and the country of processing if that were different from country of origin.<sup>27</sup> Finally, the committee considered that the National Health and Medical Research Council's Transmissible Spongiform Encephalopathy Advisory Committee should be formally charged with monitoring developments in the scientific understanding of the condition and with providing regular reports to the Minister for Health and the Minister for Agriculture, Fisheries and Forestry to enable the Government to respond quickly and appropriately to new evidence as it emerges.<sup>28</sup>

## Trade considerations

2.19 DFAT submitted to this inquiry that Australia, as a major agricultural exporter, has a strong interest in a fair global trading system. In the department's view, 'it is vital that Australia's domestic rules and regulations remain consistent with our commitments under the WTO and other international agreements'.<sup>29</sup>

2.20 DFAT informed the committee that Australia's beef importation requirements are specified in the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement), and that:

The SPS Agreement provides a multilateral framework of rules governing the use of measures to protect the life and health of humans, animals and plants, with the aim of minimising any negative impact on trade. The SPS Agreement requires inter alia that SPS measures be applied only to the extent necessary to protect human, animal or plant life or health from risks arising from, for example, the entry and spread of pests, diseases, or disease carrying organisms. The SPS Agreement also requires that any such measures be based on scientific principles and not maintained without sufficient scientific evidence. The SPS Agreement encourages WTO Members to harmonise their measures with international standards developed by relevant international organisations, including the World

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25 Rural and Regional Affairs and Transport References Committee, *The possible impacts and consequences for public health, trade and agriculture of the Government's decision to relax import restrictions on beef*, Final Report, June 2010, pp 10–11.

26 Rural and Regional Affairs and Transport References Committee, *The possible impacts and consequences for public health, trade and agriculture of the Government's decision to relax import restrictions on beef*, Final Report, June 2010, p. 17.

27 Rural and Regional Affairs and Transport References Committee, *The possible impacts and consequences for public health, trade and agriculture of the Government's decision to relax import restrictions on beef*, Final Report, June 2010, p. 19.

28 Rural and Regional Affairs and Transport References Committee, *The possible impacts and consequences for public health, trade and agriculture of the Government's decision to relax import restrictions on beef*, Final Report, June 2010, p. 21.

29 Department of Foreign Affairs and Trade, *Submission 6*, p. [1].

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Organisation for Animal Health (OIE). SPS measures may differ from an international standard but their necessity for protecting life and health must be supported by a science-based risk assessment.<sup>30</sup>

2.21 DAFF administers a risk-based inspection scheme (the Imported Food Inspection Scheme) under the *Imported Food Control Act 1992* that aims to ensure that imported foods comply with the Australian New Zealand Food Standards Code (FSC).<sup>31</sup> FSANZ develops agreed national food standards, having regard to policy guidance from COAG's Legislative and Governance Forum on Food Regulation, including BSE risk assessments. State and Territory governments develop and administer food legislation that gives effect to the requirements of the FSC.<sup>32</sup>

### **BSE Food Safety Risk Assessments**

2.22 The Government's current policy, which came into effect in March 2010, requires that prior to importing beef into Australia a country must apply for assessment from the Australian BSE Food Safety Assessment Committee.<sup>33</sup> FSANZ submitted that:

The [2010] policy change that allows a BSE risk assessment to evaluate the human health risk from beef and beef products from any country is consistent with the international standard for BSE developed by the World Organisation for Animal Health (OIE) and is based on a science-based risk assessment methodology. No changes to the BSE standard were made in revising the BSE policy.<sup>34</sup>

2.23 FSANZ informed the committee that the risk assessment it undertakes is an analysis of the applicant country's BSE-related control systems throughout the beef production chain. According to FSANZ, the assessment of the control systems 'affords the highest level of confidence in assessing the BSE risk status of a country's beef and beef products'.<sup>35</sup> This assessment of a country's BSE control systems is needed because there is no test for the condition in a live animal or in beef products.

2.24 During a country BSE risk assessment, FSANZ gathers data and evidence in relation to five key areas, as follows:

- (i) Risk assessment requirements regarding BSE risk release and exposure;

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30 Department of Foreign Affairs and Trade, *Submission 6*, p. [2].

31 Department of Agriculture, Fisheries and Forestry, *Submission 9*, pp 1–2.

32 Department of Agriculture, Fisheries and Forestry, *Submission 9*, pp 1–2.

33 The Australian BSE Food Safety Committee is chaired by FSANZ and includes an animal health expert from Department of Agriculture, Fisheries and Forestry and food safety and risk assessment experts from FSANZ.

34 Food Standards Australia New Zealand, *Submission 10*, p. 2.

35 Food Standards Australia New Zealand, *Submission 10*, p. 2.

- (ii) Other system requirements:
  - BSE awareness program
  - Compulsory notification and investigation of BSE cases
  - Diagnostic capability
  - Animal traceability and identification systems
  - Animal slaughter and processing systems;
- (iii) BSE surveillance and monitoring system;
- (iv) BSE history of the country;
- (v) Ongoing review of country BSE status and additional data.<sup>36</sup>

2.25 FSANZ stated that the data requirements are generally 'consistent with those of the OIE's Terrestrial Animal Health Code 2009,<sup>37</sup> but have been supplemented to address food safety in the areas of slaughter practices and product traceability'.<sup>38</sup>

2.26 FSANZ explained that it allocates a BSE risk category to each country:

FSANZ determines a risk category for each applicant country and provides this advice to the Department of Agriculture, Fisheries and Forestry (DAFF). DAFF is responsible for implementing relevant requirements at the border through application of the necessary import certification for imported beef and beef products, in accordance with Australia's BSE policy.<sup>39</sup>

2.27 The BSE risk categories for countries that apply to export beef to Australia are as follows:

Category 1

Countries assessed by Australia as meeting the 'Negligible BSE Risk' requirements of the Terrestrial Animal Health Code of the World Organisation for Animal Health (OIE). Beef and beef products can be imported subject to specific requirements.

Category 2

Countries assessed by Australia as meeting the 'Controlled BSE Risk' requirements of the Terrestrial Animal Health Code of the World

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36 Food Standards Australia New Zealand, *Submission 10*, p. 3.

37 The World Organisation for Animal Health (OIE) is the intergovernmental organisation responsible for improving animal health worldwide. It is recognised as a reference organisation by the World Trade Organization (WTO) and in 2013 had a total of 178 member countries. Australia is a member of the organisation. Source, [www.oie.int/about-us/](http://www.oie.int/about-us/), accessed 14 June 2013.

38 Food Standards Australia New Zealand, *Submission 10*, p. 3.

39 Food Standards Australia New Zealand, *Submission 10*, p. 2.



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Organisation for Animal Health (OIE). Beef and beef products can be imported subject to specific requirements.

### Category 3

Countries assessed by Australia that do not meet the requirements of either Category 1 or Category 2, or countries that have not applied to be assessed by Australia. Beef and beef products cannot be imported.<sup>40</sup>

## **Biosecurity import risk analysis**

2.28 As mentioned above, FSANZ's country risk assessment is provided to DAFF which is responsible for border control of beef and beef products imports under the *Quarantine Act 1908*. DAFF issues import licences for beef and beef products that have been assigned the appropriate category status by an FSANZ assessment and for other products that have a satisfactory assessment of the animal disease risk arising from the product.<sup>41</sup>

2.29 A Fact Sheet published by DAFF states that once FSANZ completes its BSE food safety country risk assessment, certain heat-treated beef products for human consumption from that country may be imported. The heat treatment would be needed to satisfy Australia's biosecurity arrangements. In effect, the pathogens that cause diseases such as FMD would be destroyed by the treatment.<sup>42</sup>

2.30 If the country wishes to import fresh, chilled or frozen beef to Australia, DAFF is required to complete an import risk analysis of that country's animal health and production systems to ensure that the biosecurity conditions for import are met.<sup>43</sup> Imports must come from FMD-free countries.

2.31 DAFF assists FSANZ in relation to its in-country assessments for beef imports in addition to undertaking a biosecurity Import Risk Analysis in relation to fresh beef. At the time of the inquiry the department had not commenced that work in relation to the application from The Netherlands.<sup>44</sup>

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40 Food Standards Australia New Zealand, *Submission 10*, pp 13–14.

41 Import licences are not required for imports from New Zealand.

42 DAFF *Submission 9*, Attachment 1.

43 DAFF *Submission 9*, Attachment 1.

44 Dr Andrew Cupit, Assistant Secretary, Animal Biosecurity Branch, Animal Division, Department of Agriculture, Fisheries and Forestry, *Committee Hansard*, 17 May 2013, p. 31.  
*Note:* The committee will shortly be reporting in detail on DAFF's biosecurity risk analysis in a report on imports of ginger, pineapples and potatoes.

